Examining Vicarious Traumatization

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EXAMINING VICARIOUS TRAUMATIZATION

By Anna Zacharcenko

Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Psychology
August 2006
PHILADELPHIA COLLEGE OF OSTEOPATHIC MEDICINE
DEPARTMENT OF PSYCHOLOGY

Dissertation Approval

This is to certify that the thesis presented to us by ANNA ZACHARIENKA
on the 21st day of March, 2006, in partial fulfillment of the
requirements for the degree of Doctor of Psychology, has been examined and is
acceptable in both scholarship and literary quality.

Committee Members' Signatures:

[Signature]
Chairperson

[Signature]
Chair, Department of Psychology
DEDICATION

This research study was pursued in dedication to
-my dearly departed mother, Sylvia Fillipinni Zacharcenko, and
- to the health care workers, clergy members and all other
professionals who courageously responded to our national
I wish to extend my gratitude to the individuals who have supported me throughout this endeavor. By sharing his comprehensive knowledge of research design, Dr. Fredrick Rotgers, my dissertation chairperson, guided the development and continual refinement of the proposal and completed study. I am grateful for his patience with me. I have been fortunate to have exceptional professionals and scholars serve as additional committee members and consultants. Dr. Robert DiTomasso has provided guidance through a multitude of roles including committee member, professor and internship supervisor. As our department chair, he has modeled excellent leadership, characterized by consistent dedication to the professional growth of our students and to the growth of our department. Immersed in the delivery and supervision of Critical Incident Stress Management services, my third committee member, Dr. Raymond Hanbury, provided state of the art expertise in trauma intervention. Appreciation is also extended to former faculty member, Dr. Donna Martin, who provided valuable consultation on the use of survey instruments. Representing Western Psychological Services, Susan Dunn Weinberg assisted me in securing permission to reprint selected tests items from the Trauma and Attachment Belief Scale. I also am grateful for the encouragement of my father, stepmother, sisters, brother, nieces, nephews and friends who have helped bring the study to completion. Finally, I am most grateful for the cooperation of the many participants. This research project would not have been possible without their input.
completion. Finally, I am most grateful for the cooperation of the many clinicians who served as study participants. This research project would not have been possible without their interest in expanding our knowledge of professional distress and trauma. I thank them for their willingness to donate their time and their valued opinions.

determine if a relationship existed between variables, such as current and cumulative exposure to client trauma and clinician endorsement of disrupted cognitive schemas and intrusive imagery. Variables such as clinician involvement in professional and personal support activities as well as participation in leisure and spiritual activities were also examined. Study results suggested that a longer work history and utilization of peer support served as protective factors against CISM clinicians developing symptoms of vicarious traumatization. The researcher expected CISM clinicians would report more symptoms of traumatic stress and vicarious traumatization; however, when compared to non-CISM clinicians, no statistically significant differences were detected between groups. Study limitations included generalizability and potential participant sensitization to survey instruments. In addition, results suggested a relationship between participant endorsement of socially desirable behaviors and the reporting of fewer traumatic stress symptoms. Because such a correlation may indicate score suppression, overall study results should be interpreted with caution.
Abstract

Examining Vicarious Traumatization

The purpose of this study was to identify risk factors correlated with vicarious traumatization in Critical Incident Stress Management (CISM) clinicians. One hundred and sixty clinicians were surveyed. Statistical analyses were conducted to determine if a relationship existed between variables, such as current and cumulative exposure to client trauma and clinician endorsement of disrupted cognitive schemas and intrusive imagery. Variables such as clinician involvement in professional and personal support activities as well as participation in leisure and spiritual activities were also examined. Study results suggested that a longer work history and utilization of peer support served as protective factors against CISM clinicians developing symptoms of vicarious traumatization. The researcher expected CISM clinicians would report more symptoms of traumatic stress and vicarious traumatization; however, when compared to non-CISM clinicians, no statistically significant differences were detected between groups. Study limitations included generalizability and potential participant sensitization to survey instruments. In addition, results suggested a relationship between participant endorsement of socially desirable behaviors and the reporting of fewer traumatic stress symptoms. Because such a correlation may indicate score suppression, overall study results should be interpreted with caution.
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Chapter One

The Problem of Professional Distress and Impairment

The identification and effective management of professional distress and impairment among mental health practitioners has been a focus of concern in the behavioral healthcare community (O'Connor, 2001). Included in this realm of professional distress, vicarious traumatization has been defined as the deleterious effects of trauma therapy on the therapist (Pearlman & Mac Ian, 1995). It has been described as an occupational hazard, consisting of the transformation occurring within the therapist as a result of empathic engagement with the client's trauma experiences (Laidig-Brady, Guy, Poelstra, & Fletcher Brokaw, 1999; Pearlman & Mac Ian, 1995). Listening to graphic descriptions of events, as well as witnessing and participating in traumatic reenactments compose this empathic engagement. Interest in vicarious traumatization has resulted in a small body of literature addressing potential risk and protective factors correlated with this phenomenon. Although previous research has focused upon trauma therapists and upon emergency workers in general, this study was designed to examine factors correlated with vicarious traumatization specifically, in CISM (Critical Incident Stress Management) therapists.
Although the crisis intervention movement dates back to the 1940's, the concept of Critical Incident Stress Management was not formally introduced to professional communities until the late 1970's by Jeffrey Mitchell, an emergency service worker (Mitchell, 1983; Mitchell & Everly, 1993; Snelgrove, 1999). Mitchell is credited with developing the Critical Incident Stress Debriefing, an intervention providing emergency service workers the opportunity to talk out their experiences of attending to traumatic and emotionally distressing events (Mitchell, 1983; Mitchell & Everly, 1993). Although there is speculation that this seven step debriefing process prevents posttraumatic stress disorder following trauma, research supporting its efficacy has been limited (Ruzek, 2002; Snelgrove, 1999). Because debriefings have been utilized in response to the national September 11th tragedy as well as other man-made and natural disasters, behavioral healthcare professionals have expressed concern that debriefings may be harmful and thus, contraindicated following trauma (Rose, Bisson, & Wessely, 2003).

Although researchers and the behavioral healthcare community currently question the potential harm of debriefings, less attention has been paid to Critical Incident Stress Management workers themselves. Given the nature of their work, Critical Incident Stress Management Workers may be at risk for developing traumatic stress symptoms as well as vicarious...
traumatization. The concern over such potential deleterious effects upon clinicians has been evidenced by modifications in professional ethical codes (DeGrande, 2002; Fischer, Webb, & Hagen, 2002). In response to the unprecedented demands for EAP services created by the September 11th tragedy, the Employee Assistance Professionals Association (EAPA) revised the organization’s code of ethics with respect to “Professional Competence.” Specifically, members are expected to use due diligence and to “reach out” formally to colleagues they suspect may need help (Fischer et al., 2002). The EAPA board has supported the development of a colleague assistance program, nationally and locally, in addition to supporting a presentation on Self-care at the annual EAPA conference (Fischer et al.).

The above-mentioned examples illustrate efforts at the prevention of professional distress; however, factors such as clinician fears surrounding the question of professional impairment or ineffective approaches to professional impairment by some state regulatory boards may act as deterrents to behavioral healthcare professionals seeking assistance when impaired (O'Connor, 2001). Regardless of such deterrents, studying factors associated with vicarious traumatization may produce information useful in the selection and supervision of professionals to be trained in Critical Incident Stress Management. As the general issue of professional impairment raises concern with respect to public protection and welfare, the specific impairment of vicarious traumatization appears to warrant further examination.
Purpose of the Study

Man-made disasters such as the national September 11th tragedy and the Columbine Massacre, and natural disasters such as destructive hurricanes and floods have a potential for creating traumatic distress in the general population (Sutker, 1999). Given the nature and intensity of these events, intervening healthcare workers may be at risk for developing vicarious traumatization, through repeated direct or indirect exposure to traumatic material (Gorman, 2001). This repeated exposure may occur through witnessing traumatic events or hearing of such events through clients’ accounts of their traumatic experiences. Given such potential risks, the purpose of this study was to:

1. Determine if the prevalence of vicarious traumatization was greater in mental health professionals who specialize in Critical Incident Stress Management services when compared to mental health professionals who do not specialize in this area,

2. Identify factors correlated with the development of symptoms and beliefs characteristic of vicarious traumatization, and

3. Identify factors correlated with the absence of symptoms and beliefs characteristic of vicarious traumatization.

The researcher proposed that examining factors associated with vicarious traumatization would:

1. Yield information potentially useful in the selection, training and on-going supervision of mental health...
professionals, specializing in Critical Incident Stress Management, and

2. Produce research findings that could further inform licensing and credentialing boards with respect to policy development and the monitoring of professional distress, professional impairment and professional competence.

Defining Vicarious Traumatization

Overall, the existing literature focuses upon three types of professional distress. These are: professional burnout, secondary traumatization or compassion fatigue, and vicarious traumatization.

Professional Burnout and Secondary Traumatization

Although professional burnout and secondary traumatization are related to vicarious traumatization, there are differences in each concept. Professional burnout refers to the deterioration and depletion that therapists experience from excessive, work-related demands (Figley, 1995). In contrast, secondary traumatic stress consists of symptoms similar to posttraumatic stress disorder, resulting from indirect exposure to trauma (Figley, 1995). These symptoms include re-experiencing a trauma event, avoidance of reminders of the event and persistent arousal. Primary traumatic stress disorder is
characterized by an individual's experiencing a markedly distressing event outside the range of usual human experience, such as a serious threat to self or destruction of one's environs. In secondary traumatic stress, the stressor consists of experiencing a markedly distressing event through indirect exposure, such as learning of a traumatized individual's experience through psychotherapy. The term, secondary traumatization has been used to describe symptom development in a variety of professional populations, such as behavioral healthcare professionals, emergency service personnel or missionaries.

Vicarious traumatization

Although vicarious traumatization includes stress symptoms, it extends beyond secondary traumatic stress by including changes in cognitive schemas and belief systems (Laidig-Brady, Guy, Poelstra, & Fletcher Brokaw, 1999; Pearlman & Mac Ian, 1995). Disruptions in worldview, identity and spirituality are characteristic of vicarious traumatization (Laidig-Brady et al., 1999; Pearlman & Mac Ian, 1995). Focus and content differentiate vicarious traumatization from secondary traumatic stress. The conceptualization of secondary traumatic stress focuses, perhaps, upon more observable symptoms, consistent with the conceptualization of posttraumatic stress disorder in the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (Figley, 1995). Although acknowledged
in the DSM-IV conceptualization of PTSD, context, meaning of a trauma and etiology are given less attention. In contrast, the concept of vicarious traumatization has been described as presuming a particular developmental and constructivist model of personality. In this model, meaning and relationship are identified as integral aspects of any human experience (Pearlman & Mac Ian, 1995). Vicarious traumatization is characterized by profound changes in the core aspects of the therapist’s self or psychological foundation. These changes include shifts in the therapist’s identity, affect management, therapist schemata relating to safety, esteem, trust and dependency, control and intimacy, and in the therapist’s sense of spirituality or sense of meaning and purpose (Pearlman & Mac Ian, 1995). As the therapist attempts to integrate trauma material and these personal changes, he or she is vulnerable to intrusive imagery and other posttraumatic stress symptomatology. Finally, two sets of factors have been identified as contributing to a therapist’s vicarious traumatization; these are: 1. specific characteristics of the therapy and its context, and 2. particular characteristics and vulnerabilities of the therapist and the manner in which the therapist works with clients (Pearlman & Mac Ian, 1995; Pearlman & Saakvitne, 1995).
Refining the Concept of Vicarious Traumatization

Problematic definition

Although researchers have specified differences between professional burnout, secondary trauma and vicarious traumatization, symptom overlap may contribute to an unclear definition of each phenomenon. In addition, further examination of secondary trauma and vicarious traumatization, suggests that perhaps each concept may differ in aspects of measurement only.

Burnout vs. secondary traumatic stress

Burnout has been described as a process rather than a fixed condition (Cherniss, 1980). It is believed to be a result of emotional exhaustion. Beginning gradually and then becoming progressively worse, the process of burnout includes gradual exposure to job strain, erosion of idealism and a void of achievement (Cherniss, 1980; Courage & Williams, 1986). Professional burnout may include characteristics similar to those found in secondary traumatic stress; however, it is not defined by exposure to a traumatic stressor. In contrast, secondary traumatic stress may emerge suddenly. In addition to a more rapid onset of symptoms, a sense of helplessness, confusion
and a sense of isolation from supporters may characterize secondary trauma. They may appear disconnected from real causes, but secondary traumatic stress symptoms may remit more quickly in comparison to symptoms of burnout (Figley, 1995). Similarly, rate of symptom remission is a distinguishing feature in Acute Stress Disorder when compared to other disorders, such as Post Traumatic Stress Disorder. In the case of Acute Stress Disorder, the disturbance an individual experiences lasts for a minimum of two days and a maximum of four weeks. In addition, symptoms occur within four weeks of a traumatic event (American Psychiatric Association, 2000).

Vicarious traumatization and cognitive processes

Although researchers cite a shift in therapist schemas as defining vicarious traumatization, similar cognitive processes have been identified in primary posttraumatic stress disorder (Foa, Steketee, & Rothbaum, 1989). Foa, Steketee and Rothbaum have used information processing theory to explain the development of posttraumatic stress disorder and in turn, have emphasized a more thorough examination of the cognitive meaning of a trauma for victims. Theorists, who utilize the information processing view, cite a variety of reactions preventing trauma survivors from integrating a traumatic event. Reactions such as disturbing negative thoughts are not integrated, because they are inconsistent with the victim’s pre-existing schema (Foa et al., 1989). A schema may be described as a cognitive structure
representing knowledge about the self or about the world (Sternberg, 1994). According to information processing theorists, victims may employ cognitive processes such as assimilation or overaccommodation to explain a traumatic event (Weaver, Resnick, McGlynn, & Foy, 1999). Assimilation may be defined as incorporating new information into one's existing schemas (Sternberg). Accommodation consists of changing one's existing schemas to fit relevant, new information about the environment (Sternberg). In the case of assimilation, the traumatic event is changed to fit prior beliefs. Using the example of sexual assault, a victim would reclassify the rape as "not rape; because I knew the rapist." With respect to accommodation, prior beliefs are altered to encompass the event (Weaver, et. al. 1999). However, beliefs are often altered to an extreme degree, as in overaccommodation. A victim may believe "After being raped by someone I know, I cannot trust anyone." The above-mentioned negative cognitions or thoughts may act as triggers for negative self-appraisals or maladaptive behaviors.

With respect to vicarious traumatization, further examination of this phenomenon reveals a similar focus upon the meaning of client traumatic material to the therapist; it also consists of changes in the therapist's cognitive schemas and belief systems. Such similarities suggest that perhaps the difference in secondary trauma and vicarious traumatization consists of the focus of measurement with respect to defining symptoms.
Table 1

<table>
<thead>
<tr>
<th>Professional Burnout</th>
<th>Secondary Traumatic Stress</th>
<th>Vicarious Traumatization</th>
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<tbody>
<tr>
<td>Described as a process (Cherniss, 1980; Maslach, 1982). The process includes a.) gradual exposure to job strain (Courage &amp; Williams, 1986), b.) erosion of idealism (Freudenberger, 1986), and c.) a void of achievement (Pines and Maslach, 1980).</td>
<td>Described as a fixed condition (Cherniss, 1980; Maslach, 1982; Figley, 1995).</td>
<td>Described as a cumulative process (Pearlman &amp; Saakvitne, 1995).</td>
</tr>
<tr>
<td>Resulting from emotional exhaustion.</td>
<td>Emphasis on empathy as vulnerability factor. Resulting from indirect exposure to a trauma.</td>
<td>Resulting from the therapist’s exposure to a client’s graphic accounts of trauma (Pearlman &amp; Saakvitne, 1995).</td>
</tr>
<tr>
<td>Characterized by several symptoms: - Work-related symptoms.</td>
<td>Characterized by symptoms similar to primary traumatic</td>
<td>Characterized by symptoms of secondary trauma:</td>
</tr>
<tr>
<td>Interpersonal symptoms</td>
<td>Behavioral symptoms</td>
<td>Emotional symptoms</td>
</tr>
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(Kahill, 1988).

- Exposure to a stressor consisting of experiencing a markedly distressing event through indirect exposure (i.e. client’s graphic accounts of trauma).

- Re experiencing the graphic accounts of the client’s trauma.

- Avoidance of reminders of the trauma.

- Persistent arousal.

- Numbing.

- Profound changes in the therapist’s worldview, identity and beliefs about the self, the world and others (Pearlman & Saakvitne, 1995).

(Table 1, continued)
<table>
<thead>
<tr>
<th>Measurement of Secondary Traumatic Stress</th>
<th>Measurement of Vicarious Traumatization</th>
<th>Measurement of Posttraumatic Stress Disorder</th>
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<tr>
<td><strong>Compassion Fatigue Self Test for Psychotherapists</strong> <em>(Figley, 1995)</em></td>
<td>TSI (Traumatic Stress Institute) Belief Scale <em>(Pearlman &amp; Mac Ian, 1995)</em></td>
<td>The Posttraumatic Diagnostic Scale <em>(Foa, Cashman, Jaycox, &amp; Perry, 1997)</em></td>
</tr>
<tr>
<td>A 40-item, self-report scale designed to assist therapists in distinguishing between burnout and Secondary Traumatic Stress <em>(Figley, 1995)</em></td>
<td>A 79-item scale measuring disrupted cognitive schemas and assessing disruptions in psychological need areas, which are hypothesized to be sensitive to traumatic experiences and to vicarious traumatization <em>(Pearlman &amp; Mac Ian, 1995)</em></td>
<td>A self-report scale designed for screening purposes to provide a measure of PTSD symptom severity and PTSD diagnosis. This instrument addresses all six PTSD criteria of the DSM-IV as well as diverse causes of trauma. Characteristics of the trauma, duration of symptoms, and dysfunction in daily living are assessed <em>(Foa et al., 1997)</em></td>
</tr>
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Chapter Two

Theories of Trauma Transmission

As previously mentioned, vicarious traumatization is characterized by symptoms of secondary trauma and by changes in the individual's worldview, identity and beliefs. The symptoms of secondary trauma may include re-experiencing graphic accounts of a client's trauma, avoiding reminders of the client's trauma, persistent arousal and emotional numbing. Defining vicarious traumatization serves as a point of departure in understanding this phenomenon. In addition, existing theories of trauma transmission may provide useful constructs, which may be applied to understanding how vicarious traumatization develops within the behavioral healthcare professional. In this text, the researcher has reviewed theories of trauma transmission addressing:

1. Holocaust survivors and their offspring, and
2. Mental health clinicians or health care workers servicing traumatized populations.

These include:

1. An exposure based theory focusing upon the communication of traumatic accounts and the role of empathy in trauma transmission,
2. Developmental theories focusing upon a traumatized parent's difficulties facilitating separation and individuation in their offspring, and

3. A constructivist theory focusing upon the meaning of a trauma to an individual, contextual factors and changes in the individual's worldview or schemas as a result of vicarious traumatization.

Holocaust survivors

Some researchers have limited their focus primarily to trauma transmission from Holocaust survivors to their offspring (Baranowsky, Young, Johnson-Douglas, Williams-Keeler, & McCarrey, 1998). The term secondary traumatization has been utilized to describe intergenerational trauma transmission (Baranowsky et al., 1998). Research on the offspring of Holocaust survivors has attempted to address whether or not a secondary PTSD syndrome, reflected in current PTSD symptomatology is being transmitted from one generation to the next (Baranowsky et al., 1998). There appears to be evidence in the literature to support this hypothesis.

Empathic traumatization. The term empathic traumatization has been utilized to describe the attempts of Holocaust survivors' offspring to understand their parents' wartime experiences and pain as a means of establishing a connection with them. Offspring maintain family ties by integrating their
parents’ experiences (Baranowsky et al., 1998). Through the mechanism of empathy, a trauma may be transmitted from one generation to the next generation.

**Trauma and communication.** Mor describes the process of secondary trauma transmission as children of trauma survivors adopting their parents’ trauma through two types of parental communication of their Holocaust survival (Mor, 1990). The first consists of an obsessive retelling of their stories to their children. The second method of communication occurs through a consuming silence designed to protect the offspring from the horrors of the accounts. Without any information, children are left, to imagine and construct details of their parents’ traumas.

**Trauma and indirect exposure.** Studies have also illustrated the stressful impact of exposure to Holocaust-related materials. Researchers have found that Holocaust Memorial museum staff who were exposed to personal artifacts, survivor histories and archival materials reported a range of stress reactions including emotional numbing, social withdrawal, grief reactions, nightmares and anger (Baranowsky, Young, Johnson-Douglas, Williams-Keeler, & McCarrey, 1998).

**Separation-individuation.** Another explanation of the transmission of trauma from Holocaust survivors to their offspring can be found in Freyberg’s psychodynamic explanation. Utilizing Mahler’s developmental model, Freyberg constructs a theory of trauma transmission, which cites separation-
individuation difficulties seen in second generation offspring as evidence of a manifestation of secondary trauma (Freyberg, 1980). Freyberg argues that the child’s development of autonomy is hindered when the primary caretaker fails to encourage and support age-appropriate exploration by the child. According to this researcher, these difficulties are evident as early as 16 to 24 months. This position is supported by Chazan who suggests that intergenerational transmission of trauma occurs when the traumatized parents implant their own emotional instability into their children. Parental stress and social mistrust are internalized by the children. Thereafter, because of enmeshed family relations, the children are confused about boundaries between themselves and their parents (Chazan, 1992). It has also been suggested that survivor parents attempt to teach their children how to survive in the event of further persecution; they consequently transmit their own wartime experiences (Danieli, 1985).

Finally, other researchers have reported observations of second generation children acting out Holocaust survival behavior adopted by their parents; this is in addition to displaying increased sensitization to Holocaust imagery during same-age anniversaries of their parents’ trauma (Axelrod, Schnipper, & Rau, 1980; Krell, 1982). Overall, with respect to this population group, empirical studies, which utilize valid and reliable measures of posttraumatic stress disorder, appear to be few in number.
A specific limitation throughout these studies is the utilization of only one or two PTSD criteria when defining and measuring the phenomenon of secondary trauma. The lack of a posttraumatic disorder (PTSD) measure modified to fit offspring of Holocaust trauma survivors, who have been indirectly exposed to the stressor, has been cited as a problem. It has been recommended that all PTSD criteria be considered when conducting research with secondary offspring (Williams-Keeler, et. al.).

Trauma transmission from client to therapist

Research has an important place both in Holocaust literature and in the field of traumatology and may teach us about the mechanism of trauma transmission among other traumatized populations, including behavioral healthcare professionals. How is trauma stress transmitted from client to therapist? Figley initially coined the term "compassion fatigue" to describe trauma that is transmitted over the course of therapy from client to counselor (Figley, 1995). In addition, Pearlman and Mac Ian have described vicarious traumatization as the deleterious effects of trauma therapy on the therapist; they utilize constructivist self-development theory to explain how trauma may be transmitted from client to therapist (Pearlman & Mac Ian, 1995). In an effort to understand the phenomenon of trauma transmission in behavioral healthcare professionals, each concept warrants examination.
Compassion fatigue. Originally referred to as secondary traumatic stress or secondary traumatic stress disorder, the concept of compassion fatigue was introduced by Charles Figley. Figley has proposed that the diagnosis of posttraumatic stress disorder be reconceptualized to include primary traumatic stress and secondary traumatic stress (Figley, 1995). Focusing upon the interpretation of Criterion A1 in the DSM-IV diagnostic criteria for post traumatic stress disorder, Figley points out that the essential feature of PTSD consists of the development of specific symptoms following exposure to an extreme traumatic stressor or to witnessing or learning of unexpected death, serious harm, or threat of death or injury experienced by a family member or close associate (American Psychiatric Association, 1994; American Psychiatric Association, 2000). The implication is that individuals can be traumatized without experiencing physical harm or being threatened with harm but by learning about the traumatic event. Therefore a therapist may be traumatized through the process of listening to a description of a client's traumatic experience.

Given this premise, Figley employs the concepts of exposure and empathy to explain the mechanism of transmission of trauma from client to therapist (Figley). With respect to exposure, Figley argues that given the nature of their work, trauma workers are surrounded by the extreme intensity of trauma inducing factors. Second, he identifies empathy as a major resource that trauma workers utilize to assist the traumatized. Despite empathy as critical in assessing a presenting problem
and formulating a treatment approach, empathy is also a key factor in the induction of traumatic material from the primary to secondary victim (Figley). In this case, the secondary victim is the therapist.

Figley cites additional vulnerability factors in the development of secondary traumatic stress. These are trauma workers own traumatic histories and the activation of unresolved trauma conflicts in the therapist by hearing reports of similar trauma in clients. Last, Figley emphasizes the fact that despite revisions of the DSM and continued application of the concept of posttraumatic stress disorder, secondary traumatic stress appears to be the least studied and the least understood dimension of traumatic stress (Figley).

Constructivist self-development theory (CSDT). Although empathy and exposure to traumatic material are identified both in concepts of compassion fatigue and vicarious traumatization, meaning and context are emphasized in the development of vicarious traumatization (Figley, 1995; Pearlman & Mac Ian, 1995). Furthermore, vicarious traumatization is characterized not only by symptoms of traumatic stress but also by a shift or change in a therapist’s core beliefs or world view. Blending contemporary psychoanalytic theories (i.e. self-psychology and object relations’ theory) with social cognition theory, CSDT provides a developmental framework for understanding the experiences of survivors of traumatic life events. An individual’s adaptation to trauma is viewed as an interaction
between an individual's personality style and salient aspects of the traumatic event (Pearlman & Mac Ian). Within the conceptual framework of CSDT, therapist characteristics such as personal trauma history, the meaning of traumatic life events to the therapist, interpersonal style, professional development and current stressors and supports may influence vicarious traumatization. In addition, the nature of the clientele, the nature of the material presented by the client in therapy, stressful client behaviors, work setting and social-cultural context are all characteristics of work which may contribute to vicarious traumatization in the therapist. Last, disrupted cognitive schemas and intrusive trauma imagery are cited as two psychological manifestations of vicarious traumatization (Pearlman & Mac Ian).
Chapter Three

Review of Existing Research:
Risk Factors and Protective Factors

When compared to literature addressing posttraumatic stress disorder and secondary trauma, studies focusing upon vicarious traumatization are fewer in number. Nonetheless, a review of existing research on posttraumatic stress disorder and secondary trauma provides a foundation for identifying potential risk factors in the development of vicarious traumatization. Studies examining risk and protective factors associated with posttraumatic stress disorder, secondary trauma exposure, referred to as peritraumatic dissociation, constitute our review of the literature. Also, because studying other populations may provide useful information regarding vicarious traumatization in therapists, this review includes research examining emergency service personnel and firefighters, military personnel and their families, missionaries, counselors, health care professionals and last, trauma therapists.
One study has focused upon the role of dissociative processes in the development of posttraumatic stress disorder (PTSD). Dissociation has been defined as a compartmentalization of experience in which elements of a traumatic experience are stored in memory as isolated fragments rather than as an integrated whole (Marmar et al., 1996). The study's focus was to identify characteristics of emergency services personnel related to acute dissociative responses at the time of critical incident exposure, referred to as peritraumatic dissociation. One hundred and fifty-seven rescue workers who responded to a freeway collapse were surveyed, as were two hundred and one rescue workers who were not involved in the disaster. Level of critical incident, demographics, subject perceived threat at the time of exposure, personality attributes, coping strategies and locus of control were measured and correlated with subjects' scores on the Peritraumatic Dissociative Experiences Questionnaire. Level of critical incident may be distinguished by the severity of the traumatic event, as measured by factors such as, but not limited to, the number and types of physical injuries and the number of fatalities. Factors such as youth,
greater exposure to critical incident stress, greater perceived threat, coping by means of escape or avoidance, externality in locus of control were predictive of higher levels of peritraumatic dissociation. The researcher concluded that rescue workers possessing particular personality attributes, coping strategies and global cognitive styles are at higher risk for acute dissociative response and subsequently for developing posttraumatic stress disorder. Personality attributes identified as risk factors included shyness, inhibition, uncertainty regarding identity and reluctance to assume leadership roles. Coping mechanisms identified as risk factors were emotional suppression and wishful thinking.

*Postmortem inquiries and trauma responses in paramedics and firefighters*

In an effort to understand the cause of a tragedy, such as loss of life and to prevent such an event from reoccurring, emergency service personnel are frequently required to participate in postmortem inquiries (Rigehr, Hill, Goldberg, & Hughes, 2003). The impact of postmortem inquiries following a critical event has been examined in a sample of paramedics and firefighters (Riegehr et al., 1999). The effects of critical events on rescue workers have been previously studied. With respect to this particular study, the researchers
focused on the stress and trauma experienced as a result of having one's actions questioned through the process of a postmortem inquiry. The study compared trauma responses in firefighters and paramedics who have participated in postmortem inquiries following a critical incident in the workplace, with the responses of those who have not. Results suggested that involvement in postmortem review was associated with significantly higher traumatic stress, depression symptoms and mental health stress leave. Postmortem review and media coverage of the event were also found to be significantly correlated with depression scores.

Urban firefighters

Exposure to traumatic incidents and prevalence of PTSD symptomatology in urban firefighters have also been examined. One study revealed that vulnerability and moderating risk factors associated with PTSD differed between U.S. and Canadian urban firefighter samples. This study compared duty-related trauma exposures and the prevalence of posttraumatic stress in U.S. and Canadian firefighters. The investigation sought to examine a variety of pre-existing and moderating variables. Findings suggested that risk factors for posttraumatic outcomes in urban firefighters are complex and multifactorial. High levels of work and family social support were associated
with a significantly lower odds ratio of PTSD but high levels of work strain were associated with a markedly higher ratio of PTSD in both samples. Results suggested that not merely exposure to traumatic events, but after work levels of support and stress impact development of PTSD in firefighters (Corneil, Beaton, Murphy, Johnson, & Pike, 1999). In addition, experience and training appeared to serve as protective factors against developing PTSD; Canadian, senior level firefighters with more experience and training reported fewer symptoms of stress. An examination of prerequisites for promotion to senior level positions in each sample, revealed that U.S. firefighters may be promoted with significantly less experience (Corneil et al., 1999). Therefore, experience and expertise may act as protective factors and may warrant further examination with respect to selection, recruitment and training of such personnel.

Vietnam veterans

One study examined resilience-recovery factors among female and male Vietnam veterans (King, King, Fairbank, Keane, & Adams, 1999). Hardiness appeared to act as a protective factor; those individuals who scored higher on items assessing hardiness dispositions appeared to report fewer PTSD symptoms. Hardiness...
was defined as a personality disposition with three components, a sense of control over one's life, b. commitment in terms of the meaning ascribed to one's existence, and c. openness to viewing change as a challenge (Kobasa, 1979). Each of these factors is believed to motivate adaptive coping behaviors in response to stressors. According to the researchers, study results supported the hypothesis that hardiness would have an indirect effect on PTSD through the variable of functional support (King et al., 1999). Functional support may be evidenced by ease at seeking out available others for realistic help in times of stress. The researchers suggested that individuals high in hardiness may be more capable of building for themselves larger or more complex support networks in comparison with individuals who are low in hardiness. In addition, the researchers concluded that their findings supported a main effect of hardiness on illness and well being, for physical and mental health outcomes (Kobasa, 1979.).

Secondary traumatization in female partners

Solomon et al. surveyed 205 wives of Israeli combat veterans to determine if combat stress reaction (CSR) and posttraumatic stress disorder (PTSD) among veterans were correlated with psychiatric symptoms in wives. Combat stress reaction has been described as an immediate reaction in which a
soldier becomes completely helpless and unable to function during battle. In this study, wives' perceptions of their husbands' PTSD, wives' psychiatric symptomatology, somatic complaints, family environment, dyadic adjustment, loneliness and social support were assessed using several measures. Research results indicated that CSR and PTSD in husbands served as predictors of psychiatric symptoms in wives, including somatization, depression, anxiety, loneliness, hostility and interpersonal problems. The researchers utilized the concept of secondary traumatization to explain the potential reason why these female subjects experienced such symptoms (Solomon et al., 1992).

Psychotherapists

Trauma therapists

One study examined vicarious traumatization in 188 self-identified trauma therapists. Study results suggested correlations between the trauma history of the therapist and the length of time the clinician had been doing trauma work (Pearlman & Mac Ian, 1995). Specifically, trauma therapists without a trauma history showed more disrupted schemas and higher distress levels as measured by instruments such as the Traumatic Stress Institute (TSI) Belief Scale. The TSI Belief Scale measures cognitive schemas and assesses disruptions...
having religious and existential components, indicating a relationship with God or higher power and a sense of life purpose and meaning beyond oneself (Laidig-Brady et al., 1999). Spirituality or spiritual well being is believed to be disrupted or altered by traumatic experiences and in the case of this particular study, by vicarious traumatization. The authors proposed that spirituality may improve after a trauma if a clinician's core beliefs are internally based (Laidig-Brady et al.). Exposure to disturbing material may produce a spiritual crisis and temporary cognitive dissonance, but eventually may result in a stronger, healthier sense of spiritual well being. The researchers suggested that perhaps clinicians who feel grounded in a clear philosophy of life are attracted to work with trauma survivors (Laidig-Brady et al.).

**Studies with Missionaries**

Parallels have been drawn between the experiences of Vietnam Veterans exposed to combat trauma and the experiences of missionaries dealing with trauma in missionary life. Missionaries have been reported to be at increased risk of trauma exposure due to exposure to violent crime on the mission field or to civil unrest, war and evacuation. Given this increased risk, research has been conducted to determine the nature and extent of traumatic events experienced by missionaries and the extent to which such missionaries report...
Posttraumatic Stress Disorder symptoms due to traumatic exposure in the mission field (Bagley, 2003). Thirty-one North American missionaries were surveyed, utilizing the Traumatic Events Questionnaire and the Posttraumatic Stress Disorder Checklist, Civilian Version. Ninety-four percent of this sample reported having been exposed to trauma in the field, with 86% reporting exposure to multiple incidents. Fewer than half the subjects reported previous posttraumatic stress symptoms during the most difficult periods of adjustment following their most traumatic experiences. The lifetime prevalence of trauma exposure among Wesleyan missionaries is higher than that found in studies of trauma prevalence in the general population, yet no missionaries reported PTSD symptoms evident during survey completion. The research data suggested that missionaries from North America have a greater resilience to trauma in comparison to the general North American population. Reasons for this seemingly greater resilience have been suggested but have not been determined. The researcher cites factors such as living constantly under high levels of stress as potentially causing missionaries to develop coping skills that are perhaps different from those exhibited within the general population of North America. Additional, suggested protective factors include anticipation of traumatic events and a high level of religious commitment. With respect to
anticipation of traumatic events, Bagley argues that the anticipation of trauma due to the nature of missionary work may create a higher level of determination and resilience in the face of trauma. Second, the researcher cites previous limited research on the impact of religious faith on trauma, indicating that religious faith may have a buffering effect from the negative effects of trauma. In addition, underreporting of PTSD symptoms due to cognitive dissonance may have accounted for the researcher's results. Bagley hypothesizes that missionaries may have underreported symptoms as an attempt to deny emotions inconsistent with their concept of spirituality. Finally, the limitations of Bagley's study include limited generalizability because of sample selection, size and the self-report format, excluding the utilization of a social desirability measure.

Summary

Risk factors and protective factors associated with the development of posttraumatic stress, secondary trauma and vicarious traumatization have been studied in several samples. These have included emergency service personnel and firefighters, military personnel and their families, missionaries, counselors, health care professionals and trauma therapists.

Common themes emerged from the studies reviewed. Findings
suggest that factors such as youth, greater indirect and direct exposure to critical incident(s) or traumatic events, greater perceived threat, coping as a means of escape or avoidance, externality in locus of control, less work experience, perceived lack of work support and perceived lack of family support predict the development of symptoms associated with some form of traumatic stress. Conversely, factors such as high levels of perceived work and social support, longer work history, greater expertise as measure by training, a perceived sense of control over one’s life, and a sense of life purpose or religious commitment have been associated with the development of fewer symptoms characteristic of various forms of traumatic stress. Finally, these previously mentioned research studies have been characterized by limitations such as generalizability and controlling for a social desirability response.
Chapter Four

Rationale for the Study

The existing literature provides a rationale for the continued study of protective factors and risk factors associated with traumatic stress. This study examined specific hypotheses addressing such variables in the potential development of vicarious traumatization in CISM clinicians and in mental health clinicians.

Hypotheses

1.) Utilizing normative data from standardization samples as a comparison, in the group of CISM therapists, a negative correlation would be observed between a longer trauma work history and the Trauma and Attachment Belief Scale (TABS) scores and the Impact of Event Scale-Revised scores (IES-R).

Rationale: Lack of professional experience and training have been identified as factors correlated with clinicians and trauma workers reporting traumatic stress symptoms. In addition, factors such as greater perceived threat and coping by means of escape and avoidance have been predictive of higher levels of peritraumatic dissociation in younger trauma workers and emergency service personnel. The survey instruments utilized in this study address both factors. The Trauma and Attachment...
Belief Scale was developed to identify and measure disrupted schemas associated with trauma. The Revised Impact of Event Scale was designed to measure symptoms of avoidance, intrusive thought and imagery associated with posttraumatic stress.

Method of analysis: Hypothesis one was analyzed utilizing a Pearson Product Correlation Coefficient.

2.) Utilizing normative data from standardization samples as a comparison, in the CIS group of therapists, a negative correlation would be observed between frequency of utilization of personal and professional supports and the Trauma and Attachment Belief Scale (TABS) scores and the Impact of Event Scale-Revised (IES-R) scores.

Rationale. Utilization of professional and personal support systems has been cited as a factor correlated with the reporting of less professional distress and secondary trauma symptoms. Specifically, higher levels of work and family or social support have been associated with a lower odds ratio of developing posttraumatic stress symptoms.

Method of analysis: Hypothesis two was analyzed utilizing a Pearson Product Correlation Coefficient. A demographic survey was utilized to measure participant utilization of professional and personal support.

3.) Utilizing normative data from standardization samples as a comparison, in the CISM group of therapists, a negative correlation would be observed between reported satisfaction with personal and professional supports and the Trauma and
Attachment Belief Scale (TABS) scores and the Impact of Event Scale-Revised (IES-R) scores.

Rationale: Perceived lack of support from family members and colleagues has been identified as a factor correlated with the reporting of traumatic stress symptoms and job related stress. Method of analysis: Hypothesis three was analyzed utilizing a Pearson Product Correlation Coefficient. A demographic survey was utilized to measure participant satisfaction with professional and personal support.

4.) Utilizing normative data from standardization samples as a comparison, in the CISM group of therapists, a negative correlation would be observed between reported frequency of engagement in leisure and spiritual activities and the Trauma and Attachment Belief Scale (TABS) scores and the Impact of Event Scale-Revised (IES-R) scores. Method of analysis: Hypothesis four was analyzed utilizing a Pearson Product Correlation Coefficient. A demographic survey was utilized to measure participant frequency of engagement in leisure and spiritual activities.

5.) Utilizing normative data from standardization samples as a comparison, in the CISM group of therapists a negative correlation would be observed between reported satisfaction with leisure and spiritual activities and the Trauma and Attachment Belief Scale (TABS) scores and the Impact of Event Scale-Revised (IES-R) scores.

Rationale for hypotheses four and five: Spiritual well being is believed to be altered by traumatic experiences. Religious faith
and a sense of life purpose have been identified as having a potential buffering effect on the negative impact of traumatic events. Specifically, research focusing upon the construct of hardiness suggests that this personality component acts as a protective factor against the development of trauma symptoms. One aspect of hardiness is described as an individual's ability to possess a sense of life purpose and meaning beyond oneself. Furthermore, engagement in leisure activities as well as satisfaction derived from such activities have been identified as factors correlated with the reporting of fewer symptoms of distress.

Method of analysis: Hypothesis five was analyzed utilizing a Pearson Product Correlation Coefficient. A demographic survey was utilized to measure participant satisfaction with leisure and spiritual activities.

6.) When compared to the group of non-trauma therapists, CISM therapists would endorse more items resulting in significantly higher scores in the Trauma and Attachment Belief Scale (TABS).

Rationale: the level or severity of a critical incident and prolonged exposure to trauma have been cited as factors associated with the development of traumatic stress symptoms. Given the nature of their work, clinicians providing CISM services, may be repeatedly exposed to critical incidents, of varying degrees of severity. Such incidents may consist of natural disasters or man-made disasters including but not
limited to hurricanes, floods, earthquakes, or acts of terrorism.

Method of analysis: Hypothesis six was analyzed utilizing a T test for independent samples.

7.) When compared to the group of non-trauma therapists, CISM therapists would endorse more items resulting in significantly higher scores in the Impact of Event Scale-Revised (IES-R).

Rationale: As previously stated in hypothesis six.

Method of analysis: Hypothesis seven was analyzed utilizing a T test for independent samples.
**Hypotheses**

1. **CISM group:** Negative correlation between longer trauma work history and disrupted beliefs and symptoms of traumatic stress.

2. **CISM group:** Negative correlation between frequency of utilization of professional and personal support systems and disrupted beliefs and symptoms of traumatic stress.

3. **CISM group:** Negative correlation between reported satisfaction with personal and professional supports and symptoms of traumatic stress and disrupted beliefs.

4. **CISM group:** Negative correlation between frequency of engagement in leisure and leisure and disrupted beliefs.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Rationale</th>
<th>Measurement</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. CISM group: Negative correlation between longer trauma work history and disrupted beliefs and symptoms of traumatic stress.</td>
<td>In providing trauma intervention services, lack of professional experience has been correlated with increased symptoms of traumatic stress and a change in a therapist’s core beliefs.</td>
<td>Trauma and Attachment Belief Scale</td>
<td>Pearson Product Correlation Coefficient One-tailed test</td>
</tr>
<tr>
<td>2. CISM group: Negative correlation between frequency of utilization of professional and personal support systems and disrupted beliefs and symptoms of traumatic stress.</td>
<td>Utilization of personal and professional support systems has been correlated with the reporting of less professional distress and fewer secondary trauma symptoms. Particular characteristics and vulnerabilities of the clinician have been identified as contributing to vicarious traumatization.</td>
<td>Trauma and Attachment Belief Scale</td>
<td>Pearson Product Correlation Coefficient One-tailed test</td>
</tr>
<tr>
<td>3. CISM group: Negative correlation between reported satisfaction with personal and professional supports and symptoms of traumatic stress and disrupted beliefs.</td>
<td>Perceived lack of support from family members and colleagues has been correlated with increased symptoms of traumatic stress and job related stress. Particular characteristics and vulnerabilities of the clinician have been identified as contributing to vicarious traumatization.</td>
<td>Trauma and Attachment Belief Scale</td>
<td>Pearson Product Correlation Coefficient One-tailed test</td>
</tr>
<tr>
<td>4. CISM group: Negative correlation between frequency of engagement in leisure and leisure and disrupted beliefs.</td>
<td>Religious faith and a sense of life purpose have been identified as having a potential buffering effect on the negative impact of traumatic events.</td>
<td>Trauma and Attachment Belief Scale</td>
<td>Pearson Product Correlation Coefficient One-tailed test</td>
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<td></td>
</tr>
<tr>
<td>spiritual activities and disrupted beliefs and symptoms of secondary trauma.</td>
<td>Engagement in leisure activities as well as satisfaction derived from such activities have been correlated with fewer symptoms of distress.</td>
<td>Demographic Survey</td>
<td></td>
</tr>
<tr>
<td><strong>5.) CISM group:</strong> Negative correlation between reported satisfaction with leisure and spiritual activities and disrupted beliefs and symptoms of secondary trauma.</td>
<td>Religious faith and a sense of life purpose have been identified as having a potential buffering effect on the negative impact of traumatic events. Engagement in leisure activities as well as satisfaction derived from such activities has been correlated with fewer symptoms of distress.</td>
<td>Trauma and Attachment Belief Scale</td>
<td></td>
</tr>
<tr>
<td><strong>6.) Comparison of groups:</strong> CISM clinicians will endorse more disrupted beliefs than non-CISM clinicians.</td>
<td>The level, type or severity of a critical incident and prolonged exposure to trauma have been associated with the development of traumatic stress symptoms and vicarious traumatization. Clinicians providing CISM services, may be repeatedly exposed to critical incidents of varying degrees of severity.</td>
<td>T test for independent samples</td>
<td></td>
</tr>
<tr>
<td><strong>7.) Comparison of groups:</strong> CISM clinicians will endorse more symptoms of traumatic stress than non-CISM clinicians.</td>
<td>The level, type or severity of a critical incident and prolonged exposure to trauma have been associated with the development of traumatic stress symptoms and vicarious traumatization. Clinicians providing CISM services, may be repeatedly exposed to critical incidents of varying degrees of severity.</td>
<td>T test for independent samples</td>
<td></td>
</tr>
</tbody>
</table>

(Table 3, continued)
Chapter Five

Methods

Subject Eligibility

Behavioral healthcare professionals specializing in Critical Incident Stress Management were surveyed in addition to behavioral healthcare professionals not specializing in providing Critical Incident Stress Management services. In order to be considered for participation in this study, subjects had to be, at minimum, a Masters level behavioral healthcare professional with at least one year of post graduate clinical experience, providing face to face, direct service to patients. In order to be considered for inclusion in the CISM group of clinicians, a participant had to have provided Critical Incident Stress Management services within the preceding 12 months. Because of the cross section of behavioral health disciplines represented in this study, subjects are referred to as participants, clinicians, therapists or behavioral health professionals.

The entire returned sample consisted of one hundred and eight female and fifty-two male participants, ranging from twenty-five years of age to seventy-eight years of age. The sample included Caucasian, Hispanic, African American, Asian and
Subject Recruitment and Survey Distribution

Subjects were recruited from the membership registries of national and local professional organizations of mental health clinicians, from outpatient clinical practice groups and, on-site, at professional, continuing education conferences and workshops. The sample which was studied included clinicians from the following discipline groups: social workers, licensed professional counselors, marriage and family therapists, psychologists, nurses, and pastoral counselors. From these registries and practice groups, a mailing list was developed. Data collection consisted of distributing survey packets via mailings and of distributing survey packets at professional conferences. Six hundred survey packets were distributed to obtain a usable sample of 120 completed surveys required for analysis. One hundred and sixty survey packets were returned; one hundred and sixty were deemed usable.

Demographics

The entire returned sample consisted of one hundred and eight female and fifty-two male participants, ranging from twenty-five years of age to seventy-eight years of age. The sample included Caucasian, Hispanic, African American, Asian and
native Hawaiian clinicians; however, a majority (90.6%) of the clinicians were Caucasian. Various disciplines including social workers, psychologists, counselors, nurses and pastoral counselors were represented. Of these, social workers composed the majority. This group appeared to represent experienced clinicians because the sample mean of overall years of post-graduate work experience was 23.40. Areas which represented specialty trauma training included: Mitchell Model, Red Cross, Cognitive Behavioral Therapy, EMDR, and Exposure Therapy. Because participants were requested to check all applicable training, some participants reported receiving more than one type of specialty trauma training. Thirty-six percent of participants reported having provided CISM services within the preceding 12 months. Within the group of clinicians having provided CISM services within the prior twelve months, a majority (67%) reported that twenty-five percent or less of their professional practice or work consisted of providing CISM services, following a variety of traumatic events. These traumatic events included, but were not limited, to natural disasters, violence or threat of violence, work-site injuries, accidents, deaths, acts of terrorism, and corporate/company downsizing.
### Table 4

Demographic Characteristics of the Sample

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
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<td></td>
</tr>
<tr>
<td>Female</td>
<td>108</td>
<td>67.5</td>
</tr>
<tr>
<td>Male</td>
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<td>32.5</td>
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<tr>
<td><strong>Marital Status</strong></td>
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<tr>
<td>Married</td>
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<tr>
<td>Separated</td>
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<tr>
<td>Divorced</td>
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<td>15.0</td>
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<tr>
<td>Widowed</td>
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<td>3.8</td>
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<td>Never married &amp; nlp</td>
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<td>10.6</td>
</tr>
<tr>
<td>Never married &amp; lp</td>
<td>4</td>
<td>2.5</td>
</tr>
</tbody>
</table>

nlp=no live-in partner; lp=live-in partner
Table 4-cont.

Demographic Characteristics of the Sample

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Frequency</th>
<th>Percent</th>
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<tbody>
<tr>
<td><strong>Race</strong></td>
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<tr>
<td>Caucasian</td>
<td>145</td>
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<td>Hispanic or Latino</td>
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<tr>
<td>African American</td>
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<td>6.3</td>
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<tr>
<td>Asian</td>
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<tr>
<td>Native Hawaiian</td>
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<td><strong>Education</strong></td>
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<td>Doctoral Degree</td>
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<td>Post-Doctoral Training</td>
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<td><strong>Professional Discipline</strong></td>
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<tr>
<td>Social Work</td>
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<td>Psychology</td>
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<td>Counseling</td>
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<td>Nursing</td>
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<td>6</td>
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<td>Pastoral Counseling</td>
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<tr>
<td>Other</td>
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### Table 4-cont.

#### Demographic Characteristics of the Sample

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<thead>
<tr>
<th>Demographic</th>
<th>Frequency</th>
<th>Percent</th>
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</thead>
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<tr>
<td>Work Status</td>
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<tr>
<td>Employed, FT</td>
<td>112</td>
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<tr>
<td>Employed, PT</td>
<td>40</td>
<td>25.0</td>
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<tr>
<td>Disabled</td>
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<td>6.0</td>
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<tr>
<td>Retired</td>
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<td>2.5</td>
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<tr>
<td>Another discipline</td>
<td>2</td>
<td>1.3</td>
</tr>
<tr>
<td>Training</td>
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<td></td>
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<tr>
<td>MM Trained</td>
<td>65</td>
<td>40.6</td>
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<tr>
<td>No MM Training</td>
<td>95</td>
<td>59.4</td>
</tr>
<tr>
<td>CISM, past 12 mos</td>
<td>58</td>
<td>36.3</td>
</tr>
</tbody>
</table>

MM= Mitchell Model; CISM Critical Incident Stress Management;
Mos=months; FT=Full-time; PT=Part-time
Table 4-cont.

Demographic Characteristics of the Sample

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Range in Years</th>
<th>Mean</th>
<th>SD</th>
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<td>Age</td>
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<td>10.36</td>
</tr>
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<td>Post-graduate Exp.</td>
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<td>10.42</td>
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<tr>
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<td>10.00</td>
</tr>
<tr>
<td>CISM Exp.</td>
<td>.00 to 40.00</td>
<td>5.55</td>
<td>7.7</td>
</tr>
</tbody>
</table>

Exp=Experience  
SD=Standard Deviation
Institutional Review Board Approval

The Philadelphia College of Osteopathic Medicine Institutional Review Board approved this study as exempt survey research without identifiers. Each survey packet was assigned a number. No participant personal identifying information such as a name, social security number or return address was recorded on the completed surveys. The mailing lists secured from the membership registries of national and local professional mental health associations, as well as clinical practice groups were kept separate from completed survey packets. Given the lack of identifiers, the study did not warrant participant completion of an informed consent form. In addition, potential risks were deemed minimal and included participants' experiencing emotional discomfort during survey completion. The participants were told in their letters of introduction, that in the unlikely event of such distress, they were to cease survey completion and refer to the provided list of mental health resources. In addition, the introductory letter explicitly directed the participant to proceed to his or her local hospital emergency room, should he or she experience a severe adverse reaction or response. A severe adverse response was defined as homicidal or suicidal ideation or plan. The entire study, including subject recruitment, survey distribution, and data analysis spanned eighteen months. Each subject's involvement included completion of four survey instruments, requiring approximately 30-45 minutes for completion.
Survey Packet Contents

Each survey packet contained a letter of introduction, a set of instructions, a stamped envelope to return the completed survey to the researcher, a demographic survey, and three survey instruments.

Statistical Analysis

Statistical analyses were conducted to determine if a relationship existed between specific variables, such as current and cumulative exposure to client trauma and therapist endorsement of disrupted cognitive schemas, intrusive imagery and avoidant behaviors as measured by the Trauma and Attachment Belief Scale and the Impact of Event Scale-Revised. In addition, a demographic survey captured information such as clinician involvement in personal therapy, clinician personal trauma history, length of employment in a trauma specialty areas, length of employment as a mental health professional and the number and types of critical incidents responded to within the previous 12 months. The Marlowe-Crowne Social Desirability Scale was also utilized to assess if a participant’s responses were shaped by concerns regarding others’ approval. The proposed study was designed to have power set at .95 at the .05 level of significance to detect medium effects.
Measures

Participants completed a demographic survey as well as three self-report instruments, the Marlow-Crowne Social Desirability Scale, the Trauma and Attachment Belief Scale (formerly known as the Traumatic Stress Institute Belief Scale) and the Impact of Event Scale-Revised.

The Marlowe-Crowne Social Desirability Scale

The Marlowe-Crowne Social Desirability Scale, a self-report, 33-item scale is designed to assess an individual's need for approval from persons in authority (Crowne & Marlowe, 1960; Pearlman & Mac Ian, 1995). The rationale for utilizing such a scale within this study involved an assessment of whether or not a therapist's responses were shaped by concerns regarding others' approval. Items within the scale measure endorsement of behaviors which are culturally accepted but improbable of occurrence (Crowne & Marlowe, 1960). A participant is asked to review statements regarding personal attitudes and traits and to decide whether each item is true or false as it relates to the participant (Crowne & Marlowe, 1960). Crowne and Marlowe administered the scale to a sample of undergraduate psychology students enrolled in a class in abnormal psychology (N=39). The mean age of this sample was 24 years, with a range of 19 to 46 years. Within this sample, an internal consistency coefficient of .88 and a test-retest correlation of .89 were obtained. A
comparison with the Edwards Social Desirability Scale revealed a correlation statistically significant at the .01 level (N=120). Within this sample, participant scores resulted in a mean of 13.72 with a standard deviation of 5.78 (Crowne & Marlowe, 1960). A shortened form of the scale has also been developed. For the purposes of this study, the researcher utilized the original 33-item scale with the recommended respective scoring and normative data.

The Trauma and Attachment Belief Scale

Based upon constructivist self-development theory and formerly known as the Traumatic Stress Institute Belief Scale, this 84-item scale measures disrupted cognitive schemas associated with five psychological need areas (Pearlman, L.A., 2003). These specific need areas are hypothesized as being sensitive to traumatic experiences and to vicarious traumatization. Utilizing a six-point Likert scale, the 84 items measure cognitive disruptions in safety, trust, intimacy, esteem and control (Pearlman, L.A., 2003; Pearlman, L.A., 2004). A version of this scale has been utilized with a sample of female and male, self-identified trauma therapists, who have been employed an average of 9.59 years in fields such as psychology, social work, psychiatry and psychiatric nursing and trauma survivor therapy (Pearlman & Mac Ian, 1995). Clinical and non-clinical populations have been utilized to develop normative
data for this scale and support the TABS as a reliable and valid measure (Pearlman, L.A., 2003; Pearlman L.A., 2004).

Scoring. TABS standard scores are normalized T-scores with a mean of 50 and a standard deviation of 10. Standard scores for the TABS were originally developed using a nonclinical sample of 1,743 adults aged 17 to 78 (Pearlman, L.A., 2003). The participants were tested in clinical research projects which addressed the effects of trauma on interpersonal functioning. Within this standardization sample, Caucasian females were overrepresented; this left older individuals, males and individuals from non-Caucasian ethnic backgrounds underrepresented (Pearlman, L.A., 2003). Despite the above-mentioned, average TABS scores for men and women in the standardization sample were very similar. The researcher utilized the normative data from the above-mentioned standardization sample as a comparison when analyzing participant responses from the present study.

The Impact of Event Scale-Revised (IES-R)

The IES-R, a 22-item scale, has been developed to assess symptoms of avoidance and the experience of intrusive thoughts and imagery associated with posttraumatic stress disorder (Horowitz, Wilner, & Alvarez, 1979; Weiss & Marmar, 1997; Zilberg, Weiss, & Horowitz, 1982). Similar to the original Impact of Event Scale (IES), the IES-R is a self-report measure
designed to assess current subjective distress for any specific life event. In the revision of the IES scale, seven items were added to the original fifteen items (Weiss & Marmar, 1997). These seven items consist of six that tap hyperarousal symptoms, heightened startle response, difficulty in concentrating, and hypervigilance as well as an intrusion item, which taps dissociative-like re-experiencing of a traumatic event. The IES-R has been used with a variety of different trauma populations. The Intrusion and Avoidance subscales have shown high test-retest reliability (r=.79-.87; Horowitz, Wilner, & Alvarez, 1979) and internal consistency (a=.78-.92; Horowitz, Wilner, & Alvarez, 1979). Within this particular study, the IES-R was intended to identify specific symptoms of trauma-related distress, which would not be addressed by the Trauma and Attachment Belief Scale. Subjects were asked to decide “Currently how true is each item for you as it applies to your clinical work, (i.e. the traumatic events or experiences of your clients)?” The researcher utilized the scoring method recommended by the developers of this scale (Weiss & Marmar, 1997). Scoring consists of tabulating the mean of items comprising each subscale (avoidance, intrusions, and hyperarousal). The sum of the three clinical scales then provides a total IES-R score.
Demographic Survey

The researcher designed a demographic survey, specifically for this study. The survey identified information such as clinician involvement in personal therapy, clinician personal trauma history, length of employment in a trauma specialty area, length of employment as a mental health professional, and the number and types of critical incidents to which they responded within the previous 12 months. Each participant was also asked to identify the types of and frequency of professional and collegial support utilized. This included peer supervision, individual supervision, Post-CISM debriefing, and continuing education. Using a five-point scale, each participant was asked to rate how helpful he/she found each professional support service in managing occupation-related stress. In addition, participants were asked to identify types of and frequency of leisure activities in which they engaged. Similarly, using a five-point scale, participants were asked to rate how helpful she/he found each activity in managing occupation-related stress.
Collection of Data and Statistical Analysis

Completed survey results were entered in a data base by the doctoral student and by a research assistant. The Statistical Program for the Social Sciences 13.0 for Windows (SPSS) was utilized to create this data base and to analyze the study data. A negative correlation would be identified between specific protective factors and therapist endorsement of vicarious traumatization symptoms; this was measured by the Trauma and Attachment Belief Scale and therapist endorsement of traumatic stress symptoms as measured by the Impact of Event Scale-Revised. Specific protective factors included a longer trauma work history, frequency of participation in social, professional support, leisure and spiritual activities, and therapist-reported satisfaction with utilization of the above-mentioned activities in managing occupation-related stress. Finally, when compared to the group of non-trauma therapists, the researcher anticipated that CISM therapists would endorse items resulting in significantly higher scores on the Trauma and Attachment Belief Scale and significantly higher scores on the Impact of Event Scale-Revised.
Chapter Six

Results

Anticipated Results

The researcher anticipated that in the CISM group of therapists, a negative correlation would be identified between specific protective factors and therapist endorsement of vicarious traumatization symptoms; this was measured by the Trauma and Attachment Belief Scale and therapist endorsement of traumatic stress symptoms as measured by the Impact of Event Scale-Revised. Specific protective factors included a longer trauma work history, frequency of participation in social, professional support, leisure and spiritual activities, and therapist-reported satisfaction with utilization of the above-mentioned activities in managing occupation-related stress. Finally, when compared to the group of non-trauma therapists, the researcher anticipated that CISM therapists would endorse items resulting in significantly higher scores on the Trauma and Attachment Belief Scale and significantly higher scores on the Impact of Event Scale-Revised.
Hypotheses and Results

1. In the group of CISM therapists, a negative correlation would be observed between a longer trauma work history and the Trauma and Attachment Belief Scale (TABS) scores and the Impact of Event Scale-Revised scores (IES-R). Hypothesis one was analyzed utilizing a Pearson Product Correlation Coefficient and a one-tailed test.

Result: As illustrated in Table 6, a Pearson Product Moment Correlation Coefficient of \(-0.269\ (p < 0.05)\) between years of CISM work experience and TABS scores indicated a statistically significant negative correlation, suggesting that perhaps a longer CISM work history may protect CISM clinicians from developing vicarious traumatization. Although results indicated a negative correlation between longer CISM work history and CISM therapist IES-R scores \((-0.061)\), these results were not statistically significant (Table 7).

3. In the CISM group of therapists, a negative correlation would be observed between frequency of utilization of personal and professional supports and the Trauma and Attachment Belief Scale (TABS) scores and the Impact of Event Scale-Revised (IES-R) scores. Hypothesis two was analyzed utilizing a Pearson Product Correlation Coefficient and a one-tailed test.

Results: As illustrated in Table 6, a Pearson Product Moment Correlation Coefficient of \(-0.241\ (p < 0.05)\) between frequency of utilization of peer support and participant TABS scores indicated a statistically significant negative correlation,
suggesting that perhaps ability to access peer support may serve as a buffer against developing symptoms of vicarious traumatization. Results did not indicate the existence of a statistically significant negative correlation between utilization of peer and professional support and participant IES-R scores. However, a Pearson Product Moment Correlation Coefficient of .276 (*p<.05) revealed a statistically significant positive correlation between frequency of utilization of personal supports and participant TABS scores (Table 6). Utilization of personal supports was operationalized as talking with a friend or family member. A sense of isolation from supporters has been previously cited as characteristic of secondary trauma (Figley, 1995). Furthermore, higher TABS scores are believed to be indicative of disrupted beliefs in relationship to safety, trust, esteem, intimacy and control (Pearlman, 2003). Searching perhaps for relief from symptoms, individuals experiencing traumatic distress as evidenced by disrupted beliefs may be more likely to access family and social support systems more frequently. However, disrupted beliefs may hinder their ability to utilize family support systems effectively. For instance, elevated subscale scores in trust and intimacy may be indicative of problematic interpersonal relationships.

4.) In the CISM group of therapists, a negative correlation would be observed between reported satisfaction with personal and professional supports and the Trauma and Attachment Belief Scale (TABS) scores and the Impact of Event Scale-Revised
(IES-R) scores. Hypothesis three was analyzed utilizing a Pearson Product Correlation Coefficient and a one-tailed test. Results: A Pearson Product Moment Correlation Coefficient of .346(** p < .01) between reported satisfaction with utilization of personal supports and participant TABS scores indicated a positive correlation, suggesting that accessing personal supports may not serve as a buffer against developing symptoms of vicarious traumatization (Table 6). However, as previously stated, elevated TABS scores and subscale scores in trust and intimacy may suggest problematic interpersonal relationships and difficulty in effectively utilizing support systems. As presented in Table 7, a Pearson Product Moment Correlation Coefficient of -.132 between reported satisfaction with peer support and IES-R scores did not support a statistically significant negative correlation between these two factors.

4. In the CISM group of therapists, a negative correlation would be observed between reported frequency of engagement in leisure and spiritual activities and the Trauma and Attachment Belief Scale (TABS) scores and the Impact of Event Scale-Revised (IES-R) scores. Hypothesis four was analyzed utilizing a Pearson Product Correlation Coefficient and a one-tailed test. Results: A Pearson product Moment Correlation Coefficient of -.122 between frequency of engagement in spiritual activities and participant TABS scores did not support a statistically significant relationship between these two variables (Table 6). In addition, a Pearson Product Moment Correlation Coefficient of .301 (*p<.05) between exercise frequency and participant TABS
scores supported a relationship between these two factors (Table 6). Although engagement in exercise may be a method of managing occupational stress, frequency may not offset the severity of symptoms (i.e. altered schemas) associated with vicarious traumatization. In addition, study results indicated the existence of a negative correlation between frequency of engagement in spiritual activities and participant IES-R scores (-.067, Table 7); however, such results were not statistically significant.

5. In the CISM group of therapists a negative correlation will be observed between reported satisfaction with leisure and spiritual activities and the Trauma and Attachment Belief Scale (TABS) scores and the Impact of Event Scale-R (IES-R) scores. Specifically, within the demographic survey, a participant was asked to rate how helpful she/he found the particular activity in managing occupational stress. Hypothesis five was analyzed utilizing a Pearson Product Correlation Coefficient and a one-tailed test.

Results: A Pearson Product Moment Correlation Coefficient of -.244 (*p<.05) between reported satisfaction with leisure activities in managing occupational stress and participant TABS scores supported a statistically significant relationship between these two factors (Table 6). The perception of leisure activities as being helpful in managing occupational distress may serve as a buffer against developing symptoms of vicarious traumatization. Although results revealed a negative correlation between reported satisfaction with spiritual activities and
participant TABS scores (-174, Table 6), these were not statistically significant. In addition, results did not support the existence of a statistically significant negative correlation between reported satisfaction with leisure and spiritual activities and participant IES-R scores (.034, .070).

6. When compared to the group of non-trauma therapists, CISM therapists would endorse more items resulting in significantly higher scores in the Trauma and Attachment Belief Scale (TABS). Hypothesis six was analyzed utilizing a T test for independent samples.

Results: Results indicated no statistically significant differences existed between CISM therapists' TABS scores and non-trauma therapists' TABS scores (Table 9).

7. When compared to the group of non-trauma therapists, CISM therapists will endorse more items resulting in significantly higher scores in the Impact of Event Scale-Revised (IES-R). Hypothesis seven was analyzed utilizing a T test for independent samples.

Results: Results indicated that no statistically significant differences existed between CISM therapists' IES-R scores and non-trauma therapists' IES-R scores (Tables 9).

MCSDS Results

The Marlowe Crowne Social Desirability Scale (MCSDS) was included as a survey instrument to determine if a relationship existed between a participant's need to present himself or
herself in a socially desirable light and the reporting of symptoms of traumatic distress and vicarious traumatization. Statistical analyses were conducted on the responses of the entire group. A Pearson Product Correlation Coefficient was utilized to analyze the potential relationship between MCSDS scores and TABS scores and IES-R scores. Results are illustrated in Table 10. A Pearson Product Moment Correlation Coefficient of \(-0.199 (**p < 0.01)\) between participant MCSDS scores and IES-R scores indicated that a negative correlation existed between these two variables. In addition, a Pearson product Moment Correlation Coefficient of \(-0.418 (**p < 0.01)\) between participant MCSDS scores and TABS scores results supported the existence of a negative correlation between these two factors. The above-mentioned results may indicate score suppression in participant TABS scores and IES-R scores. Specifically, in an effort to present oneself in a more favorable light, participants may have underreported symptoms of traumatic stress and beliefs associated with vicarious traumatization. When compared to previous standardization samples, the present study sample achieved slightly higher scores (Mean 14.83, SD 6.16, N=160). Previous participant scores have resulted in a mean of 13.72 with a standard deviation of 5.78 in a sample of 120 undergraduate psychology students (Crowne & Marlowe, 1960).
**Post Hoc Analyses**

**Non-CISM Clinicians**

The survey sample also included one hundred and two non-CISM clinicians. These were clinicians who had identified themselves as:

1. not specializing in providing CISM services or
2. previously specializing in CISM services but not having provided such services within the preceding 12 months.

Similar statistical analyses were conducted to determine if the responses of this subgroup differed from those of the CISM group.

**Results related to TABS scores.** Results did not support a statistically significant relationship between years of CISM work experience and TABS scores nor between the years of trauma work experience and TABS scores (-.062, -.050, p<.05, 1-tailed test, Table 11). Similarly, findings did not indicate a statistically significant negative correlation between utilization of professional and personal supports and TABS scores (.096, -.056, -.127, p<.05, 1-tailed test). With respect to perceived satisfaction with professional support activities and TABS scores, findings did not suggest a relationship between these two variables (.020, -.089, p<.05, 1-tailed test). In the realm of leisure and spiritual activities to manage occupational stress, findings did not support a statistically negative correlation between frequency of these activities and TABS scores (.087, -.123, .096, p<.05, 1-tailed test). With respect to
perceived satisfaction in such activities as helping to manage occupational stress, results did not indicate any significant correlation between these variables and TABS scores (-.140, -.101, -.106, -.087). However, a Pearson Product Moment Correlation Coefficient of -.206* indicated a statistically significant correlation between exercise frequency and TABS scores (*p<.05, 1-tailed test, Table 11).

Results Related to IES-R Scores. With respect to utilization of professional supports in managing occupational stress, results did not reveal a statistically negative correlation between utilization of professional supports and IES-R scores (.004, .116, -.021, Table 11). In addition, study findings did not indicate the existence of a statistically significant relationship between satisfaction with professional supports and IES-R scores (.204, -.026). The exception was the utilization of post CISM debriefing, because a Pearson Product Moment Correlation Coefficient of .543 (*p<.05, 1-tailed test, Table 11) indicated a statistically significant positive correlation between this variable and IES-R scores. Such a finding may suggest that clinicians in this subgroup experienced more symptoms of traumatic stress as measured by the IES-R. Relief from symptoms may be a strong motivator with respect to seeking intervention. However, perceived satisfaction with such a professional support does not indicate that the intervention necessarily resulted in fewer symptoms. Furthermore, the present study design does not allow for determining a baseline of symptoms. With respect to satisfaction with leisure activities
in managing occupational distress, study results did not support the existence of a statistically significant correlation between satisfaction with leisure activities and IES-R scores (.008, -.013, Table 11).

**Difference between two independent correlations** (independent samples). In order to determine if a difference in the degree of correlation(s) between the two groups existed, a test of the difference between two independent correlation coefficients was performed. Specifically, if there were no real difference in the degree of correlation for the two groups, then the correlations in the population for CISM clinicians would equal that parameter for the non-CISM clinicians. As illustrated in Table 13, results indicated a difference in the degree of correlation for the two groups in the following areas: 1. years of CISM experience and TABS scores (-1.0699), 2. satisfaction with leisure activities and TABS scores (-.561), and 3. frequency of utilization of peer support and TABS scores. When compared to non-CISM clinicians, CISM clinicians reported responses indicating a stronger relationship or negative correlation between: 1. years of CISM experience and endorsement of beliefs characteristic of vicarious traumatization, 2. satisfaction with leisure activities and TABS scores, and 3. frequency of utilization of peer support and TABS scores. In the CISM group, such results suggest that years of CISM experience, the ability to enjoy leisure activities and frequent utilization of peer support may act as potential buffers against such clinicians developing vicarious traumatization. Additional
results indicated a difference in the degree of correlation (or magnitude of the relationship) for the two groups with respect to the following variables: 1. MCSDS scores and TABS scores (-1.69, 2-tailed test, Table 13), 2. MCSDS scores and IES-R scores (-1.13, 2-tailed test, Table 13), and 3. trauma history and IES-R scores (1.042, 2-tailed test, Table 13). Such results suggest that when compared to non-CISM clinicians, CISM clinicians endorsed responses indicating a stronger relationship between social desirability and the reporting of trauma symptoms or beliefs. The desire to present oneself in a positive light may be correlated with underreporting of symptoms.

Trauma History and Participation in Trauma Treatment

Prior research has focused upon the relationship between clinician personal trauma history and reported symptoms of secondary traumatic distress or vicarious traumatization (Pearlman & Mac Ian, 1995; Pearlman & Saakvitne 1995). In addition, the relationship between clinician participation in trauma treatment or psychotherapy and reported symptoms of secondary trauma or vicarious traumatization has also been examined. Similarly, this researcher wished to determine the existence of a relationship between clinician personal trauma history and reported symptoms of traumatic stress and vicarious traumatization within the entire sample. As illustrated in Table 14, a Pearson Product Moment Correlation Coefficient of
.254(**p<.01) between participant endorsement of a personal trauma history and IES-R scores suggested a correlation between these two variables. In addition, results suggested a relationship between participant endorsement of participation in trauma treatment and TABS scores, as evidenced by a Pearson Product Moment Correlation Coefficient of .331 (**p<.01). This researcher speculates that clinician-disrupted schemas (as measured by such instruments as the Trauma and Attachment Belief Scale) may provide strong enough motivation for a clinician to seek treatment. Furthermore, the researcher questions whether or not clinician-disrupted schemas or beliefs are stronger motivators for treatment than are the motivations for seeking relief from more observable and transient symptoms such as those measured by the IES-R. Specifically, both the Impact of Event Scale-Revised IES-R and the original Impact of Event Scale (IES) were designed to assess current subjective distress. In contrast, the Trauma and Attachment Belief Scale was developed to measure core beliefs related to safety, trust, control, intimacy and esteem.
### Table 5
Mean & Standard Deviation: TABS Scores

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<th>Minimum</th>
<th>Maximum</th>
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<th>SD</th>
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</thead>
<tbody>
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<td>137.00</td>
<td>285.00</td>
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<td>19.79933</td>
</tr>
</tbody>
</table>

| Yrs general | .090 | 
| Yrs CISM     | -.269* |

*P<.05 (1-tailed)

Yrs general = years of general trauma work experience

Yrscism = Years of CISM work experience

TTABS = T scores for Trauma and Attachment Belief Scale
Table 6-cont.
Correlations: Professional Supports & TABS Scores

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<tr>
<td>CISMdebrfrea</td>
<td>-.234</td>
<td>47</td>
</tr>
</tbody>
</table>

*p < .05, (1-tailed); **p < .01, (1-tailed)

Peerfreq = peer supervision; CE = Continuing Education; cismdebrf = critical incident stress management debriefing; indivfreq = individual supervision

TABS = T scores for Trauma and Attachment Belief Scale
Table 6-cont.
Correlations
Leisure, Spiritual, Support Activities & TABS Scores

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<td>Talkrtrtng</td>
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*p<.05, (1-tailed); **p<.01, (1-tailed)
exerfreq=exercise frequency; leisfreq=leisure frequency; spiritfreq=spiritual activities and frequency; talkfreq=frequency of talking with family, friends.
Leisrtng=leisure rating; Exertng=exercise rating; Spiritrtng=spiritual activity rating; Talkrtrtng=Talk rating; TABS=T scores for Trauma and Attachment Belief Scale
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<td>Yrscism</td>
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<td>53</td>
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</table>

Yrsgeneral=years of general trauma work experience; Yrscism=Years of Critical Incident Stress Management experience

*p<.05,(1-tailed); **p<.01,(1-tailed)
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*p < .05, (1-tailed); **p < .01, (1-tailed)

Peerfreq = peer supervision; CE = Continuing Education; cismdebrf = critical incident stress management debriefing; indivfreq = individual supervision

IES-R scores for Impact of Event Scale-Revised
Table 7-cont.
Correlations: Personal Support & IES-R Scores

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<td>Talkra</td>
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<td>56</td>
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</table>

*p<.05, (1-tailed); **p<.01, (1-tailed)

exerfreq=exercise frequency; leisfreq=leisure frequency; spiritfreq=spiritual activities and frequency; talkfreq=frequency of talking with family, friends.

Leisrtng=leisure rating; Exertng=exercise rating; Spiritrtng=spiritual activity rating; Talkrtng=Talk rating; IES-R=scores for Impact of Event Scale-Revised
Table 8
T-Test for IES-R Scores

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<tr>
<th>Group</th>
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<th>SD</th>
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<tbody>
<tr>
<td>CISM12 mos</td>
<td>91</td>
<td>1.35</td>
<td>1.50</td>
<td>.15819</td>
</tr>
<tr>
<td>1.00</td>
<td>56</td>
<td>1.30</td>
<td>1.69</td>
<td>.226</td>
</tr>
</tbody>
</table>
Table 8-cont.

Independent Samples Test

Levene's Test for Equality of Variances

<table>
<thead>
<tr>
<th></th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>IES-R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>0.572</td>
<td>0.451</td>
</tr>
</tbody>
</table>

Equal variances not assumed
### Table 8-cont.

#### t-test for Equality of Means

<table>
<thead>
<tr>
<th>Equal variances assumed</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>MD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-.162</td>
<td>145</td>
<td>.871</td>
<td>-.0436</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Equal variances not assumed</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>MD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-.158</td>
<td>106</td>
<td>.875</td>
<td>-.0436</td>
</tr>
</tbody>
</table>

MD = Mean Difference

#### t-test for Equality of Means: IES-R Scores

<table>
<thead>
<tr>
<th>Std. Error Difference</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Equal variances assumed</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-.57477</td>
<td>.48754</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Equal variances not assumed</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>.27631</td>
<td>-.59142</td>
<td>.50419</td>
</tr>
</tbody>
</table>
Table 9

**t-Test for TTABS Scores**

### Group Statistics

<table>
<thead>
<tr>
<th>CISM12 mos</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Std.Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>.00</td>
<td>74</td>
<td>40.12</td>
<td>.815</td>
<td>.174</td>
</tr>
<tr>
<td>1.00</td>
<td>51</td>
<td>39.85</td>
<td>1.244</td>
<td>.095</td>
</tr>
</tbody>
</table>

Table 9-cont.

**Independent Samples Test**

<table>
<thead>
<tr>
<th>TTABS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal variances assumed</td>
<td>4.773</td>
<td>.031</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 9-cont.

<table>
<thead>
<tr>
<th>t-test for Equality of Means</th>
<th>t</th>
<th>df</th>
<th>Sig.(2-tailed)</th>
<th>MD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal variances assumed</td>
<td>-1.466</td>
<td>123</td>
<td>.145</td>
<td>-.27</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>-1.361</td>
<td>79</td>
<td>.177</td>
<td>-.27</td>
</tr>
</tbody>
</table>

MD=Mean Difference

Table 9-cont.

<table>
<thead>
<tr>
<th>t-test for Equality of Means: TTABS Scores</th>
<th>Std. Error Difference</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lower</td>
<td>Upper</td>
</tr>
<tr>
<td>Equal Variances Assumed</td>
<td>.184</td>
<td>-.634</td>
</tr>
<tr>
<td>Equal Variances not Assumed</td>
<td>.198</td>
<td>.665</td>
</tr>
</tbody>
</table>
Table 10

<table>
<thead>
<tr>
<th>TABS</th>
<th>IES-R</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCSDS</td>
<td>-.418**</td>
</tr>
<tr>
<td></td>
<td>.000</td>
</tr>
</tbody>
</table>

N=130  N=152

*p<.05, (2-tailed); **p<.01, (2-tailed)
Post Hoc Analyses

Table 11

Non-cism Sample: Professional Activities

<table>
<thead>
<tr>
<th></th>
<th>TABS</th>
<th>N</th>
<th>IES-R</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yrscism</td>
<td>-.062</td>
<td>62</td>
<td>-.148</td>
<td>74</td>
</tr>
<tr>
<td>Yrs General Trauma</td>
<td>-.050</td>
<td>63</td>
<td>-.009</td>
<td>77</td>
</tr>
<tr>
<td>Individualfreq</td>
<td>.096</td>
<td>73</td>
<td>.078</td>
<td>88</td>
</tr>
<tr>
<td>Peerfreq</td>
<td>-.056</td>
<td>75</td>
<td>.004</td>
<td>89</td>
</tr>
<tr>
<td>Cefreq</td>
<td>-.127</td>
<td>78</td>
<td>.116</td>
<td>94</td>
</tr>
<tr>
<td>cismdembrffreq</td>
<td>-.172</td>
<td>65</td>
<td>-.021</td>
<td>75</td>
</tr>
<tr>
<td>Indivra</td>
<td>.020</td>
<td>45</td>
<td>.204</td>
<td>55</td>
</tr>
<tr>
<td>Peerra</td>
<td>-.089</td>
<td>64</td>
<td>-.026</td>
<td>78</td>
</tr>
<tr>
<td>Postcismra</td>
<td>-.247</td>
<td>12</td>
<td>.543*</td>
<td>14</td>
</tr>
</tbody>
</table>

*p<.05, (2-tailed); **p<.01, (2-tailed)
Table 11-cont.

Non-cism Sample: Leisure & Spiritual Activities

<table>
<thead>
<tr>
<th></th>
<th>TABS</th>
<th>N</th>
<th>IES-R</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leisfreq</td>
<td>.087</td>
<td>79</td>
<td>-.110</td>
<td>96</td>
</tr>
<tr>
<td>Exerfreq</td>
<td>-.026*</td>
<td>78</td>
<td>-.098</td>
<td>96</td>
</tr>
<tr>
<td>Spiritfreq</td>
<td>-.123</td>
<td>79</td>
<td>-.096</td>
<td>96</td>
</tr>
<tr>
<td>Talkfreq</td>
<td>.096</td>
<td>79</td>
<td>-.046</td>
<td>95</td>
</tr>
<tr>
<td>Leisurerela</td>
<td>-.140</td>
<td>79</td>
<td>.046</td>
<td>96</td>
</tr>
<tr>
<td>Exerra</td>
<td>-.101</td>
<td>79</td>
<td>.019</td>
<td>89</td>
</tr>
<tr>
<td>Spiritra</td>
<td>-.106</td>
<td>58</td>
<td>.008</td>
<td>72</td>
</tr>
<tr>
<td>Talkra</td>
<td>-.087</td>
<td>79</td>
<td>-.013</td>
<td>96</td>
</tr>
</tbody>
</table>

*p < .05, (2-tailed); **p < .01, (2-tailed)

*Difference exists in the degree of correlation for the 2 groups

(i.e., Difference in the magnitude of the relationship for the 2 groups)
Table 12
Correlations: MCSDS Scores, Trauma hx & Scores

<table>
<thead>
<tr>
<th></th>
<th>TABS</th>
<th>N</th>
<th>IES-R</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCSDS Scores</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CISM group</td>
<td>-.560</td>
<td>58</td>
<td>-.318</td>
<td>51</td>
</tr>
<tr>
<td>Non-cism group</td>
<td>-.262</td>
<td>79</td>
<td>-.122</td>
<td>96</td>
</tr>
<tr>
<td>Trauma Hx</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CISM group</td>
<td>.181</td>
<td>46</td>
<td>.206</td>
<td>96</td>
</tr>
<tr>
<td>Non-cism group</td>
<td>.017</td>
<td>74</td>
<td>.281</td>
<td>89</td>
</tr>
</tbody>
</table>

Table 13
Test of the difference between 2 independent correlations

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>YrsCISMexp &amp; TABS scores</td>
<td>-1.0699*</td>
</tr>
<tr>
<td>Exerfreq &amp; TABS scores</td>
<td>1.534</td>
</tr>
<tr>
<td>Leisurera &amp; TABS scores</td>
<td>-.561*</td>
</tr>
<tr>
<td>Peerfreq &amp; TABS scores</td>
<td>-1.005*</td>
</tr>
<tr>
<td>MCSDS scores &amp; TABS scores</td>
<td>-1.69*</td>
</tr>
<tr>
<td>MCSDS scores &amp; IES-R scores</td>
<td>-1.13*</td>
</tr>
<tr>
<td>Trauma hx &amp; TABS scores</td>
<td>.854</td>
</tr>
<tr>
<td>Trauma hx &amp; IES-R scores</td>
<td>-.042*</td>
</tr>
</tbody>
</table>

*Difference exists in the degree of correlation for the 2 groups

(i.e. Difference in the magnitude of the relationship for the 2 groups).
Summary and Significance of Results

The problem of the identification of occupational distress and professional impairment among mental health practitioners has been identified in the behavioral healthcare community. \[\text{cite}\]

Table 14: Correlations: Trauma Hx, Counseling & Scores

<table>
<thead>
<tr>
<th>TABS</th>
<th>IES-R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Trauma Hx</td>
<td>.109</td>
</tr>
<tr>
<td>Counseling/Tx</td>
<td>.331**</td>
</tr>
</tbody>
</table>

Hx=history; tx=treatment

*p<.05, (2-tailed); **p<.01, (2-tailed)
Chapter Seven

Summary and Significance of Results

The problem of the identification of occupational distress and professional impairment among mental health practitioners has been identified as a noteworthy concern in the behavioral healthcare community (O'Halloran, T.M. & Linton, J. M., 2000; Rowe, M.M., 2000; Sexton, L., 1999). The development of interventions such as colleague assistance programs and continuing education requirements are evidence of efforts to prevent and address professional impairment. Although all mental health professionals may be exposed to occupational stressors, given the nature of their work, Critical Incident Stress Management clinicians may be at risk for developing traumatic stress symptoms and vicarious traumatization. As the general issue of professional impairment raises concern with respect to public protection and welfare, the study of vicarious traumatization may result in information to be utilized in developing programs to prevent vicarious traumatization through early identification of those professionals at risk. The above-mentioned rationale served as a foundation for the researcher to study factors correlated with vicarious traumatization. One hundred and sixty participants were surveyed to determine if specific variables were associated with fewer reported symptoms of vicarious traumatization and traumatic stress. In addition, participant responses were examined to determine if the prevalence of vicarious traumatization and symptoms of traumatic stress were greater in clinicians specializing in CISM services.
when compared to clinicians who do not specialize in providing CISM services.

Measures

Because the researcher wished to measure particular dimensions of vicarious traumatization and traumatic stress, three survey instruments were utilized in addition to a demographic survey. The Trauma and Attachment Belief Scale was introduced to measure disrupted cognitive schemas characteristic of vicarious traumatization. The Impact of Event Scale-Revised was included to measure symptoms of traumatic stress such as avoidance, hyperarousal and intrusive thoughts or imagery. A demographic survey was also used to capture information such as clinician experience, expertise and clinician utilization of professional and personal supports in the management of occupation related stress. Finally, The Marlowe-Crowne Social Desirability Scale was included to determine if a participant’s responses were shaped by the need to present oneself in a positive or socially desirable light.
Sample

The sample consisted of two groups of clinicians: 1.) clinicians who specialized in providing CISM services and who had provided CISM services within the past twelve months, and 2.) clinicians who did not specialize in providing CISM services and clinicians who had not provided CISM services within the previous twelve months.

Results related to TABS scores

Study results revealed a statistically significant negative correlation between length of clinician CISM work history and TABS scores. Such results appear consistent with previous findings in other professional populations in which training and experience have been correlated with fewer symptoms of traumatic stress (Corneil, Beaton, Murphy, Johnson & Pike, 1999; Marmar et al., 1996; Pearlman & Mac Ian, 1995). In addition, a statistically significant negative correlation was found to exist between clinician utilization of peer support and TABS scores. This would suggest that a longer CISM work history and increased utilization of peer support may serve as protective factors against CISM clinicians developing vicarious traumatization.

Interest in and the ability to experience pleasure in activities were also examined indirectly. A statistically
significant negative correlation was found between clinician reported satisfaction with leisure activities and TABS scores. Specifically, the fact that a clinician perceives leisure activities as being helpful in managing occupational distress may also indicate that these activities could serve as a buffer against developing vicarious traumatization. The role of interest and pleasure in activities has been cited in other disorders (American Psychiatric Association, 2000). Diminished interest and diminished pleasure may be one of several indicators of Major Depressive Disorder, which may co-occur with Posttraumatic Stress Disorder (American Psychiatric Association).

Finally, results revealed a statistically significant positive correlation at the .05 level between frequency of utilization of personal supports as well as frequency of engagement in exercise and participant TABS scores. Although the researcher can only speculate regarding these findings, perhaps CISM clinicians who access friends and family in managing occupational stress can not or do not, for any number of reasons, access peers to manage such distress. Perhaps such clinicians have less developed support systems among professionals and peers. Inability to develop and access peer support systems has been identified as a variable indirectly impacting the development of posttraumatic stress symptoms in military personnel (King, King, Fairbank, Keane, & Adams, 1999). Another explanation for the relationship between increased frequency of utilization of personal supports and elevated TABS
scores may be found in the impact of disrupted beliefs on interpersonal functioning. Despite an individual's attempt to seek emotional support, disrupted beliefs regarding trust, intimacy and safety may hinder effective utilization of family and social networks.

Results related to IES-R scores

Results indicated a negative correlation between longer CISM work history and CISM therapist IES-R scores; however, such results were not statistically significant. Similarly, results did not support a statistically significant difference between CISM therapist IES-R scores and CISM participant IES-R scores. Results also did not indicate the existence of a statistically significant negative correlation between utilization of peer and professional supports and participant IES-R scores. Although results indicated the existence of a negative correlation between frequency of engagement in spiritual activities and participant IES-R scores, such results were not statistically significant. In addition, results did not support the existence of a statistically significant negative correlation between reported satisfaction with leisure and spiritual activities and participant IES-R scores.
Prevalence of vicarious traumatization

Results revealed that no statistically significant differences existed between CISM therapists’ IES-R scores and non-trauma therapists’ IES-R scores. Similarly, results did not support a statistically significant difference between CISM therapists’ TABS scores and non-trauma therapists’ TABS scores. Such results indicate that perhaps vicarious traumatization is no more prevalent in the population of CISM clinicians than in the population of non-trauma clinicians. However, the above-mentioned results should be interpreted in the context of the study’s MCSDS results.

MCSDS results

Results suggested a relationship between participant endorsement of socially desirable behaviors and the reporting of fewer traumatic stress symptoms and fewer disrupted schemas, as measured by the IES-R and the TABS respectively. Because a correlation may indicate score suppression, overall study results should be interpreted with caution.
Limitations of the Study and Recommendations for Future Research

With respect to limitations, several dimensions of this study are worthy of further investigation.

Sample

Generalizability presents as a challenge in this particular study. The sample consisted of predominantly female participants. The majority of clinicians identified their professional discipline as social work. Other professional groups were underrepresented. In addition, the sample was predominantly Caucasian (90.6%). Interpretation of TABS-T-scores with underrepresented groups has been previously addressed. Asian Americans have attained higher scores than the average of 50T (Pearlman, 2003). In addition, subscale scores (Other-Safety, Other-Trust, and Other-Esteem) of African Americans have been found to be reliably higher than the expected average of 50T (Pearlman, 2003). Sample size is another consideration. One hundred and sixty surveys were returned prior to data analysis. Surveys with incomplete item responses were eliminated from analysis. Furthermore, of the one hundred and sixty returned surveys, only fifty-eight met criteria for inclusion in the CISM sample (i.e. having provided CISM services within the preceding twelve months). As demographic factors may impact study results, future research may focus upon gender as a variable. Also, each
professional discipline may equate with a different undergraduate and graduate training focus for a clinician. Professional discipline is a variable that could potentially impact the development of vicarious traumatization. In the context of multicultural awareness and sensitivity, future studies may also examine prevalence of secondary trauma and vicarious traumatization in various ethnic groups. Specifically, are there ethnic and cultural differences between clinicians with respect to how each group conceptualizes trauma and trauma intervention? Do cultural beliefs and practices impact how a CISM or trauma clinician addresses and integrates the traumatic events of patients serviced? Finally, age and marital status are additional demographic variables which may be considered.

Survey Instruments

Given the professional population sampled, sensitivity to survey instruments may have impacted study results. Specifically, within the context of their work and professional training, it is likely that clinicians may have been previously exposed to the assessment tools utilized in this study. Knowledge of such instruments may have shaped a participant’s responses. In addition, given the results supporting a negative correlation between participants’ MCSDS scores, TABS scores and IES-R scores, the researcher must consider score suppression as a possibility. Future research may include controlling for such factors by asking participants to report knowledge of or
familiarity with particular instruments. Potential participants reporting knowledge of particular survey instruments may be excluded. However, given a self-report format, accuracy of such responses may be questionable. The lack of survey instruments adequately measuring secondary trauma has been previously identified as problematic. Future research regarding secondary trauma and vicarious traumatization in clinicians could potentially focus upon the development of instruments which adequately assess the symptoms of secondary trauma and the disrupted beliefs of vicarious traumatization, at the same time controlling for social desirability responses. Concurrent with such a task is the need to further define secondary trauma and vicarious traumatization. Last, the researcher attempted to construct a comprehensive demographic survey, but some areas were not measured within this instrument. The survey did not include a category for utilization of the creative arts in managing occupation related stress. Colleagues have commented informally on the absence of this category and have identified engaging in writing, dance, and the visual arts as mechanisms for managing occupation related stress. In addition, as the study’s focus rested upon adaptive behaviors in managing occupation related distress, the demographic survey did not assess other areas, such as substance use as a coping mechanism. Furthermore, participants were not asked to disclose any history of disciplinary measures taken against them by a licensing board or by an employer because of professional impairment.
Amount of Exposure to Traumatic Events

Within the group of clinicians having provided CISM services within the past twelve months, a majority (67%) reported that 25% or less of their professional practice or work was dedicated to providing this kind of service. If this is accurate, the study may not have captured the responses of clinicians experiencing greater exposure to traumatic events. Because vicarious traumatization has been described as a cumulative process and because more direct exposure to trauma has been correlated with greater traumatic stress symptoms, future research may attempt to identify clinicians whose work is predominantly CISM focused.

Length of work experience

The sample mean of overall years of post-graduate work experience was 23.40 with a standard deviation of 10.42. Therefore this particular group appeared to represent more experienced clinicians. The researcher is left to consider if study results would have differed with a significantly less experienced group of clinicians.
Implications for Future Interventions

The present study results highlight the importance of clinician experience and collegial support in managing occupational distress. Less experienced clinicians may be more vulnerable to the deleterious effects of secondary trauma and vicarious traumatization; therefore, opportunities for collegial support, peer supervision and training are preventive efforts to be considered.

Educational opportunities

Preventive measures may be more useful if introduced at an undergraduate and graduate level of education (Sexton, 1999). Such training may include seminars on recognizing professional impairment, burnout and secondary trauma in the context of ethics coursework. Increasing the visibility of such topics may lessen potential anxiety that trainees may experience in admitting professional struggles. In addition, because graduate training involves practicum and internship seminars, students may benefit from peer supervision within this context. Introducing the value of peer supervision may provide a solid foundation for students. Modeling and engaging in supportive peer supervision may assist students in developing coping skills necessary for the management of occupation related distress in their future careers.
Policy development

Because preventive measures extend beyond professional training, the ongoing task of preventing professional impairment has implications for policy development and implementation at various levels. Professional licensing boards are challenged with the duty of creating, of continually improving and of implementing approaches to professional impairment. Such approaches include, but are not necessarily limited to the revision of ethical codes, the launching of colleague assistance programs and examination of continuing education requirements for licensed professionals. As an example, a state regulatory board may require psychologists to attend an ethics seminar as part of the continuing education requirements for licensure renewal. However, the requirement is broadly defined because numerous topics can be categorized as appropriate for inclusion within an ethics seminar. Revising continuing education requirements to include attendance at seminars addressing professional impairment is a measure and intervention worth consideration.

Employer practices

Some national and local relief organizations have adopted and applied the Critical Incident Stress Management model to
addressing the needs of their own staff members, consultants and volunteers. Other organizations offer employee assistance services to their employees. Utilization of resources to develop prevention programs may present a financial dilemma to organizations. Therefore, implementation of employee services needs to be preceded by research determining which programs are more likely to be utilized by CISM clinicians. Last, because experience appears to be a buffer against secondary trauma and vicarious traumatization, newly trained CISM clinicians may benefit from structured individual and peer supervision and the availability of a mentor or preceptor.

Relevance to Cognitive Behavioral Therapy:
Defining, Measuring and Treating Secondary Trauma and Vicarious Traumatization

An historical review of the concepts of secondary trauma and vicarious traumatization reveals three areas requiring further development. These are the areas of definition, measurement and treatment.

Definition and measurement

As previously stated, Figley has proposed that the diagnosis of posttraumatic stress disorder be reconceptualized to include primary traumatic stress and secondary traumatic stress (Figley, 1995). Post traumatic Stress Disorder consists
of the development of specific symptoms following exposure to a traumatic stressor or witnessing or learning of unexpected death, serious harm or threat of death or injury experienced by a family member or close associate (American Psychiatric Association, 1994; American Psychiatric Association, 2000). It is implied that an individual can be traumatized without experiencing physical harm or being threatened with harm but by learning about a traumatic event. Unfortunately, without an explicit diagnostic category for secondary trauma or vicarious traumatization, this type of impairment may be overshadowed by primary posttraumatic stress disorder. Lack of a specific diagnostic category may equate with less attention paid to the disorder and potentially fewer resources applied to addressing its impact upon professionals. An example includes an impaired professional being denied utilization of a short term disability benefit or a mental health benefit based upon a medical reviewer’s interpretation of diagnostic criteria.

Continued revision of the diagnostic category of posttraumatic stress disorder to incorporate secondary traumatic stress would require shifting attention and resources to a less studied phenomenon. Such an endeavor includes redistributing focus upon less observable symptoms such as an individual’s thoughts or particular beliefs associated with traumatic events. In comparison to assessing symptoms such as avoidance or
hypervigilance through self-report, identifying the meaning of a traumatic event to an individual may present additional challenges with respect to measurement. Nonetheless, it is a useful dimension of measurement to assist in treatment planning and interventions. Pearlman has recommended utilizing the Trauma and Attachment Belief Scale results to:

1.) identify themes relevant to a client, and
2.) guide the development of treatment interventions.

Further adaption of the Trauma and Attachment Belief Scale for use with mental health professionals or the development of a scale incorporating measurement of observable symptoms and clinician beliefs related to client trauma may facilitate more accurate assessment and pave the way for specialized interventions.

Treatment and intervention

Empirically based protocols to treat impaired mental health professionals appear scarce in comparison to standardized treatments developed to address primary traumatic stress disorder in the general population. A review of the literature reveals general recommendations for the use of Critical Incident Stress Management Services with professionals, skills training
and broadly defined interventions such as supervision or consultation services for trauma therapists (Rowe, M.M., 2000; Sexton, L. 1999). The development of a cognitive behavioral treatment protocol for use with mental health professionals would help to fill this deficit. Standardized treatment approaches for posttraumatic stress disorder have addressed observable symptoms such as avoidance and hypervigilance and less observable symptoms such as intrusive thoughts. Such approaches have utilized: desensitization through prolonged exposure to traumatic material, psychoeducation regarding posttraumatic stress disorder and cognitive restructuring aimed at challenging existing beliefs about a traumatic event. The cognitive behavioral model allows for interventions addressing the disrupted beliefs associated with vicarious traumatization and the behavioral indicators of secondary traumatic stress. Given such advantages, utilizing the model to develop treatment protocols for use with CISM clinicians may provide a valuable resource and direction for employee assistance programs as well as impaired professional programs.
Conclusion

The purpose of this study was to identify risk factors correlated with vicarious traumatization in CISM clinicians. One hundred and sixty clinicians were surveyed. Study results suggested that a longer work history and utilization of peer support served as protective factors against CISM clinicians developing vicarious traumatization. The researcher anticipated that CISM clinicians would report more symptoms of traumatic stress and vicarious traumatization; however, when compared to non-CISM clinicians, no statistically significant differences were detected between groups. Study limitations were reviewed with recommendations for future research to address such limitations. Implications for interventions were also discussed. Because empirically based treatment addressing secondary trauma in mental health professionals appears to be scarce, the development of a cognitive behavioral treatment protocol for use with CISM clinicians may prove to be valuable in the future.
References


Dear Participant:

We are currently conducting a study on the impact of trauma related work on mental health clinicians. We are investigating how mental health clinicians think and feel about their work, potential work related stressors and ways of coping with work related stress.

If you are a Master’s or Doctoral Level Mental Health Clinician with at least one year of post graduate experience, providing face to face direct service to clients, you may take part in this study. If you agree to participate in this study, you will be asked to complete four questionnaires.

These questionnaires will take approximately 30 to 45 minutes to complete. Your participation in the study is completely voluntary. You may decide not to participate or to stop your participation at any point in time with no consequences to you. The items in the enclosed questionnaires ask about personal, educational and professional information. In addition, you will be asked about feelings, thoughts, beliefs and behaviors. Some individuals may experience this as upsetting or uncomfortable. In addition, you may find that you are reminded of something, which could be experienced as upsetting or uncomfortable. In the unlikely event that either of these instances occur, please contact the researchers for a list of referrals in your area. If you do not wish to contact the researchers directly, you may refer to the attached list of mental health resources. In the event of a mental health emergency, please proceed to your local hospital emergency room. A mental health emergency includes experiencing thoughts or feelings of either harming yourself or another individual.

Your responses to the enclosed questionnaires are completely anonymous. This means that no one, including the investigators will be able to identify you. You will not be asked to put your name on any of the enclosed materials. As a participant, you will not receive information about the questionnaires that you complete. However, if you are interested in the results of our study, you may contact the investigators for a copy of the results for the group as a whole. Thank you for considering participation.

Feel free to contact the researchers if you have any questions or problems or if you need a referral at 215-871-6457.

Anna Zacharzenko, M.S., M.S.
Psy.D. Candidate
PCOM, Department of Psychology
4190 City Avenue
Philadelphia, Pa. 19131
215-871-6457

Frederick Rotgers, Psy.D., ABPP
Associate Professor
Dissertation Chair
PCOM, Department of Psychology
4190 City Avenue
Philadelphia, Pa. 19131
215-871-6457
Participants

Instructions for Participant

Enclosed you will find:

- Demographic Survey
- Marlowe-Crowne Inventory
- Impact of Event Scale-Revised
- Trauma and Attachment Belief Scale
- Self-Addressed Envelope

Please follow the directions at the top of each page. Please print legibly. Remember your responses are completely anonymous. To protect your confidentiality, please do not write any identifying information on any of the materials. Identifying information includes items such as your name, address, social security number, etc. Please place your completed surveys into the envelope provided, seal and return the envelope to the researcher.

Thank you for your participation.
DEMOGRAPHIC SURVEY
Participant #__________

Please answer the following questions by checking the appropriate box or filling in the blank line. Please print legibly. Remember that your responses to this survey are completely anonymous.

1. Date ______________ 

2. Gender: □ Female □ Male 

3. Age ____________ 

4. Date of Birth ______________ 

5. Marital Status: (Check one response) 
□ Married and living with spouse 
□ Separated 
□ Divorced 
□ Widowed 
□ Never married and no live-in partner 
□ Never married and live-in partner 

6. Race (Check one) 
□ Caucasian 
□ Hispanic/Latino 
□ Black/African American 
□ Asian 
□ American Indian/Alaska Native 
□ Native Hawaiian/Pacific Islander 
□ Other ____________ (Please specify) 

7. Education: (Check one response) 
□ Masters Degree 
□ Doctoral Degree 
□ Post-Doctoral training 
□ Other ____________ (Please specify) 

8a. Professional Discipline: 
□ Social Work 
□ Psychology 
□ Counseling 
□ Nursing 
□ Pastoral Counseling 
□ Other ____________ (Please specify) 

8b. Please list the number of post graduate (i.e. beyond your Masters degree) years you have been providing direct, face to face clinical service ____________.
9. Work Status: (Check the most accurate answer)
Employed as a mental health professional: □ Full-time □ Part-time
□ Disabled
□ Retired
□ Unemployed
□ Employed in another discipline/career

10. Specialty trauma training (Check all that apply)
□ CISM, Mitchell model trained
□ American Red Cross
□ Cognitive-Behavioral Model
□ EMDR
□ Exposure-based therapy
□ Other (Please specify) __________________
□ None

11. Please list in years the number of years you have been providing trauma services/CISM services:
a. general trauma services __________
b. CISM services __________

12. Which of the following professional support services do you participate in? Check all that apply.

Individual supervision: □ Yes □ No
□ less than once a month □ once a month □ 2 to 4 times a month

Peer supervision: □ Yes □ No
□ less than once a month □ once a month □ 2 to 4 times a month

Post-CISM debriefing: □ Yes □ No
□ less than once a month □ once a month □ 2 to 4 times a month

Continuing Education: □ Yes □ No
□ less than once a month □ once a month □ 2 to 4 times a month
12. Using a five-point scale, please rate how helpful you find each professional support service in managing occupation-related stress. Circle one response for each.

<table>
<thead>
<tr>
<th>Individual Supervision</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Not helpful</th>
<th>moderately helpful</th>
<th>very helpful</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer supervision</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>Not helpful</td>
<td>moderately helpful</td>
<td>very helpful</td>
<td>NA</td>
</tr>
<tr>
<td>Post-CISM debriefing</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>Not helpful</td>
<td>moderately helpful</td>
<td>very helpful</td>
<td>NA</td>
</tr>
</tbody>
</table>

13. Which of the following activities do you participate in? Check all that apply.

Leisure activities (i.e. hobbies, going to the movies, theatre, etc.):
- [ ] Yes  [ ] No
- [ ] less than once a month  [ ] once a month  [ ] more than once a month

Exercise (i.e. walking, hiking, biking, etc.):  [ ] Yes  [ ] No
- [ ] less than once a month  [ ] once a month  [ ] more than once a month

Spiritual Practices (i.e. attending formal services, meditation, spiritual retreats, talking with a member of the clergy, etc.):  [ ] Yes  [ ] No
- [ ] less than once a month  [ ] once a month  [ ] more than once a month

Talking with a friend, family member, spouse or partner:  [ ] Yes  [ ] No
- [ ] less than once a month  [ ] once a month  [ ] more than once a month

18. Have you provided CISM (Critical Incident Management Services) within the past 12 months?  [ ] Yes  [ ] No
If you have responded "no" to this item, skip items nineteen, twenty, twenty-one, and twenty-two. Proceed to item twenty-three.
14. Using a five-point scale, please rate how helpful you find each activity/category in managing occupational stress. Circle one response for each.

<table>
<thead>
<tr>
<th>Leisure activities</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not helpful</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>moderately helpful</td>
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<td>very helpful</td>
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<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Exercise</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not helpful</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>moderately helpful</td>
<td></td>
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<tr>
<td>very helpful</td>
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<td>NA</td>
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<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spiritual Practices</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not helpful</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>moderately helpful</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>very helpful</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Talking with a friend, family member, spouse or partner</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not helpful</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>moderately helpful</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>very helpful</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. Are you currently receiving behavioral healthcare services (i.e. individual psychotherapy, group psychotherapy, psychiatric consultation for medication management, EAP counseling, etc.)? □ Yes □ No

If you have responded “no” to this item, please skip items sixteen and seventeen. Proceed to item eighteen.

16. If you responded yes to item 15, how long have you been receiving behavioral healthcare services? Check one.

□ Less than 1 month
□ 1 to 3 months
□ 4 to 12 months
□ More than 12 months

17. Using a five-point scale, please rate how helpful you find this behavioral healthcare service in managing job-related stress.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not helpful</td>
<td>moderately helpful</td>
<td>very helpful</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

18. Have you provided CISM (Critical Incident Management Services) within the past 12 months? □ Yes □ No

If you have responded “no” to this item, skip items nineteen, twenty, twenty-one, and twenty-two. Proceed to item twenty-three.
19. If you answered yes to item 18, approximately how often have you provided CISM services within the past 12 months? Check one.

- [ ] several times a month
- [ ] 1 time per month
- [ ] once every 3 months
- [ ] once every 4 months
- [ ] once every six months
- [ ] once every 12 months

20. Please specify the kind of CISM service you provide most frequently. Check only one item.

- [ ] CISM services following natural disasters (i.e. earthquakes, floods, hurricanes)
- [ ] CISM services following violence or threat of violence (i.e. sexual assault, bank robberies)
- [ ] CISM services following work-site injuries, accidents and deaths
- [ ] CISM services following acts of terrorism (i.e. bombings)
- [ ] CISM services following corporate downsizing
- [ ] Grief Diffusing services
- [ ] A combination of the above-stated categories
- [ ] Other CISM services. Please specify/list ____________________________
21. When you respond to critical events in order to provide CISM services, which organization do you respond with? Check all that apply.

☐ Responding as a self-employed consultant
☐ Responding with the Red Cross
☐ Responding with FEMA
☐ Responding with NOVA (National Organization for Victim Assistance)
☐ Responding as an employee or paid consultant of a Managed Care Company
☐ Responding as an employee or paid consultant of an Employee Assistance Program
☐ Responding as an employee or member of a clinical practice group
☐ Other __________ (Please specify)

22. What percentage of your clinical practice is dedicated to providing CISM services? Check one.

☐ 0%
☐ Less than or equal to 25%
☐ Greater than 25% but less than 50%
☐ Greater than 50% but less than 75%
☐ Greater than 75% but less than 100%
☐ 100%
23. What percentage of your clinical practice is dedicated to providing individual and/or group psychotherapy for patients addressing trauma issues? Check one.
- 0%
- Less than or equal to 25%
- Greater than 25% but less than 50%
- 50%
- Greater than 50% but less than 75%
- 75%
- Greater than 75% but less than 100%
- 100%

24. Have you experienced a personal trauma or several traumatic events (non-work related)?
- Yes
- No

25. If you answered yes to 21, are you seeking or have you sought professional counseling as a result of this trauma?
- Yes
- No

Thank you for completing this portion of the survey.
The Impact of Event Scale-Revised

Below is a list of difficulties people sometimes have after stressful life events. Please read each item and then indicate how distressing each difficulty has been for you during the past seven days, with respect to your work (specifically, the traumatic events and experiences of your clients)? How much were you distressed or bothered by these difficulties?

<table>
<thead>
<tr>
<th>Difficulty</th>
<th>Not at all</th>
<th>A little bit</th>
<th>Moderately</th>
<th>Quite a bit</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any reminder brought back feelings about it.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I had trouble staying asleep.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Other things kept making me think about it.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I felt irritable and angry.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I avoided letting myself get upset when I thought about it or was reminded of it.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I thought about it when I didn't mean to.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I felt as if it hadn't happened or wasn't real.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I stayed away from reminders about it.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Pictures about it popped into</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Experience</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>My mind.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was jumpy and easily startled.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I tried not to think about it.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I was aware that I still had a lot of feelings about it, but I didn't deal with them.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>My feelings about it were kind of numb.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I found myself acting or feeling as though I was back at that time.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I had trouble falling asleep.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I had waves of strong feelings about it.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I tried to remove it from my memory.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I had trouble concentrating.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Reminders of it caused me to have physical reactions, such as sweating.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
trouble breathing, nausea, or a pounding heart.

<table>
<thead>
<tr>
<th>I had dreams about it.</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>I felt watchful or on guard.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I tried not to talk about it.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

**REFERENCES**

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you.

1. Before I vote, I thoroughly investigate the qualifications of all of the candidates.
   - [T] - True
   - [F] - False

2. I never hesitate to go out of my way to help someone in trouble.
   - [T] - True
   - [F] - False

3. It is sometimes hard for me to go on with my work if I am not encouraged.
   - [T] - True
   - [F] - False

4. I have never intensely disliked anyone.
   - [T] - True
   - [F] - False

5. On occasion, I have had doubts about my ability to succeed in life.
   - [T] - True
   - [F] - False

6. I sometimes feel resentful when I don't get my way.
   - [T] - True
   - [F] - False

7. I am always careful about my manner of dress.
   - [T] - True
   - [F] - False

8. My table manners at home are as good as when I eat out in a restaurant.
   - [T] - True
   - [F] - False

9. If I could get into a movie without paying and be sure I was not seen, I would probably do it.
   - [T] - True
   - [F] - False

10. On a few occasions, I have given up doing something because I thought too little of my ability.
    - [T] - True
    - [F] - False

11. I have never felt that I was punished without cause.
    - [T] - True
    - [F] - False

12. I like to gossip at times.
    - [T] - True
    - [F] - False

13. There have been times when I felt like rebelling against people in authority even though I knew they were right.
    - [T] - True
    - [F] - False

14. No matter who I'm talking to, I'm always a good listener.
    - [T] - True
    - [F] - False

15. I can remember "playing sick" to get out of something.
    - [T] - True
    - [F] - False

16. There have been occasions when I took advantage of someone.
    - [T] - True
    - [F] - False

17. I'm always willing to admit it when I make a mistake.
    - [T] - True
    - [F] - False

18. I always try to practice what I preach.
    - [T] - True
    - [F] - False

Continued on other side ⇒
T  F  18. I don't find it particularly difficult to get along with loudmouthed, obnoxious people.

T  F  19. I sometimes try to get even rather than forgive and forget.

T  F  20. When I don't know something, I don't mind admitting it.

T  F  21. I am always courteous, even to people who are disagreeable.

T  F  22. At times I have really insisted on having things done my own way.

T  F  23. There have been occasions when I felt like smashing things.

T  F  24. I would never think of letting someone else be punished for my wrongdoings.

T  F  25. I never resent being asked to return a favor.

T  F  26. I have never been irked when people express ideas very different from my own.

T  F  27. I never make a long trip without checking the safety of my car.

T  F  28. There have been times when I was quite jealous of the good fortune of others.

T  F  29. I have almost never felt the urge to tell someone off.

T  F  30. I am sometimes irritated by people who ask favors of me.

T  F  31. I have never felt that I was punished without cause.

T  F  32. I sometimes think when people have a misfortune, they only got what they deserved.

T  F  33. I have never deliberately said something that hurt someone's feelings.
May 26, 2006

Anna Zacharcenko
Philadelphia College of Osteopathic Medicine

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SDW:se