


Spring 5-18-2012

Efficacy of Self-Care and Traditional Mental Health Counseling in Treating Vicarious Traumatization Among Counselors of Hurricane Katrina Survivors

Mary Alice Many

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Efficacy of Self Care and Traditional Mental Health Counseling in Treating Vicarious
Traumatization Among Counselors of Hurricane Katrina Survivors

A Dissertation

Submitted to the Graduate Faculty of the
University of New Orleans
In partial fulfillment of the
requirements for the degree of

Doctor of Philosophy
in
Counselor Education

by

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May, 2012

DEDICATION

First and foremost, I dedicate this project to God, without whose strength and wisdom I could not have survived this journey.

And to my family, whose patience, support, and encouragement lovingly carried me through the process. I am grateful for all the sacrifices you have made to help me realize my dream.

ACKNOWLEDGEMENTS

To my husband, Blair, my son, Michael, my parents, George and Marilyn Driggers, and all my family and friends who have stood by me throughout this process, thank you for believing in me.

To Christina, Megan, and Sue, whose assistance proved to be invaluable in the process of research and editing, I am grateful for all the late nights, hard work, caffeine, and laughter.

To Dr. Barbara Herlihy,

Thank you for supporting and encouraging me throughout this very long journey. You always made me feel confident, and your warmth and kindness are an inspiration to me as a counselor.

To Dr. Claire Thoreson,

Thank you for your willingness to share your expertise in statistics and for your patience in translating that knowledge to me. I will always appreciate your sense of humor and gentleness.

To Dr. Zarus Watson,

Thank you for your encouragement and for your assistance when I got tangled up in red tape.

You helped me sort through the process and get back on track – and always with a smile.

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ABSTRACT

The population consisted of 9,000 Gulf Coast Licensed Professional Counselors. Surveys were returned by 609 participants. In the researcher-developed demographic survey, 586 individuals responded to the questions regarding age, gender, ethnicity, and years of counseling experience; 585 individuals responded to questions about exposure to prior trauma, and personal Katrina-related losses; 578 individuals responded to the question about the percentage of their work week that was spent counseling victims, and 579 individuals responded to questions regarding the type of mental health care strategy they participated in. There were 439 usable surveys for the *PTSD Checklist-Civilian Version (PCL-C)* (Weathers, Litz, Huska, & Keane, 1994) and 448 for the *Compassion Fatigue Subscale of The Compassion Fatigue and Satisfaction Self-Test for Helpers* (Figley & Stamm, 1996).

The PTSD Checklist-Civilian Version (PCL-C) (Weathers, Litz, Huska, & Keane, 1994) was utilized to evaluate Gulf Coast Licensed Professional Counselors for vicarious traumatization within the first year of working with Hurricane Katrina survivors. A total score of 30 or above on the *PCL-C* is required to meet criteria for PTSD. A total of 32.1% of respondents (141 individuals) scored 30 or above- criteria for vicarious traumatization. Respondents were evaluated for current compassion fatigue symptoms using the *Compassion Fatigue*. A score of 36-40 indicates high risk for compassion fatigue and a score of 41 and above indicates an extremely high risk for compassion fatigue. When the participants were evaluated based on their

symptoms 5 years after Hurricane Katrina, 5.1% scored 36 or above, indicating high or extremely high risk for compassion fatigue.

The strategies examined were traditional clinical psychotherapy (individual, group, couples or family) and non-clinical self-care (prayer, meditation, exercise, yoga, engaging in pleasurable activities). The relationship between these types of mental health care and *CFS* scores were examined, and the results indicated that participation in traditional mental health counseling is associated with lower *CFS* scores, which indicate a lower risk for compassion fatigue, and participation in non-clinical self-care is also associated with lower *CFS* scores, which indicates a lower risk for compassion fatigue; however, participation in traditional mental health counseling is more strongly associated with lower *CFS* scores than non-clinical self-care.

Keywords: Louisiana, Compassion Fatigue, Trauma, Psychotherapy

CHAPTER ONE

INTRODUCTION

This chapter includes the background for this research study, theoretical framework, the statement of the problem, the research questions, an overview of the methodology, the purpose of the study, and its significance. Assumptions, as well as delimitations of the study are discussed. Definitions of key terms pertinent to the study are presented.

Background

On August 29, 2005, Hurricane Katrina made landfall decimating much of the Gulf Coast and resulting in the loss of over 1,600 lives. The storm surge breached the levee system and flooded 80% of the city of New Orleans. The loss of lives, property, jobs, community, economic stability, infrastructure, and sense of security remain unparalleled in this, the worst combination of natural and man-made disasters in our nation's history. This catastrophic damage has had a profound effect upon the lives of those who survived and those who helped them. Most mental health professionals along the Gulf Coast worked closely with at least some survivors and clinicians from all over the country as well as overseas arrived *en masse* to provide therapy to those affected by the storm and its aftermath.

A primary concern for mental health professionals deployed to disaster sites is the potential psychological impact of working with those suffering from trauma, alternately referred to as *secondary traumatic stress*, *vicarious traumatization*, or *compassion fatigue*. This reaction

is often considered to be an inescapable occupational hazard of trauma work and if left untreated, it can lead to anxiety, depression, substance abuse, and neglect of self-care. In fact, research suggests that until serious stress symptoms manifest, prophylactic self-care is often neglected (Jones, Immel, Moore & Hadder, 2008).

Self-care strategies can be very individualized and may include almost any restorative, energizing, or relaxing activity such as yoga, meditation, prayer, hobbies, vacation, massage, reading, time spent alone or with friends and family; participation in religious or spiritual events; or exercise (Barnett, Baker, Elman, & Schoener, 2007; Iliffe & Steed, 2000; Kramer-Kahn & Hansen, 1998; Waelde, Uddo, et al., 2008).

In addition to self-care, it is important for mental health care professionals who work with trauma survivors to seek therapy for personal issues that may be triggered as a result of the work. Personal therapy can strengthen coping skills and help mental health professionals to maintain their spiritual balance (Neumann & Gamble, 1995; Sexton, 1999).

The purpose of this study was to examine the efficacy of self-care and traditional clinical mental health counseling for mental health professionals who experienced vicarious traumatization from Hurricane Katrina. The study compared the severity and duration of compassion fatigue symptoms of mental health professionals who did or did not engage in self-care and/or participate in clinical mental health counseling after the treatment of Hurricane Katrina survivors.

Theoretical Framework

The theoretical framework of this study focused on constructivist self-development theory (CSDT), which asserts that each individual is complex, adaptable, and possesses an innate will to survive (Pearlman & Saakvitne, 1995a). The CSDT also accounts for individual variability among people who have experienced the same trauma. The theory states that each person constructs his or her own reality through the development of cognitive structures, and that people use their cognitions to interpret events in their lives. Direct or indirect exposure to trauma, however, can cause a disruption in this cognitive structure. Pearlman and Saakvitne (1995a) asserted that trauma that is experienced during one developmental stage will be reinterpreted and reconstructed in each subsequent stage to fit the individual's evolving cognitive, social, and emotional growth as that person matures through each developmental stage. Therefore, the construction of meaning actually evolves over time and is the primary component of therapeutic change. According to this theory, the way an individual adjusts to a traumatic event is dependent upon several factors: the individual's personality, the context of the trauma, his or her personal history and the interaction between the social and cultural contexts (Pearlman & Saakvitne, 1995a). Pearlman and Saakvitne explained that factors including gender, race, socioeconomic status, and age can all affect the social climate of the traumatized person. Persons with fewer economic resources, for instance, are more prone to experience traumatization since their basic safety or security needs are more likely to be at risk. Family and society may respond supportively or provide unsupportive responses, such as victim-blaming. This occurs, for instance, in cases of misogyny and racism (Pearlman & Saakvitne, 1995a).

Because of each person's individual personality, personal history, experiences, and construction of meaning and significance, his or her reaction to traumatic events will also be unique.

Additionally, a person's reaction is subject to change over time as he or she incorporates life experiences throughout each developmental stage.

Just as CSDT explains the individuality of each person's response to trauma, people will likely recover from trauma in their own way and in their own time. Counselors who experience compassion fatigue are likely to treat it very individually using whatever method best suits their needs, personalities, and coping styles.

Statement of the Research Problem

During Hurricane Katrina, counselors provided psychological first aid to survivors. In the aftermath of the storm, practitioners continued to treat clients who were affected by Hurricane Katrina. Many clients experienced severe symptoms of posttraumatic stress disorder and shared horrific and gruesome details with their counselors.

Although this therapy may have been helpful to clients, the emotional burden of the trauma is sometimes shared by the mental health provider. This phenomenon, known as *compassion fatigue* or *vicarious traumatization*, often causes symptoms such as sleep, appetite and mood disturbance; increased alcohol and drug use; difficulty in concentration; irritability; thoughts of death and dying; suicidal ideation; and recurring images from the storm (Jones, Immel, Moore, & Hadder, 2008; O'Halloran & Linton, 2000; Osofsky, 2008; United States Department of Veterans Affairs, 2006). Left untreated, what begins as *compassion fatigue* or *vicarious traumatization* can lead to *burnout*. Some mental health professionals routinely seek

counseling for themselves while others do not (Farber, 2000; Holzman et al., 1996; Neumann & Gamble, 1995). In one large-scale study of psychologists, counselors, and social workers, Bike, Norcross, and Schatz (2009) found that 84% of those surveyed reported at least one "episode" of personal therapy.

It seems reasonable to assume that some providers were more profoundly affected than others by vicarious traumatization or compassion fatigue after treating Hurricane Katrina survivors. The differences between providers who did and did not receive their own mental health treatment may account for a portion of the variance in the severity and duration of symptoms of providers who experienced compassion fatigue. Bober, Regher and Zhou (2006) identified several forms of self-care techniques, but acknowledged that there is currently no instrument with which to measure them. There are no known empirical studies which examine the difference in the impact of receiving traditional mental health treatment or practicing self-care on the providers of disaster counseling (Bober, Regher & Zhou, 2006). My study attempted to bridge that gap in the literature.

Research Questions

The omnibus question of the study is: What is the relationship between compassion fatigue and self-care practiced and clinical mental health services received by Gulf Coast Licensed Professional Counselors who provided counseling services to Hurricane Katrina survivors?

The primary research questions are:

Research Question 1: What is the prevalence of vicarious traumatization as measured by *The PTSD Checklist-Civilian Version (PCL-C)* and compassion fatigue as measured by the *Compassion Fatigue Subscale of The Compassion Fatigue and Satisfaction Self-Test for Helpers (CFS)* in this sample?

Research Question 2: What is the relationship between the level of compassion fatigue and the type of mental health care strategy used by Gulf Coast Licensed Professional Counselors who provided mental health counseling to Hurricane Katrina survivors in the aftermath of Hurricane Katrina? The mental health care strategies examined in this study were traditional clinical psychotherapy (individual, group, couples or family) and non-clinical self-care (prayer, meditation, exercise, yoga, engaging in pleasurable activities, massage, time spent alone, or with friends or family).

Research Question 3: What is the relationship between the level of compassion fatigue and the variables that are considered to be risk factors associated with greater vulnerability to high levels of compassion fatigue: younger age, fewer years of experience, female gender, recent experience of personal stressful life events (Katrina-related losses) and exposure to prior trauma?

Research Question 4: What is the association between Gulf Coast Licensed Professional Counselors with vicarious traumatization who provided counseling services to Hurricane Katrina survivors within one year of Hurricane Katrina who no longer showed symptoms of high level compassion fatigue five years after Hurricane Katrina and the type of mental health care strategy utilized?

Research Question 5: What are the prevalence and frequency of non-clinical self-care activities (prayer, church attendance, meditation, exercise, yoga, engaging in pleasurable activities, massage, time spent alone, or with friends or family) utilized by Gulf Coast Licensed Professional Counselors with vicarious traumatization who provided counseling services to Hurricane Katrina survivors who no longer showed symptoms of high level compassion fatigue five years after Hurricane Katrina?

Overview of Methodology

I conducted a quantitative study using items from the instruments, *PTSD Checklist-Civilian Version* (Weathers, Litz, Huska, & Keane, 1994), and *The Compassion Fatigue and Satisfaction Self-Test for Helpers* (Figley & Stamm, 1996) as well as a researcher-developed demographic survey. Symptoms of vicarious traumatization experienced within the first year of working with Katrina survivors were measured by self-report using the *PTSD Checklist-Civilian Version* (Weathers, Litz, Huska, & Keane, 1994). Symptoms of current compassion fatigue (five years after Hurricane Katrina) were measured by the *Compassion Fatigue Subscale* of *The Compassion Fatigue and Satisfaction Self-Test for Helpers* (Figley & Stamm, 1996) and the researcher-developed demographic survey gathered participants' demographic information. The survey was distributed via a web-based survey service, Qualtrics ©, to Licensed Professional Counselors throughout the states of Texas, Louisiana, and Mississippi.

Purpose of the Study

The purposes of this study were to determine the level of impact of compassion fatigue on Gulf Coast Licensed Professional Counselors who have worked with Hurricane Katrina

survivors and to examine the relationship between symptoms of compassion fatigue experienced by those who received traditional counseling and those who practiced self-care.

Significance of the Study

This study appears to be the first to examine the relationship between Gulf Coast Licensed Professional Counselors' level of compassion fatigue after responding to a major natural disaster and their utilization of self-care and/or traditional mental health services. Both the quantity and quality of services provided by Gulf Coast Licensed Professional Counselors are directly impacted by their ability to transcend trauma. The need for mental health care increased dramatically post-Katrina, yet the services have decreased just as dramatically. Estimates indicate that the metropolitan New Orleans area lost approximately 85% of its practicing psychiatrists; only 22 of the 196 remained eight months after the storm (Faust, Black, Abrahams, Warner, & Bellando, 2008). Additionally, the area lost 35% of its psychologists, and with the closing of Charity Hospital, the number of psychiatry beds was reduced from 96 to only 3 within a 25 mile radius of New Orleans (Baek, Pritchard, Reade, Towner, & Ward, 2006).

Results of this study have several potential implications including identification of a need for policy and procedure changes in disaster response and counselor education programs. With respect to policies and procedures, the lack of coordination of services, organization, and structure among the agencies that deployed mental health professionals to the Gulf Coast post-Katrina appeared to compromise the effectiveness of the responders (Jones, Immel, Moore, & Hadder, 2008). The first author, Russell Jones, also addressed logistical concerns that he observed during his deployments to the Gulf Coast during the aftermath of Hurricane Katrina.

Some of these concerns included the need to assess where, whether, or when mental health professionals are needed so their services may be better utilized by those most in need (Jones, 2008). Jones suggested that providing the responders with contact numbers, office supplies, and other necessary equipment prior to deployment would be helpful. Licensure portability was also an immediate concern post-Katrina because, although the State of Louisiana temporarily waived certification and licensure requirements, that information was not common knowledge and, therefore, some mental health professionals were not allowed to practice in the disaster area (Jones, Immel, Moore, & Hadder, 2008).

Results of this study also have potential implications for counselor education and supervision. Cunningham (2003) recommended that mental health training programs incorporate content on trauma, including vicarious traumatization, and that administrators of clinical treatment facilities have an ethical "duty to inform" neophyte clinicians of the possible ramifications of vicarious traumatization and compassion fatigue. Additionally, it has been recommended that support and supervision be made available for mental health professionals who work with trauma clients (Cunningham, 2003; Neumann & Gamble, 1995).

Assumptions

This study focused on the construct of compassion fatigue as it relates to practicing self-care or receiving clinical mental health care in the population of Gulf Coast Licensed Professional Counselors who provided mental health counseling services to Hurricane Katrina survivors.

It was assumed that participants will answer the surveys honestly as they can do so anonymously. Another assumption of this study was that it participants' retrospective views and memories of symptoms from the first year after the storm will be accurate. It was also assumed that a portion of the population surveyed will have participated in at least one form of self-care or clinical mental health care rather than no care at all.

Delimitations

This study was delimited to Licensed Professional Counselors who are members of their respective state-level associations in Louisiana, Texas, and Mississippi. Other mental health providers such as psychologists and social workers, and mental health providers in other states who may have treated Hurricane Katrina survivors were not included in the study.

Definitions of Terms

The following definitions provide a common language for the discussion of terms used in this research study. The definitions are comprised of information from the professional literature. The terms are defined for the purpose of this research study.

Ambiguous Loss: Ambiguous loss is an intangible, conceptual or psychological loss.

Burnout: Burnout is a gradual and pathological process of emotional exhaustion due to the psychological strain of working with multiple stressors, including professional isolation, empathetic strain, ambiguous success, and erosion of idealism. Symptoms may include depression, cynicism, boredom, and loss of compassion (Maslach, 2001).

CISM: Critical Incident Stress Management is the Everly and Mitchell approach to Critical Incident Debriefing, a group activity to help people involved in extreme events to make better

sense of what happened and their reactions to it. The approach includes Introduction, Facts, Thoughts, Reactions, Symptoms, Teaching, Re-Entry, Support and Follow-up and Referral as needed (Mitchell, 1983).

Compassion Fatigue: Compassion Fatigue is the cumulative compassion stress resulting from the “cost of caring” (Figley, 1995). It is also called *Secondary Traumatic Stress Disorder* (Figley, 1995).

Compassion Satisfaction: Compassion Satisfaction is the ability to be sustained in the face of potentially distressing work. In addition to the cost of caring, positive payments come from that caring (Figley, 1995).

EMDR: Eye Movement Desensitization and Reprocessing is a psychotherapeutic approach developed by Francine Shapiro to treat trauma. While it uses elements of longer-established therapies, EMDR is most distinctive in its use of therapist-induced eye movements.

Posttraumatic Growth: Tedeschi and Calhoun (1996) defined posttraumatic growth as the positive internal response to traumatic circumstances and described five forms this positive response may take. These include more open, intimate personal relationships; the recognition of new possibilities in life’s path; a more profound appreciation of life’s offerings; an enhanced sense of personal strength; and spiritual or religious development.

Psychological First Aid: Psychological first aid describes the protocol of assessment of survivors’ immediate concerns and needs, and the implementation of those needs.

Primary/Secondary/Tertiary Traumatic Stress Disorder: Primary Traumatic Stress Disorder refers to those with symptoms derived from direct exposure to an extreme event; Secondary

Traumatic Stress Disorder refers to disorders displayed by those supporting those with primary experience; Tertiary Traumatic Stress Disorder refers to the supporters of supporters (Figley, 1995).

Resilience: Resilience is the capacity to be relatively unscathed by events. It is the efficient blending of psychological, biological, and environmental elements that permits human beings to cope with chaotic episodes and successfully maintain psychological vitality and mental health (Agabi & Wilson, 2005).

Self-Care: Self-care is a positive, healthy, or enjoyable non-clinical behavior including, but not limited to, maintaining a sense of humor; engaging in leisure or physical activities; seeking social support; and participation in religious or spiritual activities.

Vicarious Traumatization: Vicarious traumatization refers to the “transformation that occurs within the therapist as a result of empathic engagement with clients’ trauma experiences and their sequelae” (Pearlman & MacIan, 1995, p. 558). Vicarious traumatization results in profound disruptions in the therapist’s basic sense of identity, world-view and spirituality (Pearlman & Saakvitne, 1995). Multiple aspects of the therapist’s life are affected. The concept of vicarious traumatization emphasizes the role of meaning and adaptation rather than symptoms. This term is often used interchangeably with *compassion fatigue* or *secondary traumatic stress*.

CHAPTER TWO

REVIEW OF THE LITERATURE

It is widely accepted that exposure to clients' traumatic material can lead to the deleterious effects of vicarious traumatization (Baird & Kracen, 2006; Collins & Long, 2003; Jones, Immel, Moore, & Hadder, 2008; McCann & Pearlman, 1990) which involve disruption to the counselors' basic psychological needs of safety, trust, esteem, intimacy, and control (Baird & Kracen, 2006; Brady, Guy, Poelestra, & Brokaw, 1999; McCann & Pearlman, 1990; Pearlman & MacIan, 1995). Mental health professionals who have been exposed to the traumatic experiences of their clients may be in a better position to avoid the negative outcomes if they are proactive in their self-care. It is important that they set clear boundaries (Neumann & Gamble, 1995), maintain a balanced caseload (McCann & Pearlman, 1990), and seek regular supervision (Canfield, 2005; McCann & Pearlman, 1990; Pearlman & Saakvitne, 1995a), and support to debrief and to share their feelings (Canfield, 2005; McCann & Pearlman, 1990). It is also important to seek therapy for any personal issues that may be triggered as a result of their trauma work and to strengthen their personal coping skills as well as to maintain their spiritual balance (Neumann & Gamble, 1995; Sexton, 1999).

In the first section of this chapter, concepts relevant to this study are discussed including traumatization, posttraumatic stress disorder, vicarious traumatization, secondary traumatization, compassion fatigue, posttraumatic growth, burnout, resilience, and self-care. Additionally, the relationship between the trauma-related terms and how they were used in my study is explained.

The second section discusses the various mental health needs of Hurricane Katrina survivors. The third section discusses the mental health treatment of Hurricane Katrina survivors. In the fourth section, the risk factors and the protective factors that are related to vicarious traumatization are discussed. The fifth section discusses traditional clinical mental health treatment for compassion fatigue. In the sixth section, self-care for vicarious traumatization is discussed. The seventh section includes a summary and critique of the relevant literature.

Trauma and Related Concepts

This study focused on compassion fatigue experienced by Gulf Coast Licensed Professional Counselors who provided counseling services to survivors in the wake of Hurricane Katrina. It is possible that those practitioners most profoundly affected in the aftermath of Hurricane Katrina were inadequately prepared for what they were to face; had inadequate support, supervision, and resources; and had an extremely heavy caseload that was disproportionately trauma-related (Faust, Black, Abrahams, Warner, & Bellando, 2008; Johnstone, 2007; Jones, Immel, Moore, & Hadder, 2008). Because the magnitude of this disaster was unparalleled in our nation's history, it would have been truly difficult to adequately prepare the myriad therapists who rushed to the Gulf Coast to help ease human suffering. Because the entire Gulf Coast was affected, many counselors also found themselves in the role of participant-observer to the trauma. This made for yet another "perfect storm" increasing their risk for vicarious traumatization under the unimaginably challenging circumstances in the aftermath of Hurricane Katrina.

Several concepts within this study relate to the continuum of responses, either firsthand or within the therapeutic relationship, of exposure to traumatic events. Though many of the terms are conceptually similar, their nuances are important to understand in order to properly examine the topic.

Traumatization

According to the DSM-IV-TR, traumatization refers to “the experiencing, witnessing or being confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others” (American Psychiatric Association, 2000). To meet DSM-IV-TR criteria for traumatization, an adult victim or witness must experience intense fear, horror, or helplessness in response to the event. Common examples of traumatic events include, but are not limited to, combat, acts of terrorism, hostage-taking, natural and man-made disasters, homicides, robberies, physical and sexual assaults, and serious life threatening accidents or illnesses. Common symptoms comprise three clusters: intrusive thoughts, avoidance, and arousal symptoms. These symptom clusters are characteristic of all types of traumatization that will be examined in this study.

Examples of intrusive symptoms include persistent re-experiencing of the event in images, thoughts, recollections, daydreams and nightmares; the subjective experience of re-living the event; and distress in the presence of symbolic reminders. Examples of avoidance symptoms include avoiding places and thoughts symbolic of the trauma, difficulty in recalling the event, loss of interest in important activities, restricted range of emotions, and a sense of a

foreshortened future. Examples of arousal symptoms include hypervigilance, exaggerated startle response, sleep disturbance, difficulty concentrating, and irritability or angry outbursts.

Posttraumatic stress disorder

Posttraumatic stress disorder (PTSD) is one possible result of experiencing a traumatic event as defined above. After one month, the presence of symptoms from the three symptom clusters indicates the onset of posttraumatic stress disorder. Acute posttraumatic stress disorder is diagnosed when symptoms terminated three months or sooner after the event; chronic posttraumatic stress disorder is diagnosed when symptoms remain longer than three months; and delayed onset posttraumatic stress disorder is diagnosed when the onset of symptoms begins six months or longer after the traumatic event (American Psychiatric Association, 2000). PTSD, identified during the American Civil War more poetically as “a soldier’s heart,” has also been known as “combat fatigue,” “combat neurosis” and “shell-shock.” Although first recognized as a result of the brutality of war, clinicians are now generalizing this disorder beyond the battlefield.

Vicarious Traumatization

The term vicarious traumatization was first conceptualized by McCann and Pearlman in 1990 and has been described as “the transformation in the inner experience of the therapist as a result of empathetic engagement with clients’ traumatic material” (Pearlman & Saakvitne, 1995a, p. 31). In vicarious trauma, emotional and cognitive transformations can occur as a result of empathetic engagement with survivors of trauma. These transformations are most significant in

clinicians who have caseloads that are disproportionately filled with trauma clients; in less experienced therapists; and those with a previous personal history of trauma (Cunningham, 2003). Pinsley (2000) described the stress of remaining empathetically open to clients while listening to their traumatic material as emotionally draining, as well as physically exhausting. She further described the potential results as profoundly affecting a therapist's personal and professional self (Pinsley, 2000).

Secondary Traumatization

Secondary traumatization, which is also called vicarious traumatization, was defined by Figley (1995) as “the natural consequent behaviors and emotions resulting from knowing about a traumatizing event experienced by a significant other - it is the stress resulting from helping or wanting to help a traumatized or suffering person” (p.7). Tosone (2007) explained that secondary traumatic stress can have a sudden onset, and differs from occupational stress in that it relates specifically to the client's traumatic experience, including the presence of symptoms similar to those of the client, including anxiety, depression, avoidance, and hyper-arousal.

Tertiary traumatization occurs in cases of supervision, debriefing, or “the supporters of supporters” (Figley, 1995). Although the supervisors or supporters are hearing secondhand information, they can be affected by the traumatic material the client presented to the primary therapist and may also suffer posttraumatic stress disorder symptoms.

Compassion Fatigue

Compassion fatigue is a term that can be used interchangeably with vicarious traumatization or secondary traumatic stress disorder (Figley, 1995). Certain variables have been identified as either risk factors or protective factors for compassion fatigue. Factors such as length of assignment, long work hours, and caseloads with high percentages of trauma patients increased risk factors for compassion fatigue. (Boscarino, Figley, & Adams, 2004; Creamer & Liddle, 2005; Meyers & Cornille, 2002). Several researchers have identified being female as a risk factor (Brady, Guy, Poelestra, & Brokaw, 1999; Kassam-Adams, 1999; Meyers & Cornille, 2002). Additionally, having a personal trauma history (Cunningham, 2003; Nelson-Gardell & Harris, 2003) and being younger in age (Adams, Matto, & Harrington, 2001; Nelson-Gardell & Harris, 2003; Vredenburgh, Carlozzi, & Stein, 1999) tended to be risk factors for compassion fatigue. More education was identified as a protective factor (Abu-Bader, 2000), as was having additional years of professional experience (Cunningham, 2003; Pearlman & MacIain, 1995). Creamer and Liddle (2005) examined secondary traumatic stress across mental health disciplines including counselors, social workers, and psychologists, but did not find that profession was a predictor of secondary traumatic stress.

Posttraumatic growth

Posttraumatic growth is characterized by personal growth that results from the experience of a traumatic event. Tedeschi and Calhoun (1996) reported five forms of posttraumatic growth among survivors of diverse traumatic circumstances: more intimate, emotionally open

relationships; the recognition of new possibilities for one's life path; a more profound appreciation of what life has to offer; an enhanced sense of personal strength; and an increased religious or spiritual development.

Burnout

Professional burnout is defined as a psychological syndrome in response to prolonged exposure to demanding job-related interpersonal situations and is characterized by emotional exhaustion, cynicism, and reduced personal accomplishment (Maslach, Schaufeli, & Leiter, 2001). "High emotional involvement without adequate social support or feelings of personal work accomplishment (i.e., job satisfaction) may leave the caring professional vulnerable to burnout" (Adams, Boscarino & Figley, 2006, p. 104).

Resilience

Resilience (as cited in Agaibi & Wilson, 2005) is "generally viewed as a quality of character, personality and coping ability. Resiliency connotes strength, flexibility, a capacity for mastery, and resumption of normal functioning after excessive stress that challenges individual coping skills" (p. 197) Further, resilience refers to the ability to maintain one's mental health and general functioning after experiencing highly stressful events including "trauma, death, economic loss, disaster, political upheaval and cultural changes" (Agaibi & Wilson, 2005).

Relationship among trauma-related concepts

Although many of the terms used to describe the psychological effects of trauma exposure are similar, the primary terms that are relevant to this study are “posttraumatic stress disorder,” “vicarious traumatization,” and “compassion fatigue” as defined above. The terms specific to trauma itself are connected through the DSM-IV-TR definition of posttraumatic stress disorder and include traumatization, vicarious traumatization, secondary traumatization, and tertiary traumatization. Although professional burnout often occurs in situations of vicarious traumatization, it can also occur for a number of other non-trauma related reasons. I chose the terms "posttraumatic stress disorder," "vicarious traumatization," and "compassion fatigue" to focus on in my study because they best identify the symptoms, experiences, and characteristics of the participants.

Mental Health Needs of Hurricane Katrina Survivors

The magnitude of damage caused by Hurricane Katrina was immense. Almost 90,000 square miles (approximately the size of the United Kingdom) were declared a disaster area (Kessler, Galea, Gruber, et al., 2008). Over 1,600 deaths were confirmed and well over 1,000 people were missing three years later (Kessler, Galea, Gruber, et al., 2008). Because of the vast numbers of people who were exposed to traumatic material, the incidence of posttraumatic stress disorder increased in the Gulf Coast region (Baek, Pritchard, Reade, et al., 2006).

According to an assessment by the Center for Disease Control and Prevention (CDDC, 2006), seven weeks after Hurricane Katrina made landfall, 49.8% of adults in the New Orleans

area exhibited emotional distress. The federal Substance Abuse and Mental Health Services Administration (SAMHSA) estimated that between 25% and 30% of the population affected by Hurricane Katrina would have clinically significant mental health needs (Knapp, 2007). One year after the storm, Norris, VanLandingham, and Vu (2009) assessed 82 Vietnamese American adults who had survived Hurricane Katrina and its aftermath. Although only 5% of the sample met full criteria for posttraumatic stress disorder, 26% met full or partial criteria; 46% met criteria for intrusive symptoms; 49% met criteria for arousal symptoms; 63% met criteria for hypervigilance; and 36% met criteria for impaired functioning.

Kessler et al. (2006), on behalf of the Hurricane Katrina Community Advisory Group, surveyed 1043 adults living in the area affected by Hurricane Katrina. Identical questions were asked about mental illness and suicidality that were asked in an earlier survey of 826 adults living in the same area between February, 2001 and February, 2003. Additionally, the post-Katrina survey asked questions about several dimensions of personal growth. Findings revealed that respondents to the post-Katrina survey had an estimated 11.3% rate of serious mental illness, as compared to 6.1% reported pre-Katrina. Mild-to-moderate mental illness rates climbed from 9.7% pre-Katrina to 19.9% post-Katrina. Suicidal ideation dropped from 8.4% before Katrina to 0.7% after the storm. Kessler et al. (2006) believed that this lower prevalence of suicidality was related to two dimensions of personal growth: faith in one's own ability to rebuild one's life, and realization of inner strength. However, in a follow-up study two years later, Kessler et al. (2008) found that that the prevalence of suicidal ideation had increased to 6.4%, serious mental illness had increased to 14%, and that PTSD symptoms among the subsample exclusive of the New

Orleans Metropolitan area were now at 20% as opposed to their baseline measure of 11.8%. The researchers explained that unresolved hurricane-related stressors accounted for a large portion of the increase in serious mental illness, posttraumatic stress disorder, and suicidality.

In a study of 156 patients in an outpatient psychiatric clinic in Jackson, Mississippi, McLeish and DelBen (2008) found that posttraumatic stress symptoms were predicted by the number of hours of general television watched as a coping strategy and by the amount of time spent watching television coverage of New Orleans specifically. The television coverage included images and detailed accounts of the looting in New Orleans; the evacuation and rescue efforts; the damage to buildings; people dying; and the evacuees in the Superdome and Convention Center. Coping skills examined were drinking alcohol; smoking cigarettes; visiting with others; exercising; watching television; attending church; and praying. Prayer was the only coping skill in the study that was associated with a decrease in posttraumatic stress symptoms. The negative impact of watching televised disaster coverage was evident in this study and is not a recommended coping mechanism (McLeish & Del Ben, 2008).

Two weeks after Hurricane Katrina made landfall, Mills, Edmondson, and Park (2007) conducted a survey of 132 New Orleans area evacuees at the Austin Convention Center, a major Red Cross shelter in Austin, Texas. Adult participants were administered a structured survey including demographic questions, Katrina-specific questions, the Traumatic Events Questionnaire, and the Acute Stress Disorder Scale. Katrina-specific questions included length of time waited for evacuation; injury, illness, or exacerbation of pre-existing health problem; seeing corpses; death of a loved one; separation from family; and loss of home or vehicle.

Participants were asked to rate the perceived impact of each stressor on a 0-6 Likert scale. Results indicated that 62% of the sample met criteria for Acute Stress Disorder. The researchers estimated that between 38% and 49% of the total sample of Hurricane Katrina evacuees would meet diagnostic criteria for chronic Posttraumatic Stress Disorder two years after the storm based on the probability of Acute Stress Disorder leading to Posttraumatic Stress Disorder (Mills, Edmondson, & Park, 2007).

One year after the storm, Sprang and LaJoie (2009) surveyed 101 adult Hurricane Katrina evacuees who had relocated to Louisville, Kentucky. Respondents were asked a series of questions, including demographic information, and questions related to exposure to the storm and its aftermath. Examples of these questions included whether they were present when the storm made landfall; whether they felt at risk of harm or death for themselves or loved ones; and whether they had loved ones who were injured, missing, or killed during the storm. Participants' coping styles were assessed using the BriefCOPE and Posttraumatic Stress Disorder symptoms were measured with the *PTSD Checklist-Civilian Version* (Weathers, Litz, Huska, & Keane, 1994). Results showed that 93% felt they or their loved ones were at risk of harm from the storm, and 80% knew someone who had been killed, injured or was missing as a result of the storm. One half (n=51) of the 101 respondents scored above the threshold of 50 on the *PTSD Checklist-Civilian Version* (Weathers, Litz, Huska, & Keane, 1994), indicating a diagnosis of Posttraumatic Stress Disorder.

Mental Health Treatment for Hurricane Katrina Survivors

After Hurricane Katrina made landfall, the Red Cross and Substance Abuse and Mental Health Services Administration (SAMHSA) worked all along the Gulf Coast providing psychological first aid to survivors. Teams of mental health providers worked in shelters, psychiatric hospitals, mental health clinics, and even on cruise ships on the Mississippi River (Johnstone, 2007). Their assignments varied from working with first responders to assisting chronically mentally ill evacuees. Johnstone (2007) described the work she and her 16-member SAMHSA team performed during an October deployment 6 weeks after the storm. Working 10 to 12 hour shifts each day with a group debriefing meeting each evening, the team utilized Psychological First Aid, which focused on returning survivors to normal functioning, caring for their physical well-being, and connecting them to social support systems. The author described assisting evacuees in locating missing family members, completing documentation for FEMA trailers, providing food and water, and organizing activities for the children as examples of the psychological first aid that was offered (Johnstone, 2007). As Johnstone's (2007) work exemplifies, providing treatment to disaster survivors is very demanding and challenging work. Often, the ambiguity of a counselor's role, the long hours, the extended exposure to human suffering, and the physical and emotional stress combine to create an atmosphere conducive to compassion fatigue (SAMHSA, 2005).

An overview of the provision of Psychological First Aid including how to prepare for and what to expect as a provider is delineated in the United States Department of Veterans Affairs (2006) *Psychological First Aid: Field Operations Guide*. Included in the overview are the steps

of preparation to deliver Psychological First Aid: contact and engagement, safety and comfort, stabilization, information gathering regarding current needs, practical assistance, connection with social supports, information on coping, and linkage with collaborative services. Steps in the preparation portion include, but are not limited to: maintaining a calm presence, remaining sensitive to culture and diversity, and being aware of at-risk populations. The contact and engagement portion comprises introduction, asking about immediate needs, and offering an explanation of confidentiality. The safety and comfort portion of Psychological First Aid is the portion where a great deal of work may need to be done depending on the needs of the survivor. This portion includes such elements as ensuring immediate physical safety; providing information about disaster services, grief, and funeral issues; attending to children who are separated from their parents; helping survivors who have a missing family member; supporting survivors in the process of death notification, and body identification. The stabilization portion involves helping to orient emotionally overwhelmed survivors and to explain the role of medication if necessary. Information gathering involves asking the survivors a variety of questions to assess their needs. The assessment should include such information as the nature and severity of the experiences during the disaster, death of a loved one, concerns about an ongoing threat, safety concerns for self or family members, physical or mental health conditions and the need for medications, losses, extreme emotions, availability of support systems, history of substance abuse, and exposure to prior trauma. Practical assistance involves identification and clarification of the most immediate needs, co-creation of an action plan, and acting to address the need. Connection with social supports is composed of enhancing access to the survivor's

primary support persons, encouraging the use of support persons readily available, and discussing and modeling support-seeking and giving. The information on coping section involves providing the survivors with basic information on stress reactions, including common psychological reactions to trauma. These reactions include intrusive reactions, avoidance and withdrawal reactions, physical arousal reactions, trauma reminders, loss reminders, change reminders, hardships, grief reactions, traumatic grief reactions, depression, and physical reactions. Additionally, it is useful to provide information about basic coping skills, and relaxation and anger management techniques, as well as to address any substance abuse issues. Finally, the linkage with collaborative services step in Psychological First Aid involves providing referrals within the community for any services that may be needed including specific referrals for children, adolescents, or older adults (US Department of Veterans Affairs, 2006).

Many factors must be considered before undertaking the role of a provider of Psychological First Aid (US Department of Veterans Affairs, 2006). Considerations include the provider's comfort level with working in non-traditional settings, doing work that is not traditionally viewed as "mental health" work in chaotic or unpredictable environments where risk of harm or exposure is not fully known, and working with individuals who may experience extreme emotional reactions and may not be receptive to mental health support. Other considerations that may influence the decision to take on disaster mental health work include assessment of the provider's physical and emotional health or limitations, recent losses, family concerns and responsibilities, and the ability to be absent from home and work for an extended period (United States Department of Veterans Affairs, 2006). All of these factors played a large

part in the daily stress and struggle of providing mental health care to Hurricane Katrina survivors.

Once the immediate needs of the survivors are met, mental health providers generally shift their focus to the more long-term needs of the community and begin to provide more traditional clinical treatment to trauma survivors. The various treatments for trauma include, but are not limited to: Cognitive Behavioral Therapy (CBT), Eye Movement Desensitization and Reprocessing (EMDR), Acceptance and Commitment Therapy (ACT), and Stress Inoculation Training (SIT).

Cognitive Behavioral Therapy

Ellis' (1962) Cognitive-Behavioral Therapy (CBT) is the most widely practiced and studied form of treatment following trauma (Leitch, Vanslyke, & Allen, 2009). CBT is a standard therapeutic intervention which focuses on helping clients control their internal thought processes. It involves working with a client's cognitions to change thoughts, emotions, and behaviors. CBT typically incorporates an exposure component, learning skills, relapse prevention, and social skills training. In a meta-analysis of psychotherapy outcome studies on posttraumatic stress disorder, Bradley, Greene, et al. (2005) found that over 50% of the patients who completed various forms of CBT showed improvement. CBT is the treatment of choice for individuals who meet criteria for PTSD (Foa & Meadows, 1997; Haber et al., 2002).

Eye Movement Desensitization and Reprocessing

EMDR is a type of cognitive behavioral therapy developed by Francine Shapiro in 1987 designed to desensitize clients to distressing feelings and cognitions, and to replace negative cognitions with positive ones (Rubin, 2003; Shapiro, 1989). EMDR involves therapist-directed bilateral rapid eye movements while the client visualizes the trauma. The American Psychological Association has named EMDR as one of three empirically validated treatment approaches (along with exposure therapy and stress-inoculation therapy) that are probably effective in the treatment of PTSD (Rubin, 2003). Critics of EMDR argue that the treatment's effectiveness is due to the exposure therapy components which are incorporated, and that the eye movements are unnecessary (Herbert et al., 2000). More controlled studies have been done which support the effectiveness of EMDR therapy in the treatment of PTSD than any other PTSD treatments (Rubin, 2003).

Acceptance and Commitment Therapy

Acceptance and Commitment Therapy (ACT) is a behavior therapy designed to decrease the client's use of avoidance or escape strategies to cope with distressing memories, thoughts, and feelings and to increase acceptance of these events while engaging in a previously avoided behavior (Orsillo & Batten, 2005). Rather than focusing primarily on symptom reduction as an outcome measure, the intention is to increase clients' ability to make and maintain commitments to changing behavior by identifying and committing to actions consistent with their stated values (Orsillo & Batten, 2005).

Stress Inoculation Training

A cognitive-behavioral intervention known as Stress Inoculation Training, or SIT, focuses on the way therapists perceive and interpret reality which affects their method of coping. SIT includes training workshops to prepare professionals to identify potential stress and burnout symptoms, promote creative problem-solving, teamwork, and self-control. Participants are taught skills such as thought-stopping, muscle relaxation, and breathing retraining to lower arousal when exposed to traumatic material (Phipps & Byrne, 2003). Foa et al. (1999) found no significant difference among SIT and Prolonged Exposure (PE) in a study of 96 female sexual assault victims. Lee et al. (2002) compared the effectiveness of SIT with EMDR in a study of 24 participants who met diagnostic criteria for PTSD. The researchers found that both treatments were highly effective with 83% of the participants from each treatment group no longer meeting PTSD criteria at follow-up three months later (Lee et al, 2002).

Vicarious Traumatization among Mental Health Professionals

Given the increased rate of posttraumatic stress symptoms in the general population after Hurricane Katrina, it was assumed that there would be a concomitantly higher rate of vicarious traumatization, or compassion fatigue, in the population of mental health providers who worked with the survivors and may have even been survivors themselves.

Risk and Protective Factors

Some mental health professionals who worked with Hurricane Katrina survivors experienced vicarious traumatization or compassion fatigue, whereas others experienced

posttraumatic growth as a result of their post-Katrina therapeutic relationships. The literature suggests that a number of variables may account for the differences in the responses. These variables generally have been discussed in the literature as risk factors and protective factors. Research shows that prior history of personal trauma (Pearlman & MacIain, 1995), years of experience, (Pearlman & MacIain, 1995), type of caseload (Pinsley, 2000), peer support or supervision (Pearlman & Saakvitne, 1995a; Sexton, 1999), personal coping mechanisms (Bober, Regher, & Zhou, 2006), and spiritual faith (Decker, 1993; Pearlman & Saakvitne, 1995a; Sargent, 1989) are some of the most important factors to consider when studying the variance in responses.

In the following sub-section, research that has focused on both risk and protective factors is discussed. Then, studies specifically focused on risk factors are reviewed. Finally, studies related to protective factors are discussed.

Studies that examined both risk and protective factors

Sprang, Clark, and Whitt-Woosley (2007) surveyed 1,121 licensed or board certified mental health professionals including marriage and family counselors, professional counselors, social workers, psychiatrists, drug and alcohol counselors, and psychologists. Using the Professional Quality of Life Scale (ProQOL), the researchers explored the respondents' levels of compassion fatigue, compassion satisfaction, burnout and professional quality of life. Participants' average age was 45.22 years with a range from 23 to 81 years of age, and participants had an average of 13.92 years of professional experience. Approximately 30%

reported posttraumatic stress. Approximately one third (30.4%) were male and 69.6% were female. With respect to work settings, 35.8% worked in community mental health settings; 29.6% worked in private practice; the remaining 34.6% reported working in other types of settings including private facilities, public agencies, or inpatient facilities. The researchers found that providers who practiced in urban areas had lower burnout rates than those who practiced in the most rural areas. Male gender, having more years of clinical experience, a caseload with a smaller percentage of trauma clients, and older age were indicators of lower levels of compassion fatigue. The study also revealed that having specialized trauma training enhanced compassion satisfaction and served as a protective factor from compassion fatigue (Sprang, Clark, & Whitt-Woosley, 2007).

Canfield (2005) stated that it was actually the lack of protective factors rather than the presence of risk factors which predicted increased levels of compassion fatigue in counselors working with abused children. Canfield (2005) reported that protective factors including increased clinical experience; utilization of additional training; decreased percentages of trauma clients in the caseload; and increased percentages of time spent on non-trauma related work mitigated some of the negative effects that can lead to compassion fatigue.

Risk Factors

Risk factors include, but are not limited to type of trauma (Cunningham, 2003), lack of clinical experience (Pearlman & MacIlan, 1995), maintaining a heavy caseload of trauma clients (Canfield, 2005; Pinsley, 2000), prior history of personal trauma (Pearlman & MacIlan, 1995;

Sexton, 1999), younger age (Adams, Motto, & Harrington, 2001; Nelson-Gardell & Harris, 2003; Vredenburgh, Carlozzi, & Stein, 1999), gender (Sprang, Clark, & Whitt-Woosley, 2007), and having recently experienced stressful life events (Pinsley, 2000). Risk factors associated with greater vulnerability to the development of posttraumatic stress disorder include personality processes including external locus of control, and cognitive style and information processing (Sheikh, 2008).

Type of Trauma. Individuals tend to respond differently to different types of trauma. For instance, Cunningham (2003) studied counselors' compassion fatigue symptoms in response to working with sexual abuse survivors as compared to working with cancer patients. She found that human-induced traumas such as sexual abuse are associated with more compassion fatigue symptoms than naturally occurring traumas such as life-threatening illness (Cunningham, 2003). Hurricane Katrina, though initially a natural disaster, had aspects of a "human-induced" disaster in its aftermath. Because the levee system had been improperly fortified and maintained; and because a large-scale evacuation had been poorly planned or executed, the man-made factors exacerbated the existing situation. Because of the circumstances causing and exacerbating the trauma associated with Hurricane Katrina, it was uncertain whether the participants in my study would experience more or fewer symptoms of compassion fatigue relative to the type of trauma experienced. This is a question I hoped my study would begin to answer.

Experience. The counselor's level of experience has been identified as a risk factor. Pearlman and MacIan (1995) surveyed 188 self-described "trauma therapists" and found that counselors with less experience tended to exhibit more difficulties than those who had worked in

the field longer. Their contention was that the more experienced counselors were more likely to have engaged in continuing education and consultation over the years. Neumann and Gamble (1995) also indicated that counselors with fewer years of experience were more likely to experience compassion fatigue because of inadequate supervision in a survey of therapists of survivors of chronic childhood trauma. Because the findings within the literature are relatively consistent, I anticipated that participants in my study would have a similar relationship between fewer years of experience and higher levels of compassion fatigue.

Caseload. In a survey of 163 New York area counselors of rape and incest survivors, Pinsley (2000) found that counselors who had caseloads more heavily weighted with trauma clients tended to experience more symptoms than those who had fewer than half their caseloads filled with trauma clients. Pinsley stated that therapists who carried caseloads of 50% or more of rape and incest survivors reported more intrusive and avoidant symptoms associated with trauma than therapists whose caseloads had less than 50% of such clients (Pinsley, 2000).

Similarly, Cunningham (2003) surveyed 182 social workers listed among the membership directories of the International Society of Traumatic Stress Studies and the Association of Oncology Social Workers across the United States. Cunningham found that clinicians with 40% or more of their caseload comprised of sexually abused clients reported “significant disruptions in their worldview” (Cunningham, 2003).

Killian (2008) interviewed 20 Texas clinicians who treated survivors of child sexual abuse in the qualitative portion of his study of compassion fatigue, burnout, and self-care. The clinicians ranged in age from 28 to 57; 16 were female, while 4 were male. The researcher also

included a quantitative portion in which he administered the Social Support Index; the BriefCOPE; the Professional Quality of Life III: Compassion Satisfaction and Fatigue Subscales, R-III; the emotional exhaustion subscale of the Maslach Burnout Inventory; the Emotional Self-Awareness Questionnaire; and researcher-developed questions. Killian found that higher number of hours per week spent working with trauma survivors was a primary predictive factor of lower scores on compassion satisfaction. The researcher stated that his findings indicated that working with trauma survivors is hard work and in order to do more of it in the long term, a good option may be to do less of it per week (Killian, 2008). Based on research findings, I anticipated that participants in my study would experience higher levels of compassion fatigue symptoms in areas where there were large numbers of evacuees, and higher levels for those counselors who were deployed to the Gulf Coast than for counselors who treated fewer Hurricane Katrina survivors.

Personal history of trauma. There is some disagreement within the literature whether a personal history of trauma is a predictor of more distress. Pearlman and MacIan (1995) found that counselors with a personal trauma history reported significantly more general distress and more disrupted cognitive schemas than those counselors who did not have a personal history of trauma. However, Creamer and Liddle (2005) found that the relationship between compassion fatigue symptoms and therapists' personal trauma history was not significant in their study of 81 Disaster Mental Health workers who responded to the terrorist attacks of September 11, 2001. Because of the inconsistency within the literature, I could not predict the level of correlation

between compassion fatigue symptoms and personal trauma history from participants in my study and hoped my findings would add to the body of research.

Age. In a study of 166 child welfare workers, age was found to be a determining factor in compassion fatigue; Nelson-Gardell and Harris (2003) found that counselors younger in age reported more symptoms of compassion fatigue than did their older counterparts. These researchers administered the *Compassion Fatigue Self-Test for Psychotherapists* and the *Childhood Trauma Questionnaire* as well as demographics questions to a group of child welfare workers ranging in age from 23-72 years with a mean age of 40.42 years. Additionally, other studies have found that younger age tended to be a risk factor for compassion fatigue (Adams, Motto, & Harrington, 2001; Vredenburgh, Carlozzi, & Stein, 1999). Adams, Motto, and Harrington (2001) administered the *Traumatic Stress Institute Belief Scale - Revision L* to a random sample of master's level clinical social workers and found a strong association between younger age and vicarious trauma. Vredenburgh, Carlozzi, and Stein (1999) surveyed 521 members of the American Psychological Association ranging in age from 30 to 79 with a mean age of 47.5 years of age. Sixty-four percent (n= 335) of respondents were female, and 36% (n= 186) were male. In addition to a demographic questionnaire, the *Maslach Burnout Inventory* was administered and findings indicated that age explained 8.4% of the variance in "emotional exhaustion" and 9.4% of the variance in "depersonalization" (Vredenburgh, Carlozzi, & Stein, 1999). Because the literature is fairly consistent regarding the inverse relationship between age and vicarious trauma symptoms, I anticipated similar results in my study.

Gender. Gender has been found to be a factor in some studies of compassion fatigue, but not in others. Gender was not found to be significantly associated with compassion fatigue in Creamer and Liddle's (2005) study of disaster mental health workers who responded to the September 11, 2001 terrorist attacks. However, Sprang, Clark, and Whitt-Woosley (2007) reported that being female was found to be predictive of higher levels of compassion fatigue in their study of 1,121 mental health professionals (Sprang, Clark, & Whitt-Woosley, 2007). Based upon the inconsistency regarding the variable of gender within the literature, I could not predict the expected correlation between gender and compassion fatigue among the participants in my study and hoped that my study would yield this additional information.

Recent stressful life events. Pinsley (2000) found that counselors who reported "personal life stress events in the previous year" experienced more avoidant symptoms than those who did not. Further, they experienced more disruptions in their cognitive schemas and more symptoms of career burnout. Because according to Pinsley's findings, increased "personal life stress events" are related to increased compassion fatigue symptoms, I included the demographic question in my survey, "Did you experience any personal Katrina-related losses?"

Protective Factors

Protective factors include, but are not limited to, peer support, supervision, effective personal coping mechanisms and spiritual faith. Each of these protective factors is discussed below.

Peer support. Johnstone (2007) referred to the peer support she received during her deployment to the Gulf Coast to work with Hurricane Katrina survivors as an effective resource that served to promote group cohesion and loyalty (Johnstone, 2007). The United States Department of Veterans Affairs (2006) recommends that providers increase collegial support, and discuss relief work with other relief colleagues to protect themselves from the effects of vicarious traumatization (United States Department of Veterans Affairs, 2006).

Supervision. With respect to supervision, Sexton (1999) stated that “a vital element of a trauma therapist’s self-care and professional accountability is to arrange regular supervision or consultation, regardless of his or her level of experience. The work is too demanding to do without supervision, and this should be understood as an ethical responsibility” (p. 400). Despite the stated importance of supervision, in Pearlman and MacIain’s (1995) study, only 53% of the 188 trauma therapists surveyed participated in any type of trauma-related supervision.

Personality factors. Rutter (1990) identified three categories of protective factors including personality coherence, family cohesion, and social support. Rutter defined personality factors as level of autonomy, self-esteem and self-efficacy, good temperament, and positive social outlook. Additionally, Wilson (1995) and Wilson and Raphael (1993) noted that internal locus of control, altruism, the perception of social and economic resources, self-disclosure, and the formation of a clear sense of identity as a survivor were additional factors associated with resilience. Individual personality variables which serve as protective factors include personality characteristics of extraversion, openness to experience, agreeableness, openness to religious change, and conscientiousness (Tedeschi & Calhoun, 1996).

The adaptive coping strategy of maintaining optimism and hopefulness in the face of tragedy is referred to as "optimistic perseverance" and is viewed as an essential component to successfully work with trauma victims (McCann & Pearlman, 1990). Sexton (1999) stated that "maintaining realistic optimism, hopefulness and a sense of humour in the face of the traumatic experience of clients is a difficult but essential aspect of being an effective trauma therapist" (p. 400). Killian (2008) found that having a high internal locus of control in the workplace was associated with higher compassion satisfaction scores.

Support system. Family cohesion is exemplified by a sense of warmth and a lack of discord or tension among its members (Uruk, Saygar, & Cogdal, 2007). External support systems also promote more positive coping whether they are merely perceived or actually used. The knowledge that they simply exist appears to provide a sense of security (Agabi & Wilson, 2005). Killian's (2008) study found that higher compassion satisfaction scores were associated with higher reported social support.

Spiritual faith. In McLeish and DelBen's (2008) study, prayer was found to be the only coping mechanism associated with decreased posttraumatic stress symptoms. The researchers also found that attending church services was a coping skill negatively correlated with depressive symptoms (McLeish & DelBen, 2008). Included in the United States Department of Veterans Affairs (2006) provider care recommendations are "practicing religious faith, philosophy, and spirituality" as methods of reducing the effects of compassion fatigue in mental health providers (United States Department of Veterans Affairs, 2006).

Summary

Having a strong internal locus of control as well as other internally controlled variables such as maintaining an altruistic worldview, spirituality, healthy coping skills, healthy diet, exercise, engaging in leisure activities, and healthy interpersonal relationships tend to be the dominant themes in the literature as it relates to resilience and posttraumatic growth. These same skills are the ones counselors teach their clients and those counselors who practice them tend to avoid professional burnout, be more effective in their work and maintain longer, more productive careers than those who do not (Canfield, 2005). This same truth is even more important to teach to counselors who will be at a higher risk for compassion fatigue by virtue of the fact that they will be working with a higher percentage of traumatized clients.

It was assumed that these variables: history of personal trauma; age; years of experience; and recent personal life stress, would prove to be most helpful in predicting outcomes in my study, as the literature shows that they are common themes in other types of trauma work. Having a history of personal trauma, age, and years of experience tended to be predictive factors in the literature. Gender was not consistently found to be a significant predictor of compassion fatigue. Research findings vary on this risk factor, and it is my intent that my study may add to the body of research regarding the element of gender. Additionally, since many of the counselors who worked with Hurricane Katrina survivors also lived and worked in the Gulf Coast region themselves, they would have been likely to have personally experienced recent personal life stress from the evacuation, the storm itself, or its aftermath.

Traditional Clinical Mental Health Treatment for Compassion Fatigue

Because compassion fatigue has a deleterious effect on mental health professionals, and consequently on the clients they treat, it is imperative that counselors heed the Biblical advice, “Physician, heal thyself” (Luke 4:23). This healing can take several forms, one of which is the same type of mental health treatment that counselors provide to the clients with whom they work. Treatment for compassion fatigue is similar to treatment of posttraumatic stress disorder because the symptoms are the same; only the source of the trauma differs. Surprisingly, however, the majority of the literature points to self-care and supervision with the exceptions of two clinical treatments: Critical Incident Stress Debriefing (CISD), and the Accelerated Recovery Program (ARP) to assist mental health professionals in dealing with compassion fatigue.

Despite the repeated recommendations throughout the literature that therapists practice their own self-care and personal therapy (Barnett, Baker, Elman, & Schoener, 2007; Figley, 1995; Iliffe & Steed, 2000; Kramen-Kahn & Hansen, 1998; Lawson & Myers, 2011; Pearlman & Saakvitne, 1995, Sexton, 1999), research indicates that therapists are somewhat resistant to engage in the recommended behaviors themselves (Prochaska & Norcross, 1983). Prochaska and Norcross (1983) surveyed 750 members of the American Psychological Association and asked one half (n=375) how they would treat a client with “psychic distress” and the other half (n=375) how they would treat their own “psychic distress.” Of the 141 usable surveys returned, results indicated that therapists emphasize helping relationships and medications more for their clients than for themselves (Prochaska & Norcross, 1983). Research indicates that the stigma

associated with the possibility of admitting psychological impairment, along with the possible social or career consequences; preclude psychologists from engaging in their own therapy (Barnett & Hillard, 2001; Farber, 2000; Gilroy, Carroll, & Murra, 2002). Although these studies are specifically related to psychologists' hesitation to participate in their own therapy, no empirical studies were found that address the possible reluctance of counselors to seek formal treatment. I hoped that my study might help to address this gap in the literature.

Supervision

Although regular clinical supervision (Pearlman & Saakvitne, 1995a) and utilization of a collegial support system are recommended by most researchers (Yassen, 1995), Canfield (2005) has noted that there is no trauma-specific supervision model. Pearlman and Saakvitne (1995a) recommended several options including one-on-one interactive supervision, group supervision which can be facilitated by an experienced trauma therapist, or a professional peer group.

Critical Incident Stress Debriefing

One method of treating secondary trauma, or compassion fatigue, is Critical Incident Stress Debriefing, or CISD (Phipps & Byrne, 2003). This exposure-based therapy generally occurs 48-72 hours after a critical incident and involves a facilitator instructing the client or group of clients to recall specific components of the trauma in a safe environment (Mitchell, 1983). The facilitator then educates the participants about the symptoms and reactions to trauma and offers recommendations for self-care and mental health referrals in case of ongoing symptoms (Mitchell, 1983). Although there is debate in the literature about the effectiveness of

CISD (Phipps & Byrne, 2003), Mitchell and Everly (1997) supported the use of CISD and indicated that it is intended to be a multi-session treatment to maximize effectiveness.

Accelerated Recovery Program

The Accelerated Recovery Program, or ARP, was developed in 1997 by a team led by trauma specialist Dr. Charles Figley. Since that time, Dr. Figley and his team have created the Certified Compassion Fatigue Specialist Training (CCFST) which has successfully treated hundreds of caregivers utilizing their protocol (Gentry, 2002). The Accelerated Recovery Program is a five-session “manualized and copyrighted protocol” developed to treat compassion fatigue. The ARP training utilizes self-soothing techniques, self-care, narrative therapy, and Eye Movement Desensitization and Reprocessing, or EMDR, in its treatment protocol (Gentry, 2002). EMDR is a therapeutic technique for the treatment of trauma involving structured eye movements directed by the therapist while the client focuses on emotionally distressing memories. In one study, 12 professionals who provided on-going care to survivors of the Oklahoma City bombing received ARP treatment for their compassion fatigue symptoms and in every case, the ARP treatment provided “statistically and clinically significantly successful treatment” (Gentry, 2002).

Self-Care for Vicarious Traumatization

Self-care is recommended for the maintenance of an individual’s general mental health and wellness. The term self-care refers to any self-soothing activity that replenishes the spirit, energizes the body, or relaxes the mind; the kinds of "self-nurturing" and "self-building"

activities therapists recommend to clients (Barnett, Baker, Elman, & Schoener, 2007). Just as counselors recommend self-nurturing behaviors for clients, researchers describe it as an ethical necessity for counselors themselves (Iliffe & Steed, 2000; Sexton, 1999). Without the emotional “pressure release” provided by the various self-care strategies, counselors are at a greater risk for professional impairment (Figley, 1995; Lawson & Myers, 2011; Pearlman & Saakvitne, 1995). Not only does self-care aid in the prevention of compassion fatigue and burnout, it helps to moderate the intensity of the professional work of counseling (Figley, 2007). In fact, without proper self-care to manage the challenges and stressors inherent in the mental health profession, the resulting damage may harm not only the counselors themselves, but also the clients with whom they work (Barnett, Baker, Elman, & Schoener, 2007). Appropriate self-care for psychotherapists is considered to be a critical element in the prevention of potential harm to clients caused by the psychotherapists themselves (Barnett, Baker, Elma, & Schoener, 2007). Avoiding harm to clients due to counselor impairment is such an important issue that it is specifically addressed in the American Counseling Association's *Code of Ethics* (2005) in Section C.2.g. (Impairment):

"Counselors are alert to the signs of impairment from their own physical, mental, or emotional problems and refrain from offering or providing services when such impairment is likely to harm a client or others. They seek assistance for problems that reach the level of professional impairment, and, if necessary, they limit, suspend, or terminate their professional responsibilities until such time it is determined that they may safely resume their work. Counselors assist colleagues or supervisors in recognizing

their own professional impairment and provide consultation and assistance when warranted with colleagues or supervisors showing signs of impairment and intervene as appropriate to prevent imminent harm to clients" (ACA, 2005, p. 9-10).

As such, engaging in *positive career sustaining behaviors* (Kramen-Kahn & Hansen, 1998) such as taking regular breaks away from work; maintaining a balanced caseload (e.g., trauma and non-trauma cases, chronic and acute cases); varying the type of work (e.g., supervision, meetings, clinical and non-clinical work); participating in physical exercise; getting adequate rest; having a healthy diet; and meeting spiritual, emotional, and relationship needs should not be viewed as selfish or a luxury, but rather, as essential components of the professional role (Barnett, Baker, Elman, & Schoener, 2007). Because the personal and professional lives of mental health providers are so integrally connected, neglect of self-care is ultimately neglectful of the well-being of clients (Barnett, Baker, Elman, & Schoener, 2007).

Lawson and Myers (2011) studied self-care strategies, which they refer to as Career-Sustaining Behaviors, or CSBs, in 506 Professional Counselors. In addition to demographic questions, the *5F-Well*, the *ProQOL(Revision III)*, and the *Career-Sustaining Behaviors Questionnaire* were the instruments utilized. Of the counselors surveyed, 78.8% were female; 89.1% were Caucasian; 5.5% were African-American; the remaining 9.4% self-identified as belonging to other racial/ethnic groups. The mean age of participants was 49.9 years. Their mean caseload was 30, one-third of who were trauma survivors. The top eight CSBs indicated as most important were spending time with partner/family; maintaining a sense of humor; balancing

personal and professional life; maintaining self-awareness; reflecting on positive experiences; engaging in quiet leisure activities; trying to maintain objectivity about clients; and maintaining professional identity. CSBs rated least important by counselors were discussing work frustrations with partner/family; engaging in formal relaxation activities; receiving regular clinical supervision; participation in personal therapy; discussing work frustration with friends; participation in peer support groups; and using substances to relax.

Self-care strategies to counter compassion fatigue include physical activity and exercise, healthy diet, adequate rest, and participation in pleasurable leisure activities (Kramen-Kahn & Hansen, 1998). In a study of self-care patterns of 155 psychotherapists, Mahoney (1997) found that reading for pleasure, physical exercise, hobbies, and taking vacations were the most commonly reported forms of self-care by respondents. Other frequently reported forms of self-care included peer supervision, prayer or meditation, and volunteer work. The least commonly reported forms of self-care reported were personal therapy, attending church services, receiving massage or chiropractic therapy, and journaling. Over 80% of respondents reported reading for pleasure; taking vacations; and pursuing hobbies or artistic enjoyment; 75% of the sample reported exercising on a regular basis, and participating in peer supervision, while 50% reported practicing meditation or prayer. More than 40% of respondents reported doing volunteer work and 20% reported that they journaled (Mahoney, 1997).

O'Halloran and O'Halloran (2001) suggested that self-care strategies be divided into four categories; biobehavioral strategies, affective and cognitive strategies, relational strategies, and spiritual strategies. Biobehavioral strategies include, but are not limited to, caring for the

physical self through healthy eating habits, taking medications and nutritional supplements as prescribed, getting adequate sleep, exercise, relaxation, and recreation. Affective and cognitive strategies may include such interventions as positive affirmations, inspirational reading, humor, crying, and journaling. Relational strategies consist of interpersonal support systems with colleagues, family, friends, personal counseling, and even the companionship of pets. Spiritual strategies include any activity that creates meaning in everyday life and provides a connection with nature such as gardening, hiking, camping, traveling, as well as any structured or unstructured spiritual or religious rituals practiced alone or within a religious community.

Trippany, Kress, and Wilcoxon (2004) discussed the severity of the challenges that arise when counselors are affected by vicarious traumatization and recommended preventive measures to offset the effects. Some of these methods include limiting the percentage of trauma clients in a caseload, regular peer supervision, agency responsibility of providing informed consent and continuing education, personal coping mechanisms, and attention to spirituality. Norcross (2000) stated that the first step in practicing good self-care is to recognize the hazards of the career. Self-awareness, he asserts, is essential in the ability to self-monitor and employ the unique self-care methods that work for each individual including diversifying professional activities.

Attention to one's religious or spiritual domain is also recommended as trauma counselors are often faced with "spiritual challenges" and basic questions about meaning, hope, and human suffering (Decker, 1993; Pearlman & Saakvitne, 1995a; Sargeant, 1989). Bober, Regher, and Zhou (2006) surveyed 259 mental health providers. The majority (80%) was

women; the mean age was 41; the average number of years of counseling experience was 10; the average number of hours worked each week was 16; and the average number of hours working with traumatized individuals was 8. The researchers asked participants about their use of common self-care strategies. According to Bober, Regher, and Zhou (2006), no tool had been developed which measured the effectiveness of the commonly recommended self-care strategies, so they designed a new instrument. Their *Coping Strategies Inventory* was designed to assess whether or not various methods actually did lead to lower levels of distress in trauma counselors. They created three subscales: leisure, self-care, and supervision. Their findings showed that of the three subscales, only time devoted to self-care and time devoted to supervision were significantly correlated at a moderate level. The researchers suggested further studies to empirically evaluate whether or not the commonly recommended self-care strategies are, in fact, significantly effective in reducing symptoms of compassion fatigue.

Self-care for mental health providers who treated Katrina survivors

The use of meditation as a post-disaster intervention was studied in a group of 20 New Orleans mental health workers following Hurricane Katrina (Waelde, Uddo, et al, 2008). Researchers offered a meditation retreat for participants ten weeks post-Katrina. The retreat workshop included instruction and practice in several techniques such as meditation; breathing; guided imagery; mantra repetition; and acknowledging and releasing thoughts, feelings, and sensations as they arise, rather than trying to resist them or engage in them. After the initial retreat workshop, the subjects were given an 8-week home study program with a manual, and

audiotaped recordings of guided meditations with instructions to meditate for a minimum of 30 minutes six days each week. Participants were given a baseline assessment, as well as at the 3-week midtreatment point and again at the 8-week post treatment point. Instruments included *The PTSD Checklist-Specific Version*, the state subscale of the *State-Trait Anxiety Inventory*, and the *Center for Epidemiological Studies-Depression Scale*. Additionally, participants' disaster exposure was assessed and demographic questions were asked. Of the 20 participants completing the baseline assessment, 14 scored above the clinical cutoff score for depression; 5 scored above the clinical cutoff score for posttraumatic stress disorder; 10 believed their lives were in danger when Hurricane Katrina hit; and 17 had a hurricane-related injury or illness themselves or of a household member. Four participants suffered the death of a family or close friend as a result of Hurricane Katrina. All 20 participants reported at least "a little" hurricane-related property damage, while 12 reported "enormous" amounts. After the 8-week meditation workshop and home study, 14 of the 20 participants reported feeling "somewhat better" or "much better" as a result; 9 reported improvement in depressive symptoms; increase in activity levels; increased frustration tolerance; and improvement in stress coping. Other outcomes were that seven reported an increased ability to manage anger more effectively and six participants reported improvements in sleep problems, fatigue, and physical pain. Participants averaged 112 minutes of meditation weekly, with 8 reporting having practiced more than the recommended 180 minute minimum. Total posttraumatic stress disorder and state anxiety symptoms were correlated with the total number of minutes of meditation, which indicated that more meditation practice was associated with greater improvement in posttraumatic stress disorder and state

anxiety symptoms. There was no change in depressive symptoms after the intervention among the participants.

Summary of Relevant Literature

A review of the literature revealed that most experts agree that the best way to treat vicarious traumatization and to prevent compassion fatigue in therapists is through a multi-pronged approach to reduce the impact of trauma counseling work. Recommendations include development of personal supports and outside interests, physical activity, attention to diet, rest, exercise, leisure activities and healthy interpersonal relationships (Iliffe & Steed, 2000). At work, reduction in the percentage of traumatized clients in the counselor's caseload is advised, as is development of professional support networks for consultation and collaboration, engaging in continuing education, acknowledging whether there exists a history of personal trauma and seeking personal therapy if this impacts their work or emotional state as well as engaging in political activism with a goal for social change (McCann & Pearlman, 1990). All these self-care modalities are found to promote the likelihood of resilience in vicariously traumatized therapists. Just as we teach our clients to practice self-care, we must also be willing to do the work ourselves or risk losing the gift that, for most of us, is at our core, our very calling to the profession itself.

Conclusion

A review of the literature revealed no study that specifically measures the efficacy of formal therapeutic treatment versus self-care for vicariously traumatized mental health professionals. Although many forms of self-care have been suggested, no efficacy studies could

be found in the professional literature. “To date, there is no tool which measures these various forms of self-care....It was quickly determined that there are few empirical data on effective approaches for managing vicarious trauma” (Bober, Regher & Zhou, 2006, pp. 73-74).

Additionally, no instrument could be located to measure the differences between formal psychotherapy and self-care. This gap in the literature is one that I hoped my study could begin to fill.

CHAPTER THREE

Methodology

In this chapter, the purpose of the study is restated. The research questions, participants, instruments, independent and dependent variables are presented.

Purpose of the Study

The purpose of the study was to examine the relationship among compassion fatigue and self-care practiced and clinical mental health care received by Gulf Coast counselors who provided mental health counseling to survivors of Hurricane Katrina. The relationship between compassion fatigue and the use of these mental health care strategies, as well as demographic variables including age, gender, race, years of experience, prior trauma, and personal losses related to Hurricane Katrina were explored.

I conducted a survey using items from two existing instruments, the *PTSD Checklist-Civilian Version* (Weathers, Litz, Huska, & Keane, 1994), and *The Compassion Fatigue and Satisfaction Self-Test for Helpers* (Figley & Stamm, 1996), as well as a researcher-developed demographic survey. The surveys were distributed through Qualtrics © software to Licensed Professional Counselors in Louisiana, Texas, and Mississippi by way of their respective professional organizations. The *PTSD Checklist - Civilian Version* (Weathers, Litz, Huska, & Keane, 1994) was used to measure posttraumatic symptoms experienced by participants within a year of beginning to work with Hurricane Katrina survivors. The *Compassion Fatigue Subscale*

of *The Compassion Fatigue and Satisfaction Self-Test for Helpers* (Figley & Stamm, 1996) measured the current level of compassion fatigue symptoms, five years after working with Hurricane Katrina survivors.

Survey Design

I used a survey design in my study to most efficiently collect information about participants. The researcher-developed demographic survey was used to collect demographic information about participants including age, gender, ethnicity, caseload, exposure to prior trauma, years of counseling experience, and personal Katrina-related losses, as these factors are indicated in the literature to be related to compassion fatigue (Adams, Motto, & Harrington, 2001; Creamer & Liddle, 2005; Nelson, Gardell & Harris, 2003; Neumann & Gamble, 1995; Pearlman & MacIain, 1995; Pinsley, 2000; Sexton, 1999; Sprang, Clark, & Whitt-Woosley, 2007; Vredenburgh, Carlozzi, & Stein, 1999). The *PTSD Checklist – Civilian Version* (Weathers, Litz, Huska, & Keane, 1994) and *The Compassion Fatigue and Satisfaction Self-Test for Helpers* (Figley & Stamm, 1996) are brief, self-report Likert scales. Additionally, the survey could be completed online using Qualtrics © software which made it simple to use and thereby potentially increased the number of participants. The advantages of the survey design, particularly the rapid turnaround in the data collection process, the economy of the design, and the simplicity of the Qualtrics © online method, were instrumental in the design decision.

Using an online survey ensured anonymity and also allowed access to a large number of participants through their email addresses. Access was available only indirectly through their professional organizations. To increase the statistical power, I included as many Gulf Coast

Licensed Professional Counselors as possible in my sample. Using the resources available from the professional organizations' databases was the best method to make my survey available to the largest number of participants possible who met criteria for my study, which included Professional Counselors who had been affected by compassion fatigue from their work with Hurricane Katrina survivors.

Research Questions

The omnibus question of the study was: What is the relationship between compassion fatigue and self-care practiced and clinical mental health services received by Gulf Coast Licensed Professional Counselors who counseled Hurricane Katrina survivors?

The research questions were:

1. What is the prevalence of vicarious traumatization as measured by *The PTSD Checklist-Civilian Version (PCL-C)* and compassion fatigue as measured by *The Compassion Fatigue and Satisfaction Self-Test for Helpers (CFS)* in this sample?
2. What is the relationship between the level of compassion fatigue and the type of mental health care strategy used by Gulf Coast Licensed Professional Counselors who counseled Hurricane Katrina survivors?
3. What is the relationship between the level of compassion fatigue and the following variables that are considered to be risk factors associated with greater vulnerability to high levels of compassion fatigue: younger age, fewer years of experience, female gender, recent experience of personal stressful life events (Katrina-related losses), and exposure to prior trauma?

4. What is the association between Gulf Coast Counselors with vicarious traumatization who counseled Hurricane Katrina survivors within one year of Hurricane Katrina but who no longer showed symptoms of high-level compassion fatigue five years after Hurricane Katrina and the type of mental health care strategy utilized?
5. What is the prevalence and frequency of non-clinical self-care activities (prayer, meditation, exercise, yoga, engaging in pleasurable activities, massage, and time spent alone or with friends or family) utilized by Gulf Coast Counselors with vicarious traumatization who counseled Hurricane Katrina survivors but who no longer showed symptoms of high-level compassion fatigue five years after Hurricane Katrina?

Independent and Dependent Variables

The independent variables were the two types of mental health care received by Gulf Coast Licensed Professional Counselors in the aftermath of Hurricane Katrina: traditional clinical mental health care, and self-care. These counselors may have received traditional clinical mental health care which includes group, individual, or marriage and family therapy. They may have practiced self-care which may include religious or spiritual rituals such as prayer, meditation or church attendance; physical self-care such as massage, yoga, or exercise; or social self-care including time spent with loved ones and time spent alone. Additionally, they may have participated in both traditional psychotherapy and self-care; the correlation between

compassion fatigue and having received traditional mental health services *and* having practiced self-care were examined as well as the relationships between compassion fatigue and each type of mental health care separately.

The dependent variables in my study were vicarious traumatization as measured by the *PTSD Checklist - Civilian Version* (Weathers, Litz, Huska, & Keane, 1994) and the level of compassion fatigue as measured by *The Compassion Fatigue Subscale* of the *Compassion Fatigue and Satisfaction Self-Test for Helpers* (Figley & Stamm, 1996). A baseline measure of vicarious traumatization within one year after beginning to work with Hurricane Katrina survivors was assessed utilizing the *PTSD Checklist – Civilian Version* (Weathers, Litz, Huska, & Keane, 1994). The *Compassion Fatigue Subscale* of the *Compassion Fatigue and Satisfaction Self-Test for Helpers* (Figley & Stamm, 1996) was used as an outcome measure of the participants' current level of compassion fatigue five years after working with Hurricane Katrina survivors.

Characteristics of the Sample

I surveyed Licensed Professional Counselors in Louisiana, Texas, and Mississippi who had worked with survivors of Hurricane Katrina. The population of interest was approximately 9,000 Licensed Professional Counselors across the three states: members of the Louisiana Counseling Association with a membership of approximately 2000, members of the Texas Counseling Association with a membership of approximately 6000, and members of the Mississippi Counseling Association with a membership of approximately 1000. With an expected return rate of 15- 20%, the number of potential participants should have produced a

sample of 1250 to 1800 respondents, which is sufficient to be representative of the population of professional counselors in the tri-state area. Because of confidentiality requirements, protocol dictated that I submit the surveys to each state's professional association whose representative emailed them to the members along with a cover letter explaining the purpose of my study and offering the option to participate. Recipients who decided to participate were able to click onto a link that directed them to my survey at the Qualtrics © site.

Three instruments were used in this survey. The first was a researcher-developed demographic survey which was used to collect demographic information about participants including age, gender, ethnicity, caseload, exposure to prior trauma, years of counseling experience, and personal Katrina-related losses, as these factors are indicated in the literature to be related to compassion fatigue (Adams, Motto, & Harrington, 2001; Creamer & Liddle, 2005; Nelson, Gardell & Harris, 2003; Neumann & Gamble, 1995; Pearlman & MacIain, 1995; Pinsley, 2000; Sexton, 1999; Sprang, Clark, & Whitt-Woosley, 2007; Vredenburgh, Carlozzi, & Stein, 1999). Both the second instrument, *The PTSD Checklist – Civilian Version* (Weathers, Litz, Huska, & Keane, 1994) and the third instrument, *The Compassion Fatigue and Satisfaction Self-Test for Helpers* (Figley & Stamm, 1996) are brief, self-report Likert scales. Of the 9,000 Gulf Coast Licensed Professional Counselors in the population of interest, surveys or some portion of surveys were returned by 609 participants. In the researcher-developed demographic survey, 586 individuals responded to the questions regarding age, gender, ethnicity and years of counseling experience, 585 individuals responded to questions about exposure to prior trauma, and personal Katrina-related losses, 578 individuals responded to the question about the percentage of their

work week that was spent counseling Hurricane Katrina victims and 579 individuals responded to questions regarding the type of mental health care strategy they participated in. There were 439 usable surveys for the *PTSD Checklist – Civilian Version* (Weathers, Litz, Huska, & Keane, 1994) and 448 for *The Compassion Fatigue and Satisfaction Self-Test for Helpers* (Figley & Stamm, 1996). The return rate cannot be determined because the surveys were not sent directly to participants, but were sent via their respective Professional Associations for confidentiality; therefore, the actual number of surveys sent and successfully delivered is unknown. Descriptive data were gathered to identify characteristics of the sample.

Demographics of Participants

Participants were asked to identify their sex. The survey sample of Gulf Coast Licensed Professional Counselors was predominately female. The survey sample was 80.20% female and 19.80% male. The frequency distribution of participants' sex appears in Table 1 below.

Table 1: Frequency Distribution of Participants by Sex

Sex	<i>n</i>	%
Male	116	19.80
Female	470	80.20

The participants were asked to identify their birth year, which was used to determine their respective ages. The ages of the participants ranged from 24 to 81. The majority of participants were between the ages of 31-60. The frequency distribution of participants' age appears in Table 2 below.

Table 2: *Frequency Distribution of Participants by Age*

Age	<i>n</i>	%
21-30	40	6.84
31-40	127	21.71
41-50	140	23.93
51-60	165	28.21
61-70	102	17.44
71-80	10	1.71
81-90	1	0.17

Participants were asked to indicate their ethnicity. The vast majority, 95.5% of the participants, were White/Caucasian, Black/African American, and Hispanic/Latino. The largest ethnic group among participants (75.8%) was White/Caucasian. The frequency distribution of their responses is depicted below in Table 3.

Table 3: *Frequency Distribution of Participants by Ethnicity*

Ethnicity	<i>n</i>	%
Black/African American	67	11.43
Asian American or Pacific Islander	10	1.71
White/Caucasian	444	75.77
Latino/Hispanic	51	8.70
Native American	2	0.34
Middle Eastern	3	0.51
Bi/Multiracial	9	1.54

Participants were asked to indicate the number of years of counseling experience they had. Approximately 75% of respondents had 20 years of experience or less and approximately 39% had 10 years of experience or less.

Table 4: *Frequency Distribution of Participants by Years of Experience*

Years of Experience	<i>n</i>	%
00-10	227	38.74
11-20	217	37.03
21-30	85	14.51
31-40	43	7.34
41-50	14	2.39

Participants were asked to indicate the percentage of hours per work week spent counseling Hurricane Katrina survivors within the first year of the storm. Over 70% of the participants spent 20% of their work week or less counseling Hurricane Katrina survivors within the first year, and 37.89% of survey participants spent less than 1%. The frequency distribution of participants by percentage of hours per work week spent counseling Hurricane Katrina survivors within the first year is depicted below.

Table 5: *Frequency Distribution of Participants by Percentage of Hours per Work Week Spent Counseling Hurricane Katrina Survivors within the First Year*

Percentage of Work Week	<i>n</i>	%
< 1 %	219	37.89
1% - 10%	136	23.53
11% - 20%	56	9.69
21% - 30%	44	7.61
31% - 40%	30	5.19
41% - 50%	20	3.46
51% - 60%	19	3.29
61% - 70%	7	1.21
71% - 80%	12	2.08
81% - 90%	10	1.73
91% - 100%	25	4.33

Psychographic Data for Participants

Participants were asked to indicate if they had any personal history of trauma; and also if they had personally experienced any type of loss relating to Hurricane Katrina. The majority of the survey participants had no history of trauma. The frequencies of their responses are listed below in Table 6.

Table 6: *Frequency Distribution of Participants by Personal History of Trauma*

Personal History of Trauma	<i>n</i>	%
Yes	171	40.71
No	249	59.29

The majority of participants, 73.33%, did also did not experience any Katrina-related losses. The frequencies of the participants' responses appear below in Table 7.

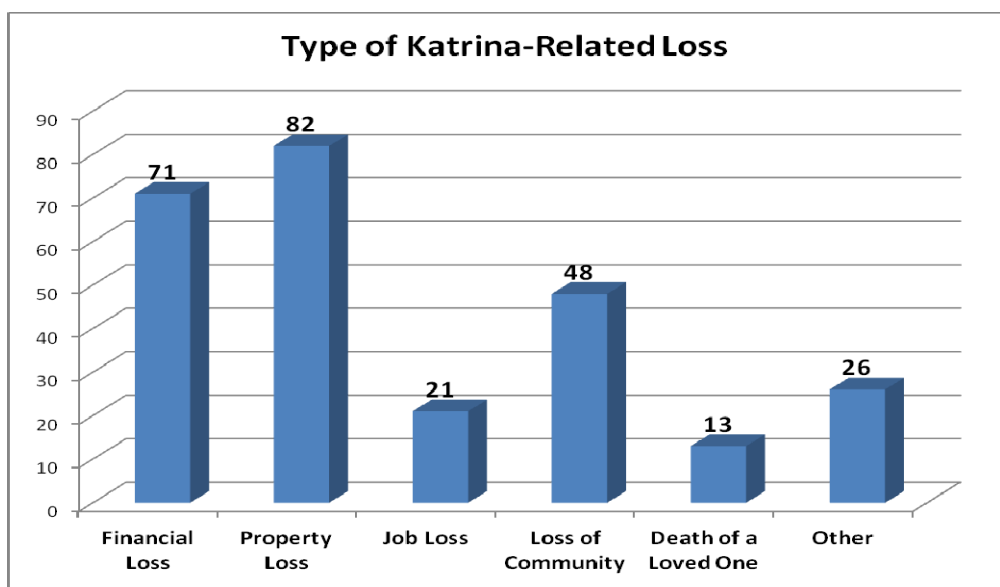
Table 7: *Frequency Distribution of Participants by Experience of Katrina-Related Losses*

Katrina-Related Losses	<i>n</i>	%
Yes	112	26.67
No	308	73.33

Individuals who had experienced any type of Katrina-related loss were asked to specify the types of losses they had experienced. Options included Financial loss, Property loss, Job

loss, Loss of community, Death of a loved one, and Other. The participants' responses to type of loss experienced are summarized in the chart below. The two most common types of loss experienced were property loss and financial loss. Descriptive data for the types of Katrina-related losses that were experienced by participants are displayed below in Table 8.

Table 8: *Type of Katrina-Related Loss*



Mental Health Care Strategies of Participants

Respondents were asked to indicate which type/s of mental health care strategies they participated in: traditional mental health counseling only, non-clinical self-care activities only, both traditional mental health counseling and non-clinical self-care activities, or neither

traditional mental health counseling or non-clinical self-care activities. The frequency distribution of participants by type of care is shown below.

Table 9: *Frequency Distribution of Participants by Type of Care*

Type of Care	<i>n</i>	%
Traditional Mental Health Counseling	11	1.90
Non-Clinical Self-Care	326	56.30
Both	94	16.23
None	148	25.56
Total	579	100.00

Instrumentation

The instruments used were *PTSD Checklist – Civilian Version* (Weathers, Litz, Huska, & Keane, 1994), a subscale of *The Compassion Fatigue and Satisfaction Self-Test for Helpers* (Figley & Stamm, 1996), and a researcher-developed demographic survey.

PTSD Checklist – Civilian Version

Weathers and his colleagues at the National Centre for PTSD created the *PTSD Checklist- Civilian Version* by revising their original *PTSD Checklist* to correspond to the DSM-IV criteria for posttraumatic stress disorder symptoms (Ruggiero, Del Ben, Scotti, & Rabalais, 2003). This instrument is a 17 item Likert scale self-report measure designed to assess subjective distress for specific life events. The PCL is one of only three self-report instruments that parallel the DSM-IV’s diagnostic criteria for PTSD (Ruggiero, Del Ben, Scotti, & Rabalais, 2003).

“Relative to a higher percentage of other available self-report measures for PTSD, the PCL may yield information that has greater predictive validity on a diagnostic level” (Ruggiero, Del Ben, Scotti, & Rabalais, 2003). Additional strengths of the PCL include efficiency of administration, strong internal consistency, and good test-retest reliability (Ruggiero, Del Ben, Scotti, & Rabalais, 2003). Some examples of the items on the *PTSD Checklist – Civilian Version* include: “Loss of interest in things you used to enjoy,” “Feeling irritable or having angry outbursts,” and “Having difficulty concentrating.”

The *PTSD Checklist-Civilian Version* (Weathers, Litz, Huska, & Keane, 1994) was also utilized in a study of 142 social service workers who were survivors of Hurricanes Katrina and Rita in New Orleans and Baton Rouge within three months after the disasters. These personnel included staff at every level of the agency from support and maintenance staff to paraprofessionals and professionals. Approximately 70% of the participants in this study were bachelor’s or master’s level social workers (Leitch, Vanslyke, & Allen, 2009). Face validity of the *PTSD Checklist-Civilian Version* (Weathers, Litz, Huska, & Keane, 1994) was obtained after being reviewed by professionals in the field.

Compassion Fatigue and Satisfaction Self-Test For Helpers

The Compassion Fatigue and Satisfaction Self-Test for Helpers, developed in 1996 by Figley and Stamm, is a 60- item self-report Likert scale comprising three subscales designed to measure compassion satisfaction, job burnout, and compassion fatigue. I utilized the 23-item

compassion fatigue subscale. This subscale measured vicarious traumatization in the counselors surveyed. Some examples of the Compassion Fatigue subscale items include:

“I force myself to avoid certain thoughts or feelings that remind me of a frightening experience,”

“I have flashbacks connected to those I help,” and

“I have difficulty falling or staying asleep.”

This instrument was used to measure compassion fatigue in a study of counseling professionals in Mississippi (Simpson, 2006). Face validity of *The Compassion Fatigue and Satisfaction Self-Test for Helpers* was obtained after being reviewed by professionals in the field.

Demographic Survey

I asked a series of demographic questions to determine whether a correlation exists between compassion fatigue and certain variables as suggested by the literature. The variables included age, gender, ethnicity, years of counseling experience, percentage of work week spent counseling Hurricane Katrina victims, exposure to prior trauma, and personal Katrina-related losses.

Table 10: *Participant Variables*

Variable	Literature Reviewed
Age	Adams, Motto, & Harrington, (2001); Nelson-Gardell & Harris, (2003); Vredenburg, Carlozzi, & Stein, (1999)
Gender	Creamer & Liddle, (2005); Sprang, Clark, & Whitt-Woosley, (2007)
Years of Experience	Neumann & Gamble, (1995); Pearlman & MacIan, (1995)
Exposure to Prior Trauma	Creamer & Liddle, (2005); Pearlman & MacIan, (1995); Sexton, (1999)
Personal Katrina-related losses	Pinsley, (2000)

Additionally, I asked participants whether or not they received traditional clinical therapy and/or practiced non-clinical self-care. If they did participate in self-care, I asked them the self-care strategies they employed and the frequency with which these strategies were utilized.

Table 11: *Self-Care Strategy Employed by Participants*

Strategy	Literature Reviewed
Physical Exercise	Illiffe & Steed, (2000); Kramen-Kahn & Hansen, (1998); Mahoney, (1997)
Leisure Activity	Bober, Regher, & Zhou, (2006); Illiffe & Steed, (2000); Mahoney, (1997)
Religious/Spiritual	Decker, (1993); Mahoney, (1997); Pearlman & Saakvitne, (1995a); Sargeant, (1989)
Peer Supervision	Canfield, (2005); Pearlman & Saakvitne,(1995a); Sexton, (1999); Yassen, (1995)

I also asked whether personal Katrina-related losses included loss of property, financial or career loss, loss of community, and/or loss of friends or family.

An open-ended item was included for participants to add any further information should they decide to do so.

Procedures

To recruit participants, I contacted professional organizations for Licensed Professional Counselors (LPCs) in Louisiana, Texas, and Mississippi. I made arrangements with the Executive Director of the Louisiana Counseling Association (LCA) to forward my introductory email to all the members along with a link to participate in the survey. It is the policy of LCA not to publish the email addresses of its membership; therefore, this is the method that is typically used when such a request is made. This procedure ensures that the members' email addresses remain private while maximizing access to LPCs. I requested to utilize the same procedure through the Texas and Mississippi Counseling Associations to include a larger number of practitioners in my study who were likely to have worked with Katrina survivors. Because the majority of direct providers of mental health services to Hurricane Katrina survivors are clinicians who work in the tri-state area, I delimited the survey to LPCs in Texas, Louisiana, and Mississippi.

Data Analysis Plan

All data analyses were computed utilizing the SPSS 19.0 software package for Windows. The analytic methods employed in this study included descriptive statistics, correlation coefficients, correlation matrices, cross-tabulations, and independent sample t-tests.

A correlational design was used because the participants answered the questions through self-report after the interventions had already been completed. At the conclusion of this study, the most relevant results of the open-ended questions from the survey are displayed.

The general research question for this study was: What is the relationship between compassion fatigue and self-care practiced and clinical mental health services received by Gulf Coast Licensed Professional Counselors who provided counseling services to Hurricane Katrina survivors?

The research questions were:

Research Question 1: What is the prevalence of vicarious traumatization as measured by *The PTSD Checklist-Civilian Version (PCL-C)* (Weathers, Litz, Huska, & Keane, 1994) and compassion fatigue as measured by *The Compassion Fatigue and Satisfaction Self-Test for Helpers (CFS)* (Figley & Stamm, 1996) in this sample? Descriptive statistics including frequency distributions, percentages, measures of central tendency and variation were used to determine the prevalence of high level compassion fatigue scores.

Research Question 2: What is the relationship between the level of compassion fatigue and the type of mental health care strategy used by Gulf Coast Licensed Professional Counselors who provided mental health counseling to Hurricane Katrina survivors in the aftermath of Hurricane Katrina? The mental health care strategies examined in this study were traditional clinical psychotherapy (individual, group, couples or family) and non-clinical self-care (prayer, meditation, exercise, yoga, engaging in pleasurable activities, massage, time spent alone, or time

spent with friends or family). A Pearson's correlation analysis was performed to measure this relationship.

Research Question 3: What is the relationship between the level of compassion fatigue and the variables that are considered to be risk factors associated with greater vulnerability to high levels of compassion fatigue: younger age, fewer years of experience, female gender, recent experience of personal stressful life events (Katrina-related losses) and exposure to prior trauma? A Pearson's correlation analysis was performed to measure the relationship between the risk factors of younger age and years of experience. Independent samples T-tests were used to examine the relationship between the risk factors of female gender, recent experience of personal stressful life events (Katrina-related losses), and exposure to prior trauma.

Research Question 4: What is the association between Gulf Coast Licensed Professional Counselors with vicarious traumatization who provided counseling services to Hurricane Katrina survivors within one year of Hurricane Katrina who no longer showed symptoms of high level compassion fatigue five years after Hurricane Katrina and the type of mental health care strategy utilized? Descriptive statistics such as frequency distributions, percentages, means, standard deviations, and minimum and maximum values were utilized to determine what type of mental health care strategies were used by individuals who no longer showed high levels of compassion fatigue five years after Hurricane Katrina.

Research Question 5: What are the prevalence and frequency of non-clinical self-care activities (prayer, meditation, exercise, yoga, engaging in pleasurable activities, massage, time spent alone, or time spent with friends or family) utilized by Gulf Coast Licensed Professional Counselors with vicarious traumatization who provided counseling services to Hurricane Katrina survivors who no longer showed symptoms of high level compassion fatigue five years after Hurricane Katrina? Descriptive statistics such as frequency distributions and percentages were used to determine which individuals who no longer showed high levels of compassion fatigue five years after Hurricane Katrina engaged in non-clinical self-care activities, which types of non-clinical self-care activities were engaged in and how often.

CHAPTER FOUR

Results

The purpose of this study was to examine the efficacy of self-care and traditional clinical mental health counseling for Gulf Coast Licensed Professional Counselors who experienced vicarious traumatization working with Hurricane Katrina survivors. Additionally, the study examined the relationship between symptoms of compassion fatigue experienced by those who received traditional counseling and those who practiced self-care.

In this chapter, the relationship between compassion fatigue and the use of these mental health care strategies, as well as demographic variables such as age, gender, ethnicity, years of experience, caseload, prior trauma, and personal losses related to Hurricane Katrina are reported. This chapter concludes with the restatement of the research questions, the statistical procedures used and presentation of the obtained results, and the results to the open-ended comment questions.

Research Questions and Results

Three instruments were used in this survey. The first was a researcher-developed demographic survey. Both the second instrument, the *PTSD Checklist – Civilian Version* (Weathers, Litz, Huska, & Keane, 1994) and the third instrument, *The Compassion Fatigue and Satisfaction Self-Test for Helpers* (Figley & Stamm, 1996) are brief, self-report Likert scales.

The general research question for this study was: What is the relationship between compassion fatigue and self-care practiced and clinical mental health services received by Gulf Coast Licensed Professional Counselors who provided counseling services to Hurricane Katrina survivors?

Research Question 1 asked: What is the prevalence of vicarious traumatization as measured by *The PTSD Checklist-Civilian Version (PCL-C)* and compassion fatigue as measured by *The Compassion Fatigue and Satisfaction Self-Test for Helpers (CFS)* in this sample?

Table 12: Mean and Score Distribution of Total Sample on Dependent Variables PCL-C and CFS

Level of Compassion Fatigue	Mean	SD	Min	Max	Low (%)	High (%)
PCL-C Score	27.87	12.95	17	85	67.9	32.1
CFS Score	13.97	12.2	0	69	94.9	5.1

The PTSD Checklist-Civilian Version (PCL-C) (Weathers, Litz, Huska, & Keane, 1994) was utilized to evaluate Gulf Coast Licensed Professional Counselors for vicarious traumatization one year after Hurricane Katrina. The possible scores on this instrument range from 17 to 85. A total score of 30 or above on the *PCL-C* is required to meet criteria for PTSD. Because participants were asked to respond to the *PCL-C* based upon their experiences counseling Hurricane Katrina survivors within the first year of the storm, the PTSD symptoms would fall within the category of vicarious traumatization. A total of 32.1% of respondents

scored 30 or above; thus, they met criteria for vicarious traumatization. The mean score was 27.87, with a standard deviation of 12.95. The minimum score was 17 and the maximum score was 85 among the survey sample.

The same Gulf Coast Licensed Professional Counselors were evaluated for current compassion fatigue symptoms (5 years after Hurricane Katrina) using the *Compassion Fatigue Subscale* from the *Compassion Fatigue and Satisfaction Self-Test for Helpers (CFS)* (Figley & Stamm, 1996). The table below presents the scoring guide for Compassion Fatigue Risk scores.

Table 13: *Compassion Fatigue Risk Score Guide*

Compassion Fatigue Risk Score Guide	
0-26	Extremely Low Risk
27-30	Low Risk
31-35	Moderate Risk
36-40	High Risk
41 and over	Extremely High Risk

A score of 36-40 indicates high risk for compassion fatigue and a score of 41 and above indicates an extremely high risk for compassion fatigue. When the participants were evaluated based on their symptoms 5 years after Hurricane Katrina, 5.1% scored 36 or above on the *CFS* which indicates high or extremely high risk for compassion fatigue. The mean score was 13.97, which falls in the extremely low risk category. The standard deviation was 12.21. There was a minimum score of zero and maximum score of 69 among the survey sample.

Table 14: *Frequency Distribution of Participants with Low Level of Compassion Fatigue*

Low Level Compassion Fatigue Score	<i>n</i>	%	Mean	SD	Min	Max
Did not meet Criteria for PTSD (PCL-C<30)	298	67.9	20.46	3.72	17	29
Extremely Low/Low/Moderate Compassion Fatigue Risk (CFS<36)	425	94.9	12.17	9.44	0	35

A total of 439 participants responded to the *PTSD Checklist-Civilian Version (PCL-C)* and 448 responded to the *Compassion Fatigue Subscale* from the *Compassion Fatigue and Satisfaction Self-Test for Helpers (CFS)*. Of the 439 respondents to the *PCL-C*, 298 did not meet criteria for vicarious traumatization. By contrast, 425 of 448 respondents did not meet criteria for high levels of compassion fatigue on the *Compassion Fatigue Subscale* from the *Compassion Fatigue and Satisfaction Self-Test for Helpers (CFS)*. Finally, 293 individuals did not meet criteria on either instrument. Of those who did not meet criteria on the *PCL-C*, the mean score was 20.46 with a standard deviation of 3.72, and of those who did not meet criteria on the *CFS*; the mean score was 12.17 with a standard deviation of 9.44.

Table 15: *Frequency Distribution of Participants by High Level Compassion Fatigue*

High Level Compassion Fatigue Score	<i>n</i>	%	Mean	SD	Min	Max
Met Criteria for VT (PCL-C \geq 30)	141	32.1	43.52	11.5	30	85
High/Extremely High Compassion Fatigue Risk (CFS \geq 36)	23	5.1	47.26	9.35	36	69

Of the 439 participants who responded to the *PCL-C*, 141 had a total score of 30 or above. A participant is considered to meet criteria for vicarious traumatization with a total score of 30 or higher. The mean score of those participants was 43.52 with a standard deviation of 11.5. Of those who had a total score of 30 or above on the *PCL-C*, 17.7% were male respondents and 82.3% were female respondents, which is very similar to the male/female ratio of survey sample (80.20% female and 19.80% male). The majority of participants who met criteria for high levels of compassion fatigue was White/Caucasian and were between the ages of 41-60 years old. Approximately 50% had a personal history of trauma, and approximately 38% had personally experienced some type of Katrina-related loss, as compared to the entire survey sample of whom 34.9% had a personal history of trauma, and 21.5% had personally experienced some type of Katrina-related loss. More than 50% of respondents who met criteria for vicarious traumatization spent 20% or less of their work week counseling Hurricane Katrina survivors within the first year, and more than 40% had between 11-20 years of counseling experience. Approximately 80% of those who met criteria for vicarious traumatization had 20 years of counseling experience or less. The frequency distributions of participants with high levels of compassion fatigue as per the *PCL-C* by years of counseling experience and by case load appear below in Tables 16 and 17.

Table 16: *Frequency Distribution of High Level Compassion Fatigue Participants (PCL-C \geq 30) by Years of Experience*

Years of Experience	<i>n</i>	%
0-10	42	29.79
11-20	58	41.13
21-30	28	19.86
31-40	10	7.09
41-50	3	2.13

Table 17: *Frequency Distribution of Participants by Case Load Who Met Criteria for VT*

Percentage of Work Week	<i>n</i>	%
< 1 %	26	0.18
1% - 10%	27	0.19
11% - 20%	19	0.13
21% - 30%	19	0.13
31% - 40%	13	0.09
41% - 50%	7	0.05
51% - 60%	7	0.05
61% - 70%	3	0.02
71% - 80%	3	0.02
81% - 90%	7	0.05
91% - 100%	10	0.07
Total	141	1.00

A total of 23 participants had a total score of 36 or above on the *CFS*, the minimum score required to be considered to be at “high risk for compassion fatigue.” A score of 41 or higher is considered to be “extremely high risk.” The mean score of those 23 participants was 47.26 with a standard deviation of 9.35. Of those who had a total score of 36 or above on the *CFS*, 21.7%

were male respondents and 78.3% were female respondents. This is roughly the same as the overall survey sample, which was 80.20% female and 19.80% male. The majority of those who were considered to be at high or extremely high risk for compassion fatigue were White/Caucasian and were between the ages of 31-50 years old which can be seen in the tables below.

Table 18: *Frequency Distribution of Participants with High Levels of Compassion Fatigue by Ethnicity*

Ethnicity	<i>n</i>	%
Black/African American	1	0.04
White/Caucasian	22	0.96
Total	23	1.00

Table 19: *Frequency Distribution of Participants with High Levels of Compassion Fatigue by Age*

Age	<i>n</i>	%
21-30	1	0.04
31-40	6	0.26
41-50	10	0.43
51-60	4	0.17
61-70	2	0.09
71-80	0	0.00
81-90	0	0.00
Total	23	1.00

Approximately 70% had a personal history of trauma, and approximately 44% had personally experienced some type of Katrina-related loss, as compared to the entire survey

sample in which 34.9% had a personal history of trauma, and 21.5% had personally experienced some type of Katrina-related loss. More than 65% of respondents who scored high or extremely high for compassion fatigue risk spent 20% or less of their work week counseling Hurricane Katrina survivors within the first year, and approximately 39% had between 0-10 years of counseling experience which was nearly the same as the whole survey sample in which 38.7% of the survey sample had 0-10 years of counseling experience. More than 90% of those who met criteria for high or extremely high compassion fatigue risk had 20 years of counseling experience or less. The frequency distributions of participants with high levels of compassion fatigue as per the *CFS* by years of counseling experience and by case load appear below in Tables 20 and 21.

Table 20: *Frequency Distribution of High Level Compassion Fatigue Participants (CFS \geq 36) by Years of Experience*

Years of Experience	<i>n</i>	%
0-10	9	39.13
11-20	12	52.17
21-30	1	4.35
31-40	1	4.35
41-50	0	0.00

Table 21: *Frequency Distribution of Participants by Case Load Who Had High Levels of CF*

Percentage of Work Week	<i>n</i>	%
< 1 %	2	0.01
1% - 10%	4	0.03
11% - 20%	4	0.03
21% - 30%	5	0.04
31% - 40%	1	0.01
41% - 50%	0	0.00
51% - 60%	2	0.01
61% - 70%	0	0.00
71% - 80%	1	0.01
81% - 90%	2	0.01
91% - 100%	2	0.01
Total	23	0.16

Research Question 2 asked: What is the relationship between the level of compassion fatigue and the type of mental health care strategy used by Gulf Coast Licensed Professional Counselors who provided counseling services to Hurricane Katrina survivors in the aftermath of Hurricane Katrina?

The mental health care strategies examined in this study were traditional clinical psychotherapy (individual, group, couples or family) and non-clinical self-care (prayer, meditation, exercise, yoga, engaging in pleasurable activities, massage, time spent alone, and time spent with friends or family). A Pearson correlation analysis was computed to measure this relationship.

Table 22: *Pearson Correlations for Independent and Dependent Variables*

	<i>CFS</i>	<i>Traditional Mental Health Counseling</i>	<i>Non-Clinical Self-Care</i>
<i>CFS</i>	1	-.228**	-.219**
<i>Traditional Mental Health Counseling</i>	-.228**	1	.152**
<i>Non-Clinical Self-Care</i>	-.219**	.152**	1

***. Correlation is significant at the 0.01 level (2-tailed).*

Of the participants, 105 individuals participated in traditional mental health counseling and 420 participated in non-clinical self-care. Considerably more individuals participated in non-clinical self-care than in traditional mental health counseling. The mean *CFS* score was 13.97 (extremely low risk for compassion fatigue) with a standard deviation of 12.20.

The Pearson’s *r* correlation between individuals who sought and participated in traditional mental health counseling and *CFS* scores is -0.228, which indicates that the two variables are negatively correlated. The magnitude of the *r* indicates that although *CFS* scores and individuals who participated in traditional mental health counseling have a negatively correlated relationship, the relationship between the two variables is weak. The alpha level is .000 which shows that there is a significant relationship between those who seek and participate in traditional mental health counseling and *CFS* Scores. This negative correlation shows that participation in traditional mental health counseling is associated with lower *CFS* scores, which indicate a lower risk for compassion fatigue.

The Pearson’s *r* correlation between individuals who participated in non-clinical self-care activities and *CFS* is -0.219, which indicates that the two variables are negatively

correlated. The magnitude of the r indicates a weak relationship between the two variables. The alpha level is .000 which shows that there is a significant relationship between participation in non-clinical self-care activities and *CFS* Scores. This negative correlation means that participation in non-clinical self-care is associated with lower *CFS* scores, which indicates a lower risk for compassion fatigue. Although both relationships are weak, the relationship between individuals who participated in traditional mental health care and *CFS* scores is stronger than the relationship between individuals who participated in non-clinical self-care activities and *CFS* scores. This means that participation in traditional mental health counseling is more strongly associated with lower *CFS* scores than non-clinical self-care.

Research Question 3 asked: What is the relationship between the level of compassion fatigue and the variables that are considered to be risk factors associated with greater vulnerability to high levels of compassion fatigue: younger age, fewer years of experience, female gender, recent experience of personal stressful life events (Katrina-related losses) and exposure to prior trauma?

Pearson's correlation coefficient was utilized to examine the relationships between the risk factors of younger age and fewer years of experience, and the dependent variable, vicarious traumatization, as measured by the *PCL-C* Scores. Table 23 below displays the results of the Pearson correlation analyses of age, years of experience, and *PCL-C* Scores.

Table 23: *Pearson Correlations for Variables Age and Years of Experience and Dependent Variable Vicarious Traumatization as Measured by the PCL-C*

	PCL-C	Age	Years of Experience
PCL-C	1	-0.05	0.032
Age	-0.05	1	.656**
Years of Experience	0.032	.656**	1

** . Correlation is significant at the 0.01 level (2-tailed).

The mean age of respondents was approximately 49 years old with a standard deviation of 11.87, and the mean number of years of experience counseling was 14.55 years with a standard deviation of 9.87. The mean *PCL-C* score was 27.87 (did not meet criteria for vicarious traumatization) with a standard deviation of 12.95.

The Pearson's *r* correlation coefficient between Age and *PCL-C* scores is -0.050, which indicates that the two variables have a negative correlation. The magnitude of the *r* indicates a weak relationship between the two variables. The alpha level is .298 which shows that the relationship between Age and *PCL-C* scores is not significant. In other words, younger participants did not have significantly higher *PCL-C* scores.

The Pearson's *r* correlation coefficient between Years of Experience and *PCL-C* scores is 0.032, which indicates that the two variables have a positive correlation. The magnitude of the *r* indicates a weak relationship between the two variables. The alpha level is .509 which shows that the relationship between Years of Experience and *PCL-C* score is not significant. These results indicate that participants with more years of counseling experience did not have significantly higher *PCL-C* scores.

The Independent Samples T-Test was utilized in order to examine the relationships between the risk factors female gender, exposure to prior trauma, and recent experience of personal stressful life events (Katrina-related losses) and vicarious traumatization as measured by *PCL-C* Scores. The table below displays the results of the T-test analysis of gender and *PCL-C* Scores.

Table 24: Comparison of Mean *PCL-C* Score by Gender

Independent Samples T-Test (Gender)										
		Levene's Test for Equality of Variances	t-test for Equality of Means							
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
PCL-C Score	Equal variances assumed	0.470	0.493	-1.334	437	0.183	-2.02509	1.51825	-5.00908	0.95890
	Equal variances not assumed			-1.334	143.069	0.184	-2.02509	1.51775	-5.02520	0.97502

The Independent Samples T-Test compares the mean scores of two groups on a given variable. This test was used to compare the mean *PCL-C* scores of males and females. The mean *PCL-C* score for males was 26.27, which indicates that the criterion for vicarious traumatization was not met, with a standard deviation of 12.94. The mean score for women was slightly higher, 28.29, but also indicates the criterion for vicarious traumatization was not met, with a standard deviation of 12.94.

The Levene's Test determines the relationship between the variances of the two groups. Due to the fact that the alpha level was 0.493, the Levene's Test was not significant and

indicates that the two variances are not significantly different. This means that the variances in *PCL-C* scores for men and women are assumed to be equal. The *t* value for men and women was -1.334 and the degrees of freedom were 437. The alpha level was 0.183. Thus, no significant difference was found between the mean scores of men and women.

Table 25: Comparison of Mean *PCL-C* Score by Exposure to Prior Trauma

Independent Samples T-test (Exposure to Prior Trauma)										
		Levene's Test for Equality of Variances	t-test for Equality of Means							
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
PCL-C Score	Equal variances assumed	23.619	0	4.674	437	0	5.86083	1.25388	3.39644	8.32522
	Equal variances not assumed			4.319	261.766	0	5.86083	1.35693	3.18895	8.53271

Table 25 above displays the results of the Independent Samples T-Test. This test was used to compare the *PCL-C* scores of individuals who had a history of prior trauma and those who did not. The mean *PCL-C* score for those individuals who had a history of prior trauma was 31.58, which indicates the criterion was met for vicarious traumatization, with a standard deviation of 15.01. The mean score for those individuals who did not have history of prior trauma was lower, 25.72, which indicates the criterion was not met for vicarious traumatization, with a standard deviation of 11.07.

The Levene's Test determines the relationship between the variances of the two groups. The alpha level was 0.00, which shows that the Levene's Test was significant. This

indicates that the two variances are significantly different; the variances in *PCL-C* scores for those who had history of prior trauma and those did not have a history of prior trauma are not equal. The *t* value for individuals who had history of prior trauma and those who did not was 4.319 and the degrees of freedom were 261.766. Due to the fact that the alpha level was 0.00, it was determined that there was a significant difference between the mean scores of those who had history of prior trauma and those did not.

Table 26: Comparison of Mean *PCL-C* Score by Katrina-Related Losses

Independent Samples T-Test (Katrina-related Losses)										
		Levene's Test for Equality of Variances	t-test for Equality of Means							
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
PCL-C Score	Equal variances assumed	7.711	0.006	5.725	437	0	7.84273	1.36993	5.15025	10.53520
	Equal variances not assumed			5.136	162.269	0	7.84273	1.52696	4.82745	10.85801

Table 26 above displays the results of the Independent Samples T-Test that was used to compare the mean *PCL-C* scores of individuals who had personally experienced Katrina-related losses and those who had not. As shown above, the mean *PCL-C* scores for those individuals who had personally experienced Katrina-related losses was 33.71, which indicates that the criterion was met for vicarious traumatization, with a standard deviation of 14.63. The

mean score for those individuals who did not experience any Katrina-related losses was lower, 25.87, which indicates the criterion was not met for VT, with a standard deviation of 11.70.

The Levene's Test determines the relationship between the variances of the two groups. The alpha level was 0.006, which shows that the Levene's Test was significant. This indicates that the two variances are significantly different, which means that the variances in *PCL-C* scores for those individuals who experienced Katrina-related losses and those who did not experience Katrina-related losses are not equal. The t value for those who experienced Katrina-related losses and those who did not was 5.136 and the degrees of freedom were 162.269. There is a significant difference in the mean *PCL-C* scores between those who experienced Katrina-related losses and those who did not because the alpha level was 0.00. In other words, the variances between the *PCL-C* scores of individuals who experienced Katrina-related losses and those who did not are not equal, and there was a statistically significant difference in the mean scores on the *PCL-C* for the two groups. Therefore, the findings show that individuals who did experience Katrina-related losses were more likely to meet criteria for vicarious traumatization than those individuals who did not experience any Katrina-related losses.

Research Question 4 asked: What is the association between Gulf Coast Licensed Professional Counselors with vicarious traumatization who provided counseling services to Hurricane Katrina survivors within the first year of Hurricane Katrina who no longer showed symptoms of high level compassion fatigue five years after Hurricane Katrina and the type of mental health care strategy utilized?

A total of 141 Gulf Coast Licensed Professional Counselor participants scored 30 or above on the *PTSD Checklist-Civilian Version (PCL-C)* and were considered to meet criteria for vicarious traumatization. When results were scored from five years after Hurricane Katrina, 113 of those participants scored below 36 on the *Compassion Fatigue Subscale* from the *Compassion Fatigue and Satisfaction Self-Test for Helpers (CFS)* and were no longer considered to have high levels of compassion fatigue. Those who received a high level score within the first year after Hurricane Katrina made landfall and did not receive a high level score five years later are considered to be individuals who have improved.

Table 27: *Frequency, Mean and Score Distribution of Improved Participants*

Improved Participants	<i>n</i>	%	Mean	SD	Min	Max
PCL-C Score ≥ 30 & CFS Score < 36	113	80.14	19.93	8.73	0	35

In self-report from symptoms within the first year of counseling Hurricane Katrina survivors, 141 participants scored a 30 or above on the *PCL-C* indicating that they met criteria for vicarious traumatization. When participants reported their current symptoms, 80.14% no longer showed signs of high level compassion fatigue. The mean score of these improved individuals was 19.93 indicating extremely low compassion fatigue risk, with a standard deviation of 8.73.

Table 28: *Frequency Distribution of Improved Participants by Type of Care*

Type of Care	<i>n</i>	%
Traditional Mental Health Counseling	3	2.65
Non-Clinical Self-Care	74	65.49
Both	25	22.12
None	11	9.73
Total	113	100.00

Non-clinical self-care was engaged in by 65.49% of respondents who originally met criteria for vicarious traumatization and no longer showed indications of high level compassion fatigue five years later. A smaller percentage, 22.12%, of respondents whose symptoms improved participated in both traditional mental health counseling and non-clinical self-care. Very few participants (2.65%) participated solely in traditional mental health counseling.

Research Question 5 asked: What is the prevalence and frequency of non-clinical self-care activities (prayer, meditation, exercise, yoga, engaging in pleasurable activities, massage, time spent alone, or time spent with friends or family) utilized by Gulf Coast Licensed Professional Counselors with vicarious traumatization who provided counseling to Hurricane Katrina survivors in the aftermath of Hurricane Katrina who no longer showed symptoms of high level compassion fatigue five years after Hurricane Katrina?

When the Gulf Coast Licensed Counselor participants reported their current symptoms (five years after Hurricane Katrina), 113 participants who had originally met criteria for

vicarious traumatization no longer were at high risk for compassion fatigue. Of these participants who improved, 87.61% had engaged in non-clinical self-care activities.

Table 29: Frequency Distribution of Improved Participants by Non-Clinical Self-Care

Type of Care	<i>n</i>	%
Yes	99	87.61
No	14	12.39
Total	113	100.00

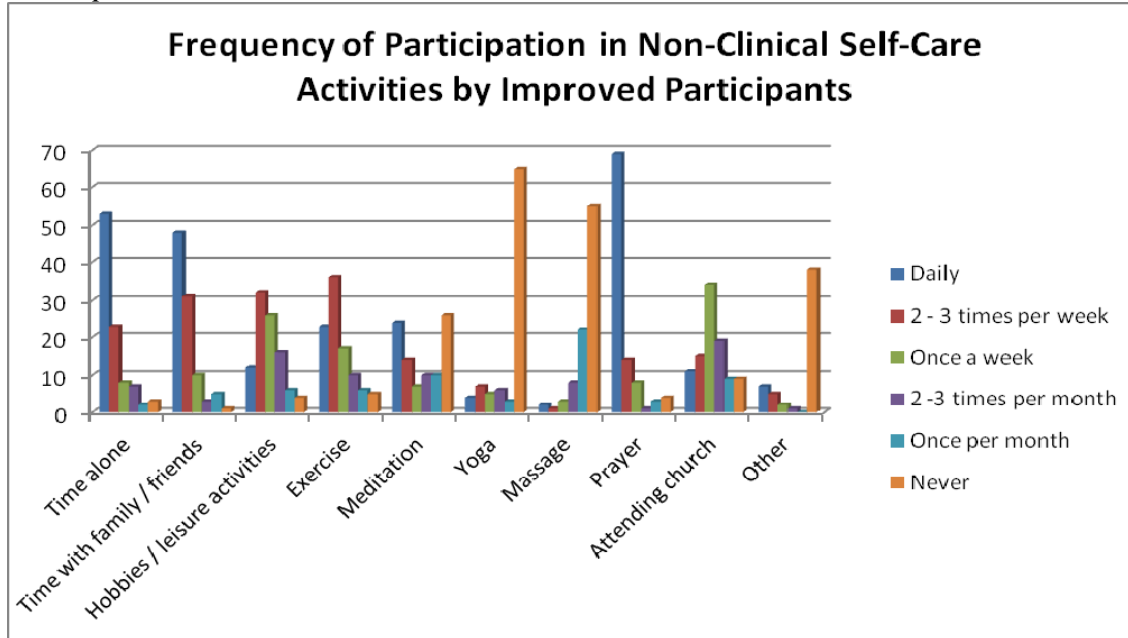
The non-clinical self-care activities included in the study were: time spent alone, time with friends/family, engaging in hobbies/leisure activities, exercise, meditation, yoga, massage, prayer, attending church, and other activities. The participation in these activities was fairly evenly distributed with other activities being significantly less often reported. Prayer was the activity used by the most participants, followed by time with family/friends, exercise, and attending church. Approximately 80% of the participants who improved engaged in all the non-clinical self-care activities listed except “other.”

Table 30: *Frequency Distribution of Improved Participants by Type of Non-Clinical Self-Care Activity*

Type of Non-Clinical Self-Care Activity	<i>n</i>	%
Time alone	96	84.96
Time with family / friends	98	86.73
Engaging in hobbies / leisure activities	96	84.96
Exercise	97	85.84
Meditation	91	80.53
Yoga	90	79.65
Massage	91	80.53
Prayer	99	87.61
Attending church	97	85.84
Other	53	46.90

The column chart below displays the frequency with which those participants who originally met criteria for vicarious traumatization were no longer were symptomatic five years later engaged in each non-clinical self-care activity. Prayer, time alone, and time with family/friends were most often engaged in daily. Most participants indicated that yoga, massage, and other activities were never used.

Table 31: *Frequency of Participation in Non-Clinical Self-Care Activities by Improved Participants*



Results of the Open-Ended Comment Questions

This study included four open-ended comment questions which asked participants to provide their own answers. These questions were asked to gather more in-depth information regarding participants’ personal experiences with Katrina-related losses, types of traditional mental health counseling used other than those listed on the survey, and types of non-clinical self-care activities that were engaged in other than those listed on the survey. At the end of the survey, participants were asked “Is there any additional information you would like to add about your experience?” to allow them the opportunity to provide any other information regarding their

personal experience that they considered to be relevant to the study. The following open-ended questions were asked:

The first open-ended question asked, *What type of Katrina-related loss/es did you experience?*

Of the 609 Gulf Coast Licensed Professional Counselors who participated in this survey, approximately 4.3% (26 individuals) responded to this question. Of these individuals who provided a response to some other type of Katrina-related loss not explicitly listed on the survey, approximately 27% (7 individuals) reported loss of home. Several participants also listed loss having to do with personal or family displacement. Some examples of quotes from individual participants are provided below in Table 32.

Table 32: *Open-Ended Question: What type of Katrina-related loss/es did you experience?*

Selected Supporting Quotes
<i>"Had had 2 or 3 friends that were made homeless by Katrina. I directly counseled students that came to the public schools in the State of Texas. Very bad stories of horror inside that "Coliseum", rape, drugs, murders etc. and these kids heard and saw everything! Shame on America and FEMA for allowing children, the aged and women suffer to that extreme."</i>
<i>"Family that lost house, community"</i>
<i>"Relocation instability"</i>
<i>"Concern for family members and providing shelter for many of them."</i>
<i>"Had to move out of state for employment"</i>
<i>"Taking in people, one permanently. Lots of time helping do clean-up in NO, volunteering with my church. It was exhausting."</i>

The second open-ended question asked, *Did you seek and participate in traditional mental health counseling for yourself? If so, what kind?*

Of the 609 Gulf Coast Licensed Professional Counselors who participated in this survey, only 3 provided responses for this question. The three responses to other types of traditional mental health counseling that were utilized were: “Pharmacological,” “Weekly consultation with other therapists,” and “Loss.”

The third open-ended question asked, *Did you participate in other non-clinical self-care activities? What forms?*

Seventy-nine (79) of the 609 participants provided relevant responses (not including responses such as “none”, “no”, N/A”, or “I’m not aware of any others”) to the question regarding other types of non-clinical self-care activities engaged in. Several recurring responses included peer and colleague support and/or communication, reading, journaling, other religious activities, and time with pets. Examples of a few of participants’ responses are shown below in Table 33.

Table 33: *Open-Ended Question: Did you participate in non-clinical self-care activities? What forms?*

Selected Supporting Quotes
"Comfort reading"
"Journaling"
"Talking with coworkers"
"Bible study, Christian music"
"Peer to Peer support"
"Self-help books"
"Caring for animals"

The final open-ended question asked, *Is there any additional information you would like to add about your experience?*

Approximately 15% (N=93) of the total 609 participants provided a relevant response to this question. A wide variety of responses were collected regarding personal experiences of counselors, perceptions of Katrina victims, other activities engaged in to cope with stress or grief, experiences with other hurricanes such as Rita and Ike, and other responses. Examples of comments follow.

Table 34: *Open-Ended Question: Is there any additional information you would like to add about your experience?*

Selected Supporting Quotes
<i>"I recognized the symptoms of secondary trauma on the 14th day and called a well-trained clinician who I know well to come to my house and provide assistance. She spent a couple of hours with me and she provided CISD and made a plan for me to take off work for a week. 2 weeks later our town was hit by Hurricane Rita and my office was destroyed."</i>
<i>"I found that since I was daily counseling others about Katrina, I had a delayed grief response. It was hard to process my own feelings...4 years after the storm; I finally fully processed my grief."</i>
<i>"It took me about three years to mentally come out of the Katrina fog. I had to hit the ground running helping others in spite of my trauma and loss."</i>
<i>"It was difficult to engage fully with clients when I was re-experiencing trauma myself"</i>
<i>"I knew people affected by Katrina but they kept away due to the mental health labeling."</i>
<i>"My personal experience involved my brother being killed by Katrina evacuees moved into Shreveport from New Orleans."</i>
<i>"Peer to peer support was also very valuable."</i>
<i>"The descriptions from the clients were the hardest. Helping them overcome their negative experiences, and look into a healthier future assisted me in the recovery from the secondary trauma."</i>
<i>"The communing with God and others about faith in God was a tremendous personal help."</i>
<i>"I noticed how the Katrina victims had faith, hope, and sense of family. As each individual told his or her story, I was aware of the faith, hope, and sense of family."</i>
<i>"The majority of clients served had lied about their experiences. They were lazy, unappreciative and took everything they could get from their hosts with frequent complaining."</i>

Summary

The population of interest consisted of 9,000 Gulf Coast Licensed Professional Counselors. Surveys or some portion of surveys were returned by 609 participants. In the researcher-developed demographic survey, 586 individuals responded to the questions regarding age, gender, ethnicity, and years of counseling experience; 585 individuals responded to questions about exposure to prior trauma, and personal Katrina-related losses; 578 individuals responded to the question about the percentage of their work week that was spent counseling Hurricane Katrina victims, and 579 individuals responded to questions regarding the type of mental health care strategy they participated in. There were 439 usable surveys for the *PTSD Checklist – Civilian Version* (Weathers, Litz, Huska, & Keane, 1994) and 448 for *Compassion Fatigue Subscale* of *The Compassion Fatigue and Satisfaction Self-Test for Helpers* (Figley & Stamm, 1996).

The PTSD Checklist-Civilian Version (PCL-C) (Weathers, Litz, Huska, & Keane, 1994) was utilized to evaluate Gulf Coast Licensed Professional Counselors for vicarious traumatization within the first year of working with Hurricane Katrina survivors. A total score of 30 or above on the *PCL-C* is required to meet criteria for PTSD. A total of 32.1% of respondents (141 individuals) scored 30 or above; thus, they met criteria for vicarious traumatization. The same Gulf Coast Licensed Professional Counselors were evaluated for current compassion fatigue symptoms (5 years after Hurricane Katrina) using the *Compassion Fatigue Subscale* from the *Compassion Fatigue and Satisfaction Self-Test for Helpers (CFS)* (Figley & Stamm, 1996). A score of 36-40 indicates high risk for compassion fatigue and a score of 41 and above indicates

an extremely high risk for compassion fatigue. When the participants were evaluated based on their symptoms 5 years after Hurricane Katrina, 5.1% scored 36 or above on the *CFS* which indicates high or extremely high risk for compassion fatigue.

The mental health care strategies examined in this study were traditional clinical psychotherapy (individual, group, couples or family) and non-clinical self-care (prayer, meditation, exercise, yoga, engaging in pleasurable activities, massage, time spent alone, and time spent with friends or family). The relationship between these types of mental health care and *CFS* scores were examined, and the results indicated that participation in traditional mental health counseling is associated with lower *CFS* scores, which indicate a lower risk for compassion fatigue, and participation in non-clinical self-care is also associated with lower *CFS* scores, which indicates a lower risk for compassion fatigue; however, participation in traditional mental health counseling is more strongly associated with lower *CFS* scores than non-clinical self-care.

Certain risk factors and their relationship with *PCL-C* scores were also examined. The results determined that younger participants did not have significantly higher *PCL-C* scores, and participants with more years of counseling experience did not have significantly higher *PCL-C* scores. There was no significant difference was found between the mean scores of men and women, and the variances in *PCL-C* scores for men and women are assumed to be equal. It was determined that the variances in *PCL-C* scores for those who had history of prior trauma and those did not have a history of prior trauma are not equal, and there was a significant difference between the mean scores of those who had history of prior trauma and those did not. Finally,

the results demonstrated that the variances between the *PCL-C* scores of individuals who experienced Katrina-related losses and those who did not are not equal, and there was a statistically significant difference in the mean scores on the *PCL-C* for the two groups.

The types of health care strategies utilized by individuals who no longer showed symptoms of high level compassion fatigue five years after Hurricane Katrina, but who had originally met criteria for vicarious traumatization after providing counseling services to Hurricane Katrina survivors within the first year of Hurricane Katrina were examined. A total of 141 Gulf Coast Licensed Professional Counselor participants scored 30 or above on the *PTSD Checklist-Civilian Version (PCL-C)* (Weathers, Litz, Huska, & Keane, 1994) and were considered to meet criteria for vicarious traumatization. When results were scored from five years after Hurricane Katrina, 113 of those participants scored below 36 on the *Compassion Fatigue Subscale* from the *Compassion Fatigue and Satisfaction Self-Test for Helpers (CFS)* (Figley & Stamm, 1996) and were no longer considered to have high levels of compassion fatigue. Non-clinical self-care was engaged in by 65.49% of respondents who had originally met criteria for vicarious traumatization and no longer showed indications of high level compassion fatigue five years later, 22.12%, of respondents whose symptoms improved participated in both traditional mental health counseling and non-clinical self-care, and only 2.65% participated solely in traditional mental health counseling.

The research then focused on non-clinical self-care activities (prayer, meditation, exercise, yoga, engaging in pleasurable activities, massage, time spent alone, or time spent with friends or family) utilized by Gulf Coast Licensed Professional Counselors with vicarious

traumatization who provided counseling to Hurricane Katrina survivors in the aftermath of Hurricane Katrina who no longer showed symptoms of high level compassion fatigue five years after Hurricane Katrina. Of the 113 participants who improved, 87.61% had engaged in non-clinical self-care activities. The participation in these activities was fairly evenly distributed with other activities being significantly less. Prayer was the activity used by the most participants, followed by time with family/friends, exercise, and attending church.

CHAPTER FIVE

Discussion

In Chapter Five, the purpose of the study is restated, and findings are discussed. Limitations of the study are identified. Implications for counselors, counselor educators, and agency administrators, as well as recommendations for further research are offered.

Purpose of Study

This study surveyed Gulf Coast Licensed Professional Counselors who had worked with Hurricane Katrina survivors with the purpose of investigating the relationship between symptoms of compassion fatigue and vicarious traumatization and the type of mental health care strategy utilized, as well as demographic variables including age, gender, caseload, years of experience, exposure to prior trauma, and experience of personal Katrina related losses. In this study, vicarious traumatization was measured using the *PTSD Checklist-Civilian Version* (Weathers, Litz, Huska, & Keane, 1994) and the *Compassion Fatigue Subscale* of the *Compassion Fatigue and Satisfaction Self-Test for Helpers* (Figley & Stamm, 1996) assessed the level of risk for compassion fatigue. A baseline measure of vicarious traumatization within one year after beginning to work with Hurricane Katrina survivors was obtained utilizing the *PTSD Checklist-Civilian Version* (Weathers, Litz, Huska, & Keane, 1994). The *Compassion Fatigue Subscale* of the *Compassion Fatigue and Satisfaction Self-Test for Helpers* (Figley & Stamm, 1996) was used as an outcome measure of the participants' current level of compassion fatigue five years after working with Hurricane Katrina survivors.

This research was conducted to determine the prevalence of vicarious traumatization in Gulf Coast Licensed Professional Counselors who worked with Hurricane Katrina survivors as measured by the *PTSD Checklist-Civilian Version* (Weathers, Litz, Huska, & Keane, 1994) and the current level of compassion fatigue as measured by the *Compassion Fatigue Subscale* of the *Compassion Fatigue and Satisfaction Self-Test for Helpers* (Figley & Stamm, 1996) as well as the relationship between type of mental health strategy (traditional mental health counseling or non-clinical self-care) and the level of compassion fatigue. Additionally, the relationship was examined between certain demographic and psychographic variables considered to be risk factors for individual Gulf Coast Licensed Professional Counselors and their levels of compassion fatigue.

Discussion of Findings

Research Question 1

Research Question 1 examined the prevalence of vicarious traumatization as measured by *The PTSD Checklist-Civilian Version (PCL-C)* and *The Compassion Fatigue and Satisfaction Self-Test for Helpers (CFS)* in this sample of Licensed Professional Counselors in the Gulf Coast region who counseled survivors of Hurricane Katrina.

The findings indicate that the majority of Gulf Coast Licensed Professional Counselor participants (n=293) did not meet criteria for vicarious traumatization as measured by the *PTSD Checklist-Civilian Version* (Weathers, Litz, Huska, & Keane, 1994) within one year after beginning to work with Hurricane Katrina survivors, nor were they determined to be at high risk

for compassion fatigue as measured by the *Compassion Fatigue Subscale* of the *Compassion Fatigue and Satisfaction Self-Test for Helpers* (Figley & Stamm, 1996) five years after working with Hurricane Katrina survivors. However, a substantial minority, 32.1% of the survey sample (n=141), met criteria for vicarious traumatization as per the *PCL-C* within one year after beginning to work with Hurricane Katrina survivors, whereas only 5.1% of the survey sample (n=23) indicated having a high level of compassion fatigue on the CFS five years after working with Hurricane Katrina survivors.

A total of 439 participants responded to the *PTSD Checklist-Civilian Version (PCL-C)* which measured criteria for vicarious traumatization after working with Hurricane Katrina survivors within the first year, and 448 responded to the *Compassion Fatigue Subscale* from the *Compassion Fatigue and Satisfaction Self-Test for Helpers (CFS)* which measured current compassion fatigue symptoms five years after working with Hurricane Katrina survivors. Although the majority of respondents (n=293) did not meet criteria for vicarious traumatization or compassion fatigue on either instrument, the findings indicated that 32.1% (n=105) of the Gulf Coast Licensed Professional Counselors who worked with Hurricane Katrina survivors and who participated in this study met criteria for vicarious traumatization as measured by the *PTSD Checklist-Civilian Version* (Weathers, Litz, Huska, & Keane, 1994) within one year after beginning to work with Hurricane Katrina survivors.

No previous research studies have measured the prevalence of vicarious traumatization within one year of Hurricane Katrina among this population of Gulf Coast Licensed Professional Counselors. However, researchers have estimated the prevalence of clinically significant mental

health needs and have studied the occurrence of posttraumatic stress (PTS) symptoms in the general population of individuals affected by Hurricane Katrina. The prevalence rate of vicarious traumatization and PTS among counselors in this study is similar to the estimated prevalence rate suggested by the federal Substance Abuse and Mental Health Services Administration (SAMHSA) - that between 25% and 30% of the population affected by Hurricane Katrina would have clinically significant mental health needs (Knapp, 2007). The 32.1% prevalence rate among counselors in this study is lower than that found by Sprang and LaJoie (2009) in their sample population of primarily female, African-American, middle-aged Hurricane Katrina evacuees. Sprang and LaJoie found that one half (n=51) of the 101 respondents they surveyed met criteria for PTSD one year after the storm. A limitation of their study, however, is that there was no comparison group.

The relatively high prevalence of vicarious traumatization found among the counselors in this study is not surprising given the increased rates of posttraumatic stress symptoms in the general population after Hurricane Katrina. However, an even higher rate of vicarious traumatization might have been expected to exist among the population of mental health providers because mental health providers were not only exposed to the traumatic material of their clients, but also had a higher probability of direct exposure to trauma due to the nature of the disaster. Because this was a natural disaster that affected such a large area, anyone living in the region was directly or indirectly affected to some degree. Faust, Black, Abrahams, Warner, and Bellando (2008) described the direct impact, adverse effects, daily frustrations, and

“survivor guilt” that led to vicarious traumatization among a group of psychologists practicing in New Orleans after Hurricane Katrina.

Compared to 32.1% of respondents in the sample who met criteria for vicarious traumatization within one year after the storm, only 5.1% (n=23) had high levels of compassion fatigue as measured by the *Compassion Fatigue Subscale* of the *Compassion Fatigue and Satisfaction Self-Test for Helpers* (Figley & Stamm, 1996) five years after working with Hurricane Katrina survivors. This apparent dramatic decrease in symptomology may be explained, in part, by research that has shown that treatment of vicarious traumatization, either through self-care or through traditional mental health counseling, leads to a reduction in symptomology and can prevent burnout. Various researchers have identified peer support and supervision as protective factors (Pearlman & Saakvitne, 1995a; Sexton, 1999), as well as personal coping mechanisms (Bober, Regher, & Zhou, 1989), and spiritual faith (Decker, 1993; Pearlman & Saakvitne, 1995a; Sargent, 1989). Approximately three-quarters of the participants (74.43 %; n=431) in my study utilized at least one form of treatment. In addition to participation in either traditional mental health counseling or self-care, another possible reason that compassion fatigue symptoms decreased dramatically over the five year time period was that the passage of time itself allowed for the unfolding of events to occur that would re-order the lives of Hurricane Katrina survivors. This five-year time span allowed most people to move from their temporary FEMA trailers; reach agreements with their insurance companies, contractors, and builders; and restructure their lives so that their basic safety and security needs were once again met. Because one of the risk factors for posttraumatic stress disorder is the experience of recent

stressful life events (Pinsley, 2000), as this experience diminishes, the symptoms are likely to diminish as well.

Research Question 2

Research question 2 focused on determining the relationship between compassion fatigue and type of mental health care strategy utilized. In this study, 77.3% of the respondents (n=420) indicated that they had participated in non-clinical self-care activities, whereas only 18.1% of the participants (n=105) received traditional mental health counseling.

These findings suggest that professional counselors may be reluctant to seek traditional mental health treatment for themselves. Prochaska and Norcross (1983) found that “therapists emphasize helping relationships and medications more for their clients than for themselves.” Additionally, the research indicates that the stigma associated with the possibility of admitting psychological impairment, along with the possible social or career consequences, precludes psychologists from engaging in their own therapy (Barnett & Hillard, 2001; Farber, 2000; Gilroy, Carroll, & Murra, 2002). A second possible explanation for the low rate of usage of traditional mental health services among the study participants is that mental health resources in the New Orleans area were very limited within the first year after Hurricane Katrina made landfall (Baek, Pritchard, Reade, Towner, & Ward, 2006; Faust, Black, Abrahams, Warner, & Bellando, 2008). It may have been that traditional mental health care was difficult to access, and that self-care was more easily utilized.

An encouraging finding was that a negative correlation was found between the level of compassion fatigue as measured by the *CFS* and participation in traditional mental health counseling as well as participation in non-clinical self-care activities. That is, participation in traditional mental health counseling was associated with lower *CFS* scores which indicate a lower risk for compassion fatigue. In addition, engaging in non-clinical self-care activities was associated with lower *CFS* scores which indicate a lower risk for compassion fatigue. Overall, a statistically significant relationship was found between engaging in some type of mental health care strategy (traditional mental health counseling or non-clinical self-care activities) and compassion fatigue level. Participation in traditional mental health counseling and *CFS* scores had a significant, weak, negative correlation. It appears that participation in traditional mental health counseling may result in lower levels of compassion fatigue as measured by the *CFS*. A significant, weak, negative correlation was also found between engaging in non-clinical self-care activities and *CFS* scores, suggesting that engaging in non-clinical self-care activities may result in lower levels of compassion fatigue as measured by the *CFS*.

These findings lend support to the findings of research conducted by Bober, Regher, and Zhou (2006), who found that time devoted to self-care and time devoted to supervision were significantly moderately correlated with lower levels of distress in trauma counselors. Although improvement was expected, the findings from this study indicated only a weak correlation. Perhaps the strength of the correlation was moderated by the fact that 40.71% (n=171) of the participants surveyed indicated that they had a prior history of trauma and that 26.67% (n=112) reported experiencing Katrina-related losses. Research has demonstrated that both previous

trauma (Pearlman & MacIan, 1995) and recent stressful life events (Pinsley, 2000) are risk factors for increased symptoms of vicarious traumatization.

The relationship between participation in traditional mental health care and lower *CFS* scores was found to be stronger than the relationship between participation in non-clinical self-care activities and lower *CFS* scores. This finding was to be expected, as traditional mental health counseling, particularly cognitive behavioral therapy, has proven to be effective among the general population in the treatment of posttraumatic stress disorder (Bradley, Greene, et al., 2005; Foa & Meadows, 1997; Haber et al., 2002; Leitch, Vanslyke, & Allen, 2009). Although additional research is needed to study specific outcomes in the treatment of vicarious traumatization, it seems reasonable to assume that the treatment outcomes in the treatment of posttraumatic stress disorder for the general population and the treatment outcomes in the treatment of vicarious traumatization for mental health counselors would not differ significantly.

Research Question 3

Research question 3 examined the relationships between compassion fatigue and certain variables that are considered risk factors associated with greater vulnerability to the development of posttraumatic stress disorder as measured by the *PCL-C*. Risk factors include, but are not limited to type of trauma (Cunningham, 2003), lack of clinical experience (Pearlman & MacIan, 1995), maintaining a heavy caseload of trauma clients (Canfield, 2005; Pinsley, 2000), prior history of personal trauma (Pearlman & MacIan, 1995; Sexton, 1999), younger age (Adams, Motto, & Harrington, 2001; Nelson-Gardell & Harris, 2003; Vredenburgh, Carlozzi, & Stein,

1999), female gender (Sprang, Clark, & Whitt-Woosley, 2007), and having recently experienced stressful life events (Pinsley, 2000). The risk factors examined in research question 3 included younger age and fewer years of experience, female gender, history of personal trauma, and experience of Katrina-related losses. Age and years of experience were measured using Pearson's correlation coefficient and gender, history of prior trauma, and experience of Katrina-related losses were measured using Independent Samples T-tests.

For the participants in this study, age and *PCL-C* scores had a weak, negative correlation; however, the results also showed that the relationship was insignificant, indicating that the relationship was likely to have occurred by chance. The results also indicated that years of experience and *PCL-C* scores had a weak, positive correlation. This relationship was also found to be insignificant. Surprisingly, my results seem to contradict the consistent findings of previous researchers, including Nelson-Gardell and Harris (2003), Adams, Motto, and Harrington (2001), and Vredenburgh, Carlozzi, and Stein (1999) who all found younger age to be a risk factor for vicarious traumatization. Although I had anticipated similar results from my own study, one potential reason for the discrepancy could be that neither age nor clinical experience are particular risk factors in coping with or counseling survivors of this specific type of trauma or natural disaster. It is possible that age and clinical experience were inadequate preparation for or indicators of vicarious traumatization in my study because the type of trauma in my survey differs from the type of trauma in other studies. For instance, self-described "trauma therapists" are, by definition, somewhat prepared to anticipate trauma in their daily work. Counselors who work in settings dealing with sexual abuse also have some expectation

of vicarious traumatization when working with trauma survivors. However, a natural disaster places all counselors in the unexpected role of working with trauma survivors, and neither age nor counseling experience would be an indicator of preparation for that role. It seems that the role of these factors would be as individual as the counselors themselves, once all the other factors are considered.

Due to the nature of the variables of gender, exposure to trauma, and experience of personal stressful life events (Katrina-related losses), Independent Samples T-tests were utilized to examine the association between the risk factors previously mentioned and vicarious traumatization as measured by the *PCL-C* Score. First, the relationship *PCL-C* Score and gender was examined. The mean *PCL-C* Score for males was 26.27, which indicates that criteria were not met for vicarious traumatization. The mean score for women was slightly higher, 28.29, but also indicates criteria were not met for VT. For the participants in this study, the variances of mean *PCL-C* scores of the two groups' males and females were approximately equal. Also, no statistically significant difference was found between the means of the two groups, male and female, which indicates that the mean *PCL-C* score of each of the two groups were approximately equal. This finding supports the research of Creamer and Liddle (2005), who found that female gender was not significantly associated with compassion fatigue. It does not support the findings of Sprang, Clark, and Whitt-Woosley (2007), who found that being female was predictive of higher levels of compassion fatigue. I hoped originally that results of this survey would help to answer this discrepancy within the literature. My findings show that female gender is not a significant risk factor for vicarious traumatization. A possible

explanation is that my pool of participants may be different than those in Sprang, Clark, and Whitt-Woosley's (2007) study, whose participants consisted of "1,121 mental health providers in a rural Southern state" and more like the participants from Creamer and Liddle's (2005) study of disaster mental health workers who responded to the terrorist attacks of September 11, 2001. My participants responded to an unexpected, catastrophic event more like Creamer and Liddle's (2005) participants and it is possible that this factor made a difference in the findings of the study.

The relationship between exposure to prior trauma and level of VT as measured by the *PCL-C* Score was also studied. The mean *PCL-C* Score for individuals with a history of prior trauma was 31.58, which indicates criteria were met for vicarious traumatization. The mean score for those individuals who did not have history of prior trauma 25.72, which indicates criteria were not met for vicarious traumatization. According to my results, the variances of mean *PCL-C* scores for the two groups, individuals who had history of prior trauma and individuals who did not, are not equal. Results also indicated that there is a statistically significant difference in the mean *PCL-C* score of those who had history of prior trauma and those who did not. This finding is expected and consistent with the previous research findings of Pearlman and MacIain (1995) who found that counselors with a personal trauma history reported significantly more general distress and more disrupted cognitive schemas than counselors who did not have a personal history of trauma. It does, however, contradict the findings of Creamer and Liddle's (2005) study, who found the relationship between compassion fatigue symptoms and therapists' personal history of trauma to be insignificant. I would have

anticipated that the relationship between personal history of trauma and compassion fatigue symptoms would exist in my findings because multiplicity of stressors is an indicator of increased risk of depressive symptoms. Additionally, the presence of one loss can trigger emotional responses to prior losses. It stands to reason, then, that those counselors with a prior history of personal trauma would have had a higher score on the *PCL-C*.

Finally, the relationship between experience of personal stressful life events (Katrina-related losses) and VT as measured by the *PCL-C* score was analyzed. The mean *PCL-C* score for those individuals who had personally experienced Katrina-related losses was 33.71, which indicates criteria were met for vicarious traumatization. The mean score for those individuals who did not experience any Katrina-related losses 25.87, which indicates criteria were not met for vicarious traumatization. The findings determined that the variances of the two groups, individuals who experienced Katrina-related losses and individuals who did not, are not equal. Findings also indicated that there is a statistically significant difference in the mean *PCL-C* score of those who had experienced Katrina-related losses and those who did not. This shows that the *PCL-C* scores for the two groups, individuals who had experienced Katrina-related losses and those who did not are different; their variances in scores are different as well as their mean score. These findings are to be expected as prior researchers found that counselors who reported personal life stress events in the previous year experienced more avoidant symptoms, more disruptions in their cognitive schemas, and more symptoms of career burnout (Pinsley, 2000). This consistency with Pinsley is expected as the multiplicity of stressors is a serious factor to be considered in the assessment of overall mental health.

Research Question 4

Research question 4 analyzed the association between Gulf Coast Licensed Professional Counselors with vicarious traumatization who provided counseling services to Hurricane Katrina survivors within the first year of Hurricane Katrina who no longer showed symptoms of high level compassion fatigue five years after Hurricane Katrina and the type of mental health care strategy that was utilized. Two types of mental health care strategies were examined: traditional mental health counseling which included individual, group, couples or family counseling; and non-clinical self-care activities which included prayer, meditation, exercise, yoga, engaging in pleasurable activities, massage, time spent alone, or time spent with friends or family.

A total of 141 Gulf Coast Licensed Professional Counselor participants scored 30 or above on the *PTSD Checklist-Civilian Version (PCL-C)* (Weathers, Litz, Huska, & Keane, 1994) and were considered to meet criteria for vicarious traumatization. When results were scored from five years after Hurricane Katrina, 23 participants scored below 36 on the *Compassion Fatigue Subscale* of the *Compassion Fatigue and Satisfaction Self-Test for Helpers (CFS)* (Figley & Stamm, 1996) indicating they were no longer considered to have high levels of compassion fatigue. These results indicate that 80.14% of the participants who originally were symptomatic for high levels of compassion fatigue no longer reported current symptoms.

The 80.14% who improved their symptoms of compassion fatigue represent 113 individual participants. The majority of these individuals, 65.49%, engaged solely in non-clinical self-care activities, followed by individuals who participated in both traditional mental

health counseling and non-clinical self-care activities, 22.12%. Only 2.65% participated solely in traditional mental health counseling. That only a small percentage of counselors participated solely in traditional mental health counseling is not a surprising result as research consistently indicates that self-care is far more likely to be engaged in as the treatment of choice for vicarious traumatization symptoms (Prochaska & Norcross, 1983). Additionally, the availability of traditional counseling services was limited in the New Orleans area after Hurricane Katrina, which made self-care more readily accessible, individualized, and a more likely choice for most participants.

Research Question 5

Research question 5 examined Gulf Coast Licensed Professional Counselors with vicarious traumatization who provided counseling services to Hurricane Katrina survivors within the first year of Hurricane Katrina who no longer showed symptoms of high level compassion fatigue five years after Hurricane Katrina who participated in non-clinical self-care activities, which included prayer, meditation, exercise, yoga, engaging in pleasurable activities, massage, time spent alone, or with friends or family.

The findings of this study show that 113 participants who had originally met criteria for vicarious traumatization no longer showed symptoms, and of these participants who improved, 87.61% had engaged in non-clinical self-care activities. The non-clinical self-care activities included in the survey were prayer, meditation, exercise, yoga, engaging in pleasurable activities, massage, time spent alone, or with friends or family. Prayer was used by all improved

individuals who participated in non-clinical self-care (87.61%). The other activities engaged in by the majority of participants were time with family/friends (86.73%), exercise (85.84%), attending church (85.84%), time alone (84.96%) and engaging in hobbies/leisure activities (84.96%).

The findings also indicated the frequency with which each of the non-clinical self-care activities were engaged in (daily, 2-3 times per week, once a week, 2-3 times per month, once a month, and never). Prayer was used by all improved individuals who participated in non-clinical self-care, and 70.1% of those individuals engaged in prayer daily. Other activities that were often engaged in daily include time spent alone (53.8%), and time with friends/family (49.1%). The majority of participants indicated that yoga (74.5%) and massage (61.6%) were never used.

These findings were somewhat expected; in Mahoney's (1997) research into self-care patterns of 155 psychotherapists, participation in prayer, exercise, and pleasurable leisure activities were the most commonly reported forms of self-care practiced, and massage and personal therapy were least reported. However, Mahoney also found that the least commonly reported forms of self-care included attending church services, which was found to be utilized by over 85% of participants in this study. One potential reason for this difference could be cultural, as the Gulf South is a part of the region of the United States known as "the Bible Belt" and has a higher percentage of its population for whom church attendance is a regular part of their family, community, and cultural norms.

Relationship of Findings to Theoretical Framework

The purpose of this study was to determine the level of impact of vicarious traumatization in Gulf Coast Licensed Professional Counselors who have worked with Hurricane Katrina survivors and to examine the relationship between symptoms of compassion fatigue experienced by those who received traditional counseling and those who practiced self-care. The findings of my study support the theoretical framework of the constructivist self-development theory (CSDT) which asserts that each individual is complex, adaptable, and possesses an innate will to live (Pearlman & Saakvitne, 1995a). The CSDT also accounts for individual variability among people who have experienced the same trauma. The theory states that each person constructs his or her own reality through the development of cognitive structures, and that people use their cognitions to interpret events in their lives. Direct or indirect exposure to trauma, however, can cause a disruption in this cognitive structure. Pearlman and Saakvitne (1995a) asserted that trauma that is experienced during one developmental stage will be reinterpreted and reconstructed in each subsequent stage to fit the individual's evolving cognitive, social, and emotional growth as that person matures through each developmental stage. Therefore, the construction of meaning actually evolves over time and is the primary component of therapeutic change. According to this theory, the way an individual adjusts to a traumatic event is dependent upon several factors: the individual's personality, the context of the trauma, his or her personal history, and the interaction between the social and cultural contexts (Pearlman & Saakvitne, 1995a). Pearlman and Saakvitne explained that factors including gender, race, socioeconomic status, and age can all affect the social climate of the traumatized person. Persons with fewer

economic resources, for instance, are more prone to experience traumatization as their basic safety or security needs are more likely to be at risk. Family and society may respond supportively or provide unsupportive responses, such as victim-blaming. This occurs, for instance, in cases of misogyny and racism (Pearlman & Saakvitne, 1995a). Because of each person's individual personality, personal history, experiences, and construction of meaning and significance, his or her reaction to traumatic events will also be unique. Additionally, a person's reaction is subject to change over time as he or she incorporates life experiences throughout each developmental stage. My results support this theoretical framework since the developmental stage and unique transgenerational messages, beliefs, and individuality of each participant were reflected through their utilization of various self-care techniques, traditional mental health counseling, beliefs about the event itself, the survivors, and about themselves and their profession. The meaning and significance of counseling Hurricane Katrina survivors and healing from the experience varied as much as the individuals themselves, and this is an expected outcome based on the constructivist self-development theory.

Limitations

Using a targeted sample limits the generalizability of results to the larger population. Various limitations also exist in web-based research. It is difficult to determine whether the participant is focusing solely on the survey as well as whether or not the participants' answers are truthful. Another important limitation is the potential for participants to over-report both the amount of traditional clinical psychotherapy they received as well as the

amount of non-clinical self-care they practiced. Because the participants were all Licensed Professional Counselors, they may have considered it socially or professionally desirable to over-report these items. Due to the fact that participants responded to this survey with retrospective views and memories of symptoms during the first year after the storm as well as five years after the storm, the results may not be accurate and complete.

Implications for Counselors, Counselor Educators, and Administrators

The results of this study have important implications for counselors, counselor educators, and agency administrators. Results from the present study support findings in the literature suggesting that counselors are more likely to engage in non-clinical self-care than in clinical mental health counseling to treat their own distress: 65% of counselors with vicarious traumatization who no longer met criteria five years later had participated only in non-clinical self-care, 2.65% participated in traditional mental health counseling, 22% participated in both, and 10% engaged in neither activity. These findings also support the research that indicates a multi-pronged approach is the most effective tool in treating vicarious traumatization. Just as each individual is unique and processes trauma in his or her own way based upon culture, age, belief systems, family dynamics, and developmental stage, individuals also heal from vicarious traumatization as individually and uniquely based upon their needs. Self-care strategies utilized in post-Katrina vicarious traumatization varied a great deal and most often were combined in order to create the most effective treatment strategy for each individual. Most frequent self-care methods included prayer, time alone, and time with family and friends. Counselor educators and

agency administrators should encourage their students and employees to pursue self-care behaviors, as doing so assists them in reducing their likelihood of vicarious traumatization and professional burnout. Self-care should be viewed as a professional necessity rather than a luxury. Without it, many counselors will be unable to manage the trauma exposure and continue giving their best to their clients and to the profession.

Counselor education programs could benefit from incorporating content on trauma as well as providing information regarding different self-care strategies and encouraging counselors to engage in such activities. Further, it would be useful to continue to provide continuing education at conferences for counselors on the subject of self-care to highlight the importance of ensuring our own, as well as our clients' continued mental health. Additionally, it may also be beneficial to form a support system and/or group that would be for mental health professionals who work with trauma clients, as results show that peer to peer and co-worker support is often sought out by individuals who work with trauma patients. Agency administrators need to be aware of the benefits of peer supervision in the reduction of vicarious traumatization symptoms in their counselors and could benefit from making available regular sessions, particularly for those who work with trauma clients or during a time of crisis.

Suggestions for Further Research

Although this investigation adds to the body of literature detailing the efficacy of self-care and traditional mental health counseling in the treatment of vicarious traumatization of counselors of Hurricane Katrina survivors, additional research is needed to replicate the study

with other populations including, but not limited to other mental health professionals, and mental health professionals who have worked with survivors of various types of traumas. It also would be of interest to further explore whether vicarious traumatization is treated differently by counselors when it is a result of a natural disaster and when it is a man-made disaster.

This survey questioned whether or not the participants had experienced prior trauma in their lives, but did not specify the type of trauma, the severity of the trauma experienced, or how many traumatic events had been experienced. Because 50% of counselors who met criteria for vicarious traumatization within one year of working with Hurricane Katrina survivors reported a personal history of prior trauma, it would be beneficial to further explore this risk factor for vicarious traumatization.

Additionally, due to the fact that more than 80 % of the survey sample did not participate in traditional mental health counseling and more than 75% of the participants who originally met criteria for vicarious traumatization and no longer showed symptoms of high level fatigue 5 years later did not participate in traditional mental health counseling, it would be of interest to include a qualitative component to study the reasons the majority of counselors who met criteria for vicarious traumatization opted not to seek and participate in traditional mental health counseling.

Conclusions

This investigation arose from an interest in the most effective forms of treatment for vicarious traumatization in counselors and the forms of self-care practiced by counselors. The

overall findings of my study show that non-clinical self-care activities were the mental health care strategy most utilized by the survey sample as a whole as well as by the participants with vicarious traumatization who provided counseling to Hurricane Katrina survivors in the aftermath of Hurricane Katrina who no longer showed symptoms of high level compassion fatigue five years after Hurricane Katrina.

The findings also indicated that approximately 50% of Gulf Coast Licensed Professional Counselors who worked with Hurricane Katrina survivors who were considered to meet criteria for vicarious traumatization had a history of personal trauma. Consequently, counselors with a prior history of personal trauma may be more susceptible to vicarious traumatization.

Training programs, agencies, and counselors themselves need to remain acutely aware of their own vulnerability to vicarious traumatization as well as their own innate ability to treat it when it occurs. As unique and individual as we all are, we bring to the counseling profession our whole selves, not only our training, but also our histories, our family systems, our values and beliefs, our developmental stages, our cultures, our strengths, and our gifts. These traits are what we take into each counseling session and what we utilize in our work with our clients. We must be cognizant of using our individuality in our own treatment and our own self-care in order to keep ourselves and our clients healthy.

APPENDIX A

Demographics Questionnaire

Demographics Questionnaire

Thank you for your participation in this study. Please fill out the questionnaire as completely as possible. Provide additional comments as needed.

1. What is your gender?
 - Male
 - Female
2. What is your age? _____
3. What is your ethnicity?
 - African American/Black
 - Asian American or Pacific Islander
 - Caucasian/White
 - Indian
 - Latino/Hispanic
 - Native American
 - Middle Eastern
 - Other _____
4. What is your marital status?
 - Single
 - Married
 - Divorced
 - Widowed
5. How many years of counseling experience do you have? _____
6. What percentage of your work week was spent counseling Hurricane Katrina survivors? _____
7. Do you have a personal history of trauma? _____
8. Did you experience any personal Katrina-related losses?
 - Yes
 - No
9. If so, what kind?
 - Loss of property

- Financial or career loss
- Loss of community
- Loss of friends/family

10. Did you participate in traditional mental health counseling?

- Yes
- No

11. If so, what type?

- Individual
- Group
- Couple
- Family
- Other _____

12. Did you participate in non-clinical self-care?

- Yes
- No

13. If yes, what forms and how often? Please check all that apply.

What Forms?	Daily	2-3 Times a Week	Once a week	2-3 times per month	Once a month	Less than once a month
<input type="checkbox"/> Time alone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Time with friends/family	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Engaging in hobbies/leisure activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Exercise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Yoga	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Massage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Prayer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Meditation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Attending church	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. Is there any additional information you would like to add about your experience?

APPENDIX B

PTSD Checklist – Civilian Version

PTSD Checklist – Civilian Version (PCL-C)

Instructions: Below is a list of problems and complaints that individuals sometimes have in response to stressful life experiences. Please read each one carefully, put an “X” in the box to indicate how much you have been bothered by that problem within the first year of working with Hurricane Katrina survivors.

		Not at all	A little bit	Moderately	Quite a bit	Extremely
1	Repeated, disturbing memories, thoughts, or images of a stressful experience from the past?	1	2	3	4	5
2	Repeated, disturbing dreams of a stressful experience from the past?	1	2	3	4	5
3	Suddenly acting or feeling as if a stressful experience were happening again (as if you were reliving it)?	1	2	3	4	5
4	Feeling very upset when something reminded you of a stressful experience from the past?	1	2	3	4	5
5	Having physical reactions (e.g., heart pounding, trouble breathing, or sweating) when something reminded you of a stressful experience from the past?	1	2	3	4	5
6	Avoid thinking about or talking about a stressful experience from the past or avoid having feelings related to it?	1	2	3	4	5
7	Avoid activities or situations because they remind	1	2	3	4	5

		Not at all	A little bit	Moderately	Quite a bit	Extremely
	you of a stressful experience from the past?					
8	Trouble remembering important parts of a stressful experience from the past?	1	2	3	4	5
9	Loss of interest in things in things that you used to enjoy?	1	2	3	4	5
10	Feeling distant or cut off from other people?	1	2	3	4	5
11	Feeling emotionally numb or being unable to have loving feelings for those close to you?	1	2	3	4	5
12	Feeling as if your future will somehow be cut short?	1	2	3	4	5
13	Trouble falling or staying asleep?	1	2	3	4	5
14	Feeling irritable or having angry outbursts?	1	2	3	4	5
15	Having difficulty concentrating?	1	2	3	4	5
16	Being “super alert” or watchful on guard?	1	2	3	4	5
17	Feeling jumpy or easily startled?	1	2	3	4	5

APPENDIX C

Compassion Fatigue and Satisfaction Self-Test for Helpers – Compassion Fatigue Subscale

Compassion Fatigue and Satisfaction Self-Test for Helpers – Compassion Fatigue Subscale

Helping others puts you in direct contact with other people's lives. This self-test helps estimate how much at risk you are for compassion fatigue. Consider each of the following characteristics about you and your **current** situation.

0 = Never	1 = Rarely	2 = A Few Times	3 = Somewhat Often	4 = Often	5 = Very Often
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- _____ 1. I feel estranged from others.
- _____ 2. I force myself to avoid certain thoughts or feelings that remind me of a frightening experience.
- _____ 3. I find myself avoiding certain activities or situations because they remind me of a frightening experience.
- _____ 4. I have gaps in my memory about frightening events.
- _____ 5. I have difficulty falling or staying asleep.
- _____ 6. I have outbursts of anger or irritability with little provocation.
- _____ 7. I startle easily.
- _____ 8. While working with a victim, I thought about violence against the perpetrator.
- _____ 9. I have flashbacks connected to those I help.
- _____ 10. I have had firsthand experience with traumatic events in my adult life.
- _____ 11. I have had firsthand experience with traumatic events in my childhood.
- _____ 12. I think I need to “work through” a traumatic experience in my life.
- _____ 13. I am frightened of things a person I helped has said or done to me.

- _____ 14. I experience troubling dreams similar to those I help.
- _____ 15. I have experienced intrusive thoughts of times with especially difficult people I helped.
- _____ 16. I have suddenly and involuntarily recalled a frightening experience while working with a person I helped.
- _____ 17. I am preoccupied with more than one person I help.
- _____ 18. I am losing sleep over a person I help's traumatic experiences.
- _____ 19. I think I might have been "infected" by the traumatic stress of those I help.
- _____ 20. I remind myself to be less concerned about the well-being of those I help.
- _____ 21. I have felt trapped by my work as a helper.
- _____ 22. I have a sense of hopelessness associated with working with those I help.
- _____ 23. I have been in danger working with people I help.

APPENDIX D

IRB Letter of Approval

***University Committee for the Protection of Human Subjects in
Research University of New Orleans***

Campus Correspondence

Principal Investigator: Barbara Herlihy
Co-Investigator: Mary Alice Many

Date: August 9, 2011

Protocol Title: "Efficacy of Self-Care and Traditional Mental Health
Counseling in Treating Vicarious Traumatization Among
Hurricane Katrina Survivors"

IRB#: 02Aug11

The IRB has deemed that the research and procedures described in this protocol application are exempt from federal regulations under 45 CFR 46.101 category 2, due to the fact that the information obtained is not recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects.

Exempt protocols do not have an expiration date; however, if there are any changes made to this protocol that may cause it to be no longer exempt from CFR 46, the IRB requires another standard application from the investigator(s) which should provide the same information that is in this application with changes that may have changed the exempt status.

If an adverse, unforeseen event occurs (e.g., physical, social, or emotional harm), you are required to inform the IRB as soon as possible after the event.

Best wishes on your project.
Sincerely,

Robert D. Laird, Ph.D., Chair
UNO Committee for the Protection of Human Subjects in Research

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Vita

Mary Alice Many earned her Bachelor of Arts in Psychology and English with a Minor in Political Science from Louisiana State University in 1989. She earned both a Master of Arts in Community Agency Counseling and her Education Specialist in Marriage and Family Therapy from Louisiana State University in 1995. Mary Alice completed the Doctor of Philosophy degree in Counselor Education at the University of New Orleans in 2012.

Mary Alice is a Licensed Professional Counselor Supervisor (LPC-S) and a Licensed Marriage and Family Therapist (LMFT) in Louisiana. She is a member of the International Critical Incident Stress Foundation, American Counseling Association, Louisiana Counseling Association, Louisiana Association of Marriage and Family Counselors, Louisiana Mental Health Counselors Association, and Chi Sigma Iota. She also held leadership positions as the Secretary and District Chair of the Louisiana Mental Health Counselors Association, as Student Representative of the Louisiana Association of Marriage and Family Counselors, and as President of Chi Sigma Iota Honor Society.

She has professional experience as a counselor at Southeastern Louisiana University Counseling Center, the COPE TEAM at Our Lady of the Lake hospital, and in private practice. She has presented at state conferences on topics including counselor education, the therapeutic use of humor, and conflict resolution. Mary Alice also published an article regarding the media's portrayal of gays and lesbians in the *Electronic Journal of Human Sexuality* in 1999 and co-facilitated a series of 9 case management focus groups on mental retardation in 2000.