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Resilience as a Protective Factor Against Compassion Fatigue in Trauma Therapists

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Abstract

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MSW, New York State University at Stony Brook, 2002

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Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Human Services

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Abstract

Many adults in the United States experience posttraumatic stress disorder (PTSD) within their lifetimes. Researchers have identified compassion fatigue (CF), which debilitates mental health providers as a result of being exposed to their clients' traumatic experiences, as an occupational hazard. The purpose of this study was to examine whether a correlation exists between the presence of CF and the level of resilience. A confidential survey using the Connors-Davidson Resilience Scale, the Professional Quality of Life Scale Version 5, and a demographic questionnaire were given to graduate-level mental health clinicians who self-identified as routinely working with and/or treating trauma victims in the past 6 months. Participants were recruited from the New England Society for the Treatment of Trauma and Dissociation, the Metropolitan Atlanta Therapists Network, Dallas Chapter NASW listserv, and the Georgia Therapist Network. A multivariate analysis on the collected data was conducted to determine whether a relationship exists between the resilience scale and the subscales of CF within these population samples. According to study findings, there is a correlation between resilience and the 3 compassion fatigue subscales—CF, burnout, and compassion satisfaction. This study may lead to positive social change by helping guide clinicians to find ways to enhance resilience, and therefore, decrease risks of CF.

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Dedication

I want to dedicate this to my loving family and to all those brave first responders, social workers, and other mental health clinicians that answered the call in the aftermath of the September 11, 2001 terrorist attack.

Acknowledgments

"I believe in the spirit and resilience of the American people." Barack Hussein Obama

Like most Americans on September 11, 2001, I experienced a major psychological shift in my assumptive world view. Very few people can forget the events of that day as the first news report of an airplane hitting the World Trade Center was aired. I was living in Bayside, Queens, New York and was about to leave my home for my graduate class in social work at New York State University at Stony Brook when the tragic events began to unfold. The psychological shift for all of us caused a collective shock that radically altered our fundamental world assumptions about the security of our lives.

Americans have always felt far from harm, mainly due to the country's geological distance from most of the hot spots of war and conflicts. However, on that fateful day, the country's overall sense of security was shattered. Subsequently, America's reactions to the traumatic event continue to perpetuate more collective-trauma as this country remains fearful and has turned to policies of war rather than taking a more enlightened, humanitarian approach. We must remember that human beings are resilient and that our country can become more resilient by taking a higher ethical, wiser, and more compassionate approach to dealing with the global problems associated with poverty, hunger, social injustices, and human suffering, which ultimately contribute to an atmosphere of hate and violence—the impetus behind most terroristic acts.

During the days after September 11, 2001, I worked with the guidance counselors at Benjamin Cardozo High School in Queens, NY to provide comfort and encouragement to its students. Years later I learned about the hazards that mental health workers experience as they became vulnerable to compassion fatigue and secondary trauma when working with the trauma victims. As I researched compassion fatigue, I wanted to understand what made some mental health workers more resilient than others in spite of working with trauma victims and what could we do as researchers, academics, and professionals to help protect our friends and colleagues in the mental health profession. It is my hope that this research adds to our professional knowledgebase.

I must acknowledge and sincerely thank all the clinicians that responded to this study. Your enthusiasm and zeal for understanding compassion fatigue and your desire to know how we as professionals can remain resilient is remarkable and laudable. As our honorable American military personnel return from the traumas of combat and war, we need to be ready to provide them with an uncompromised quality of care and services, so that they can properly heal and return to their families and mainstream society to lead full and satisfying lives.

I am eternally grateful to my dissertation committee chairperson, Dr. Christine Racanelli, PhD, and to my committee members: Dr. Barbara Benoliel, PhD and Dr. Sylvia Kaneko, PhD for your expertise, guidance, keen insights, wisdom, patience, and for faithfully staying the course with me through the research years. I owe each one of you a great debt of appreciation.

I also appreciate my mother, Barbara David, for her love, encouragements, and unfailing prayers, and my father, Daniel J. David, for his love and example of how to believe in myself and how to live a fulfilling successful life. I appreciate my sister, Annette Tanna, for always making me loved and feel welcomed in your family. Your children, Jairus, Lauren, and Cameron are the best. I also write this in memory of my younger brother, Scott J. David, who transitioned to the other side so long ago, yet he remains missed and unforgotten. And, I dearly appreciate Kedrick J. Harrison whose love as a son and cheerful demeanor has brightened my life in so many wonderful ways.

I want to express my deepest gratitude to Dr. Louis deSalle, PhD, my philosophy professor, who believed in me and inspired me to push ahead toward higher academic pursuits. And I want to thank my dear Atlanta friends Bruce Bridges, Jayne Vandergriten, and Konnie Torban, PhD, for their encouragements, and for not giving up on me when I often disappeared into my research and writing. I also want to express my thanks to Angela Daniels for her help with proof reading and editing—always with a good laugh and a beautiful smile, as well as thank Gaius Augustus for his positive energy and supportiveness.

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Chapter 1: Introduction to the Study

Background

World events in the past decade have made researchers and mental health communities more aware that treating victims of trauma and posttraumatic stress disorder (PTSD) can have negative effects on mental health clinicians (Figley, 2002). According to Bride, Figley, and Radey (2007) compassion fatigue (CF) is identified as "the negative effects on clinicians due to work with traumatized clients" (p.155). Bride et al. (2007) asserted that assisting an individual with trauma requires that the mental health professional extend empathy and share emotional burdens while working through traumatic imagery, which leaves the professional vulnerable to CF.

Trauma comes from different causes. Traumatic events such as the terrorist attacks on September 11, 2001, Hurricane Katrina (August 23, 2005), and the return of traumatized U.S. soldiers from wars in Iraq and Afghanistan are a part of the U.S. collective psyche (Tyson, 2007). Additionally, through television, radio, and the Internet, the media provides information about trauma as it relates to physical and sexual abuse, neglect, rape, bullying, war, and a number of other causes (Updegraff, Silver, & Holman, 2008). No indication exists that more people are being traumatized at this point in history than in the past. Catastrophic events such as earthquakes, floods, fires, and life-threatening weather have occurred in civilizations throughout recorded history. However, since PTSD's original recognition and diagnosis appeared in the *DSM-III* (American Psychological Association [APA], 1980) after the Vietnam War, the influence of the modern media has continued to educate and make more people aware of the deleterious

nature of trauma, the causes of being traumatized, and the benefits of psychological and psychiatric trauma treatments (McNally, 2003). The increased collective awareness of trauma may have contributed to a rise in the number of individuals in the United States seeking the treatment that mental health professionals provide.

Researchers who have examined exposure to trauma have identified a range of occupational hazards to clinicians, such as vicarious traumatization (Bride, 2004), burnout (Figley, 1995), secondary traumatic stress (Bride et al., 2007), and CF (Figley, 1995, 2002). Ultimately, mental health professionals and other clinicians such as social workers, nurses, doctors, and psychologists who provide psychotherapeutic treatment to trauma victims need to become more aware of the risks involved in order to protect themselves from harm (McCann & Pearlman, 1990).

Research into trauma and CF has increased the awareness of the psychological risks of providing treatment to patients who have experience a traumatic event (Cohen, Gagin, & Peled-Avram, 2006). However, as studies about these risk factors continue to emerge in the research literature, less focus has been put onto clinicians who remain resilient and who are able to avoid developing negative symptoms, such as CF, in the course of their work with trauma victims. The concept of resilience refers to positive adaptations in individuals who experience adversity and survive, and even seem to thrive, in spite of the adverse situation (Miller & Daniel, 2007). Edward (2005) examined the phenomenon of resilience among crisis-care mental health clinicians and described resilience as “the ability of the individual to bounce back from adversity, persevere through difficult times, and return to a state of internal equilibrium or a state of healthy

being" (p. 143). Kitano and Lewis (2005) noted that "in the aftermath of September 11, resilience has become a public focus with the intent of providing information on supporting recovery from trauma wrought by terrorism" (p. 200). This focus on resilience in relation to CF within the mental health profession needs to be extended to the clinicians who treat trauma victims.

Understanding how mental health professionals face, adapt, and cope with trauma becomes salient in determining an individual clinician's predisposition toward resilience or potential vulnerability toward developing CF (Killian, 2008). Researchers have suggested that adaptive coping mechanisms are characteristic of resilience as observed within individuals, adolescents, families, and communities (Bonanno, 2008; Tedeschi & Kilmer, 2005). Tiet and Huizinga (2002) found that individuals were more likely to be deemed resilient based upon their ability to adapt and make adjustments to adverse situations. According to Taylor's (1983) theory of cognitive adaptation, in the face of adversity, individuals strive to make adjustments around three themes: "a search for meaning in the experience, an attempt to regain mastery over the event in particular and over one's life more generally, and an effort to restore self-esteem through self-enhancing evaluations" (p. 1161). Frankl (1984) stated that in the face of adversity, individuals adapt and cope by searching to make meaning out of circumstances that may seem senseless or meaningless. Frankl wrote, "Man's search for meaning is the primary motivation in his life and not a 'secondary rationalization' of instinctual drives" (p. 121). The human proclivity to "seek for meaning in the midst of adverse situations" is often the impetus behind human striving (Frankl, 1984, p. 121). This is observed when individuals

use humor as a means of ascribing whimsical or absurd meanings to a stressful situation as a way of coping, which aids in resisting depression. A robust sense of humor has been identified as being a characteristic of resilience (Haglund, Nestadt, Cooper, Southwick, & Charney, 2007; Vaillant, 1977). How clinicians ultimately display the absence of the characteristics of resilience may be a factor in determining the level of potential vulnerability to developing CF (Adams, Boscarino, & Figley, 2006; Shubs 2008).

Problem Statement

There is a need to determine what helps clinicians prevent CF. Evaluating the characteristics of resilience as potential protective factors, which may prevent or decrease a clinician's vulnerability to CF, is important for understanding how mental health professionals could remain healthy in order to provide an uncompromised professional level of care to their traumatized clients.

Researchers have pointed to the potential risks involved in treating trauma victims—risks such as CF, burnout, or vicarious traumatization. The aim of this study was to examine whether all mental health providers experience negative effects or detrimental consequences to treating patients who have experienced a traumatic event. I focused on resilience as a theoretical construct that may potentially contribute to understanding how to counteract the deleterious effects of CF. The construct of resilience presents a positive, strength-based implication for the mental health profession, particularly for those treating traumatized clients, because of its acknowledgment of protective traits and characteristics that are capable of being enhanced through awareness and training (Connors, 2006).

Researchers have studied CF occurring among mental health providers treating trauma survivors. However, few scholars have examined the more common but often unrecognized phenomenon of resilience, a model based on a way to measure personal qualities that make it possible to cope with stressors in adverse circumstances (Connor, 2006;Hernandez, Gansei, & Engstrom, 2007; Sabo, 2008). The need for in-depth research into the phenomenon of resilience among clinicians working with trauma victims has become more evident. There is a need to understand why some clinicians are more resilient than others (Lawson, 2007). Sabo (2008) examined CF, burnout, and vicarious traumatization in nurses involved in palliative and hematological cancer care and argued that a need existed "to explore the role of moderating factors such as resilience and compassion satisfaction on the overall health and well-being of nurses providing palliative care" (p. 27). Likewise, Radey and Figley (2007) argued that "Too often we focus on disorders, psychopathology, dysfunction, and problems. We must balance these negative elements with a focus on altruism, compassion, resilience, success, and thriving" (p. 208). Understanding the phenomenon of resilience as it occurs among trauma therapists more regularly than the occurrences of CF may provide strategies for mental health practitioners concerned with preventing CF among their ranks that are working with or specializing in treating trauma survivors.

There is a lack of studies on resilience directly studied in relationship to CF among mental health professionals. Sabo (2006) recommended a need for in-depth studies regarding the potential for resilient outcomes among mental health providers as they routinely work with trauma survivors. This lack of empirical studies about positive

outcomes such as resilience among clinicians may be because of the research community's preoccupation with pathological concerns such as CF (Radey & Figley, 2007). Scholars who examine the relationship that may exist between the protective factors or characteristics of resilience and the negative symptoms of CF among clinicians are practically nonexistent (Sabo, 2006). Little is known about how a resilient response may counterbalance the onset of CF among clinicians in the course of their exposure to trauma survivors. Investigations of resilience among mental health providers can provide insights and benefits for mental health providers who attempt to provide assistance to those coping with the trauma.

Purpose of the Study

The purpose of this study was to explore the role that characteristics of resilience may have in mitigating the risks associated with mental health clinicians developing CF. CF has been identified in the research literature as an occupational hazard for mental health providers in the course of their work with trauma survivors (Bride et al., 2007). Research of resilience among mental health providers treating trauma victims is needed in order to fill the gap in the existing empirical knowledge. Furthermore, research identifying whether a correlation exists between the characteristics of resilience and the characteristics of CF in clinicians needs to be conducted to further understand the concept of resilience and how it may contribute to sustaining and empowering trauma clinicians. In this study, I examined resilience, a construct indicating an aggregate of positive traits and behavioral adaptations despite facing adverse situations such as traumatic events, in relationship to mental health providers and the risks associated with CF. Although the

phenomenon of CF has been acknowledged as a potential risk, many individuals experience traumatic events with minimal to no significant effect on their ability to function (Mancini & Bonanno, 2006). Furthermore, some clinicians manifest positive strengths while working with trauma and violence (Bell, 2003; Hernandez et al., 2007).

Researchers have conducted few studies based upon a positive, strengths perspective of clinicians who manifest resilience in the course of their work with trauma victims (Edward, 2005). Researchers have mainly looked at clinicians working with traumatized clients from a predominantly deficit- and pathology-based perspective. This deficit perspective has continued to guide much of the research into trauma, CF, vicarious traumatization, and burnout (Bride et al., 2007). In this study, I helped establish a line of research that looks at the subject of clinical trauma work through a positive, resilience perspective.

Significance of the Study

In this study, I attempted to fill a gap in the knowledge of how resilience may play a role in preventing CF. Understanding how to prevent CF can potentially improve the quality of health for mental health providers, as well as protect the ethical standard of care for those being treated for trauma by guarding clients against clinicians suffering from CF. Research exploring resilience as a counterbalance to the risk factors associated with CF is of importance to the domain of mental health. I aimed to extend the knowledge base that currently exists in the fields of resilience and CF as applied to mental health providers. An understanding of the concept of resilience, the result of adaptive coping mechanisms manifesting in mental health providers, depends upon

understanding the risks associated with the therapeutic encounter between the provider and those who have been traumatized.

This study will be of interest to professionals, researchers, and policy makers across all mental health disciplines seeking to protect the health of clinicians providing treatment to trauma survivors, as well as to protect the integrity and quality of professional care for clients. In a post September 11, 2001 and post-Hurricane Katrina world, mental health professionals will continue to be called upon to provide the bulk of therapeutic treatment services for trauma victims of all sorts. Additionally, broader application of the *DSM-IV's* PTSD diagnosis with the general population means that more mental health clinicians are faced with treating other types of trauma victims in their routine clinical settings (Liebschutz et al., 2007).

A better understanding of how mental health providers remain resilient in the course of their professional work with clients diagnosed with PTSD is useful for developing graduate education curricula and postgraduate professional continuing education courses that not only raise awareness, but also serve to enhance the resilience of mental health providers. Likewise, this study may help mental health professionals recognize the risks associated with CF and the importance of developing self-care skills that enhance their resilience. The analysis of potential correlations between resilience and CF will serve to inform future researchers about the subjects of resilience, CF, clinical practice, and work with trauma victims.

Research Questions and Hypotheses

The following research questions and hypotheses will guide this study:

1. What is the extent of the relationship between the level of resilience as measured by the Connors-Davidson Resilience Scale (2001, 2009) and the three compassion fatigue subscales: compassion fatigue, burnout, and compassion satisfaction as measured by the Professional Quality of Life Version V (Stamm, 2009). Do the scales show that when the level of resilience is measurable that an inverse relationship exists with measuring compassion fatigue and burnout? In other words, when the level of resilience is reported to be substantial among participants, is the presence of compassion fatigue and/or burnout markedly more or less measurable?
2. What is the relationship between the level of resilience as measured by the Connors-Davidson Resilience Scale (2001, 2009) and the following demographic variables?
3. What is the relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and gender?
4. What is the relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and years of experience?
5. What is the relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and level of education?
6. What is the relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and the prior history of trauma of the clinician?

7. What is the relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and the number of trauma clients treated?

The hypotheses in relationship to the aforementioned research questions are

$H_0$1:There is no relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and the three compassion fatigue subscales: compassion fatigue, burnout, and compassion satisfaction as measured by the ProQOL-V (Stamm, 2009).

$H_1$1: There is a correlation between the level of resilience as measured by the CD-RISC (2001, 2009) and the three compassion fatigue subscales: compassion fatigue, burnout, and compassion satisfaction as measured by the ProQOL-V (Stamm, 2009).

H_0*2*: The level of resilience as measured by the CD-RISC (2001, 2009) does not predict any changes in the compassion fatigue subscales as measured by the ProQOL-V (Stamm, 2009).

H_1*2*: The measure of resilience does predict negative correlations with the compassion fatigue subscales as measured by the ProQOL-V (Stamm, 2009).

H_0*3*: There is no relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and demographic variables.

1. There is no relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and gender.
2. There is no relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and years of experience.
3. There is no relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and level of education.

4. There is no relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and prior history of trauma.
5. There is no relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and the number of trauma clients treated.

$H_1$3: There is a relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and demographic variables.

1. There is a relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and gender in that being either male or female has a significant role in determining the level of resilience.
2. There is a relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and years of experience in that more or fewer years of experience has a significant role in determining the level of resilience in the provider.
3. There is a relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and level of education and that the provider's level of education has a significant role in determining the level of resilience in the provider.
4. There is a relationship between the level of resilience as measured by the CD-ISC (2001, 2009) and the number of trauma clients treated and this is an indicator of the level of exposure that has a significant role in determining the level of resilience in the provider.

Limitations of the Study

As with any research, there are limitations to this study. First, the ability to accurately measure the intensity of each respondent's exposure to trauma in the course of their interactions and professional practice with their clients is limited. Second, accurately evaluating the level of CF, to the degree that each respondent experienced the onset of CF symptoms, is limited (Stamm, Varra, Pearlman, & Giller, 2002). Third, accounting for all potential variables that enhanced each respondent's self-reported resilience may be limited because of the number of questions posed on the combined survey-instrument questionnaire. A fourth limitation is that a possibility of a sampling bias exists as the subjects in this study may have responded to the study for various reasons, such as the topic resonates with them. Additionally, individuals who have experienced severe burnout or traumatization may not have had the energy or the emotional disposition to respond to this study because of their prior negative experiences and the likelihood of their resistance to the subject matter of this study.

Definition of Terms

Adaptation: "The necessary and complementary processes of assimilation and accommodation [that] constitute the fundamental process of adaptation" (McIlveen & Gross, 2004, p. 40). Piaget used the term adaptation in relationship to child developmental processes and also paralleled biodevelopmental adaptation with intellectual adaptation "as a coordination of two seemingly antithetical functions: assimilation and accommodation" (as cited in Flavell, 1963, p. 38). Luthar et al. (2000) noted that the evidence of positive adaptation is a "coexisting condition of resilience . . .

despite the adversity encountered . . . across one or more domains of functioning" (p. 546).

Adjustment: A process of change in terms of accommodation or assimilation that involved defense mechanisms (Lazarus, 1963). Badger, Royse, and Craig (2008) found that social support was reported in the literature as being an essential component of adjustment in relationship to trauma recovery (p. 63).

Accommodation: A term that is frequently used in conjunction with *assimilation* as an aspect of the Piagetian concept of adaptation (Buckingham & Schultz, 2000). Accommodation is also used in conjunction with assimilation when referring to trauma (Thomas & Wilson, 2004). According to McIlveen and Gross (2004), assimilation leads to accommodation beginning in child development as the child learns about different aspects encountered in his or her world, and that accommodation by stretching the existing cognitive schemas in order to "take in" new information (p. 40).

Assimilation: "The process by which we incorporate new information into our existing schemas" (McIlveen & Gross 2004, p. 40). Lazarus (1963) identified assimilation as a process by which the person "assimilates the world to his own requirements, using people and social situations about him most advantageously for attaining his own ends" (p. 11).

Burnout: Maslach, Schaufeli, and Leiter (2001) defined burnout as "a prolonged response to chronic emotional and interpersonal stressors on the job, and is defined by the three dimensions of exhaustion, cynicism, and inefficacy" (p. 397).

Compassion fatigue: Adams et al. (2006) defined compassion fatigue as "the formal caregiver's reduced capacity or interest in being empathic or 'bearing the suffering of clients' and is the natural consequent behaviors and emotions resulting from knowing about a traumatizing event experienced or suffered by a person" (p. 103).

Domain: Luthar et al. (2000) used the term domain to delineate and relegate aspects of resilience, adaptation, and adjustment into multidimensional areas of functioning (i.e., educational, emotional, and social). The various adjustment domains are demarcated as *educational resilience* (Wang et al. 1994), *emotional resilience* (Kline & Short, 1991), and *behavioral resilience* (Carpentieri, Mulhern, Douglas, Hanna, & Fairdough, 1993) in order to fine tune the precision of the terminology (p. 548).

Resilience: According to Collins (2007), resilience is an "adaptive state and personality trait evident in many people, including social workers, but it is influenced by many variables such as culture" (p. 255). Hernandez et al. (2007) defined resilience as "the way in which trauma survivors access adaptive processes and coping mechanisms to survive and even thrive in the face of adversity" (p. 229). Wilson and Agaibi (2006) stated that resilience is "a model of resilience in response to psychological trauma, the reaction to a traumatic life event is explained. This determines activation of the allostatic stress response which influences the continuum of adaptation and resilience" (p. 13).

Risk: This term is used to describe "The heightened probability of negative outcome among individuals possessing certain vulnerabilities or sharing exposure to certain conditions" (Haeffel & Grigorenko, 2007, p. 435). Risk and vulnerability are both used to differentiate and identify resilience (Luthar et al., 2000; Haeffel & Grigorenko,

2007). Without risk or potential vulnerability, resilience would be rendered inactive or undetectable (Tiet & Huizinga, 2002). Risk and vulnerability activate the dynamic process by which the individual enacts positive or negative functioning (Luthar et al., 2000).

Posttraumatic growth: According to Tedeschi and Calhoun (2004), posttraumatic growth is described as "the experiences of positive change that occurs as a result of the struggle with highly challenging life crises" (p. 1). Calhoun and Tedeschi (1998) viewed posttraumatic growth as "the antithesis of posttraumatic stress disorder" and identified the growth consequences following traumatic events that may or may not parallel traumatic stress (p. 3).

Posttraumatic stress disorder: A fear response to traumatic events. The *Diagnostic and Statistical Manual* (1994) specified that "the person experienced, witnessed, or was 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," and evoked "intense fear, helplessness, or horror" (e.g., war, rape, physical abuse, acts of violence, natural disasters, etc.) (pp. 427–28). McNally (2003) argued that PTSD is unusual among the diagnostic criteria in that it stipulates an etiologic event that exposes the individual to a traumatic stressor and that if this one criterion is not met, the diagnosis cannot be made. According to McNally, the *DSM-IV* expanded the definition of a traumatic stressor to include a person's mere learning about another person being threatened with harm qualifies as exposure to harm, and is, therefore, diagnosable for PTSD with the other symptoms being diagnosed.

Protective factors: Ong, Bergemen, Bisconti, and Wallace (2006) identified protective factors in relationship to the concept of resilience as "diverse processes that lead to successful adaptation is identifying the broad protective factors that facilitate or contribute to sustaining the adaptive process" (p. 730).

Secondary traumatic stress: "A disorder that has the same symptoms as post traumatic stress disorder, but results from vicariously experiencing trauma through association with those directly encountering the traumatic events" (Simon, Pryce, Roff, & Klemmack, 2005, p. 1).

Trauma: According to Trippany, Kress, and Wilcoxon (2004), trauma is defined as "an exposure to a situation in which a person is confronted with an event that involves actual or threatened death or serious injury, or a threat to self or others' physical well-being" (p. 31). Being exposed to an inescapably stressful event that overtaxes an individual's coping mechanisms causes trauma . Elliott (2002) described trauma as

> A response to a traumatic event that is experienced through thoughts, feelings, and senses. It can take a multitude of forms, including significant distress and a sense of helplessness, which is often accompanied by a shift in the individual's view of the world around him or her as well as his or her view of self. This distress is demonstrated by emotional and behavioral reactions, which in most individuals abate with time. (p. 52)

Terrorism: "Attacks that combine features of criminal assaults, disasters, and acts of war" (Miller, 2002, p. 283).

Traumatic material: The experiences of individuals who experienced an event that threatens mental and physical harm or loss of life (Deighton, Gurris, & Traue, 2007).

Vicarious agency: ”Feelings of authorship for the actions of others” (Wegner, Sparrow, & Winerman, 2004, p. 840). The term vicarious agency is used to delineate “authorship” whether direct or indirectly proceeding from the original (true) source.

Vicarious resilience: A term primarily derived from the analysis of overlapping concepts such as vicarious traumatization (VT), secondary traumatic stress, empathic stress, and compassion fatigue (Figley, 1998; Hernandez et al., 2007).

Vicarious traumatization: “Persons who work with victims may experience profound psychological effects, effects that can be disruptive and painful for the helper and can persist for months or years after work with traumatized persons” (Pearlman & McCann, 1990, p. 133). The literature treats the term vicarious as an adjective that accentuates the noun traumatization (e.g., vicarious traumatization), often leaving the scientific components related to vicarious ambiguous or undefined.

Victim: Someone who has suffered harm, injury, or loss as a result of the intentional or negligent actions of other human beings or whose life has been disrupted by a catastrophe (McCann et al., 1988, p. 532).

Vulnerability: The natural consequence of behaviors and emotions resulting from knowing about and listening to the narratives about a traumatizing event a significant other experiences (Figley, 1995).

Summary

In this study, I examined the indicators of resilience as measured by the CD-RISC (2001, 2009) and CF measured by the ProQOL-V (Stamm, 2009) that clinicians self-report based on their professional experience with clients possessing a variety of trauma histories based on the symptoms of PTSD as described by the APA's *DSM-III's* (APA, 1980) and in the *DSM-IV's* (APA, 1994) posttraumatic stress disorder's expanded diagnostic criteria. Clinicians in the mental health professions (e.g., social workers, psychologists, nurses, counselors, and psychiatrists) were recruited to participate in completing questionnaires pertaining to resilience, CF, and pertinent demographic data, such as gender, years of professional experience, level of education within the individual's particular profession, prior personal history of trauma, and the number of trauma clients being treated. I used these data to ascertain whether an inverse correlation exists between the level of resilience and the level of CF, as well as whether resilience plays a role as a counterbalance to insulate clinicians from the development of CF while they treat trauma victims. Enhancing the presence of the qualities of resilience (e.g., via training, education, supervision, etc.) and increasing the level of resilience within clinicians working with trauma victims is significant in light of a post-September 11, 2001, world and in acknowledgement that more cases of PTSD are being diagnosed because of the expansion of *DSM-IV* criterion.

Chapter 2 will include a review of existing literature related to the theories of resilience and CF. In addition to reviewing the research literature regarding these constructs, I will synthesize theoretical foundations in order to construct a correlational

theory about how resilience characteristics may affect levels of CF in mental health providers. Chapter 3 will include the research methodologies that will be used to examine the research questions and the hypotheses described in Chapter 1. Chapter 4 will include the results of the study. Chapter 5 will include recommendations for future study.

Chapter 2: Literature Review

Introduction

A review of the theoretical and empirical frameworks for examining and evaluating the constructs of both resilience and CF was vital for laying a theoretical and operational foundation of these classifications. Examining the potential correlations of resilience and CF within the mental health profession was essential for understanding how to protect mental health providers and the quality of their professional practices. To find sources for this study, I accessed databases in Questia.com, a Web-based research library that includes research-based books, textbooks, journals, and peer-reviewed articles. I also mined EBSCO, which included Psychology SAGE, Academic Search Premier, CINAHL Plus, Nursing & Allied Health Source, PsychARTICLES, PsychBOOKS, PsychINFO, SocINDEX, Dissertations and Theses, ProQuest Central, and Google Scholar for research articles and data.

I searched for sources using the following keyword search terms: *resilience*, *compassion*, *compassion satisfaction*, *adaptation*, *adjustment*, *assimilation*, *accommodation*, *posttraumatic stress disorder*, *PTSD*, *vicarious traumatization*, *acute stress disorder*, *disaster*, *terrorism*, *war*, *military*, *sexual abuse*, *trauma*, *posttraumatic growth*, *vicarious resilience*, *strengths perspectives*, *social worker*, *mental health professional*, *clinician* and *trauma treatment*. In formulating this literature review, I included websites supported by universities and experts in the field that presented research data, empirical studies, and conceptual frameworks specifically related to resilience, CF, vicarious traumatization, PTSD, and measurement instruments.

Because of the limited scope of interrelated domains throughout the research, I included three domains in this literature review: resilience, CF, and trauma. I integrated them into a conceptual framework with an emphasis on their overlapping constructs. Resilience is further described via its differentiation from posttraumatic growth and vicarious resilience. CF is described as "the formal caregiver's reduced capacity or interest in being empathic or 'bearing the suffering of clients' resulting from knowing about a traumatizing event experienced or suffered by a person" (Adams et al., 2006, p. 103). CF is presented in the literature regarding mental health professionals and PTSD and is compared to VT, which is a condition identified as negative psychological effects resulting from working with victims (Pearlman & McCann, 1990).

In the review on adaptation (e.g., cognitive adaptation, adaptation theory), I evaluated the origins of a theory, which is related to resilience theory. I described adaptation as a characteristic of resilience and/or how the inability to adapt contributes to vulnerability to CF Finally, I examined a comparative identification of convergences between the constructs of resilience, CF, and trauma for corollary relationships.

Background

Some mental health providers may believe that are immune to CF. Lawson and Venart (2005) studied mental health providers and found that clinicians serving in their roles (e.g., clinician, psychotherapists, nurses, and social workers) commonly assumed that they are invulnerable to the stresses and traumatic experiences of their clients. Lawson and Venart argued that this assumption is derived from the notion that because

professionals are well-educated about mental and emotional struggles, and because they are skilled at helping others deal with these problems, they are impervious or immune to experiencing mental or emotional problems as a result of working with victims of trauma.

Although a knowledge base is emerging in the literature about the stresses associated with being victimized by traumatic experiences (McFarlane & Yehuda, 2000), adequate research has not yet been conducted for understanding the long-term consequences that confront mental health professionals who provide vital psychological services to trauma victims (Adams & Riggs, 2008; Solomon & Berger, 2005). Because mental health professionals are increasingly called upon to respond to the needs of traumatic event victims, there are growing concerns about the psychological effect of providing care to patients who have experienced a traumatic event on the providers themselves (Bride, 2004). Adams et al. (2007) surveyed social workers who worked with victims in the aftermath of the World Trade Center attacks and found that there were psychological hazards for social workers treating clients who experienced severe trauma. Researchers who have studied clinicians' exposure to victims of trauma related to (a) natural and environmental disasters, (b) human-generated disasters (e.g., terrorism, technological, and criminal acts), (c) emotional and physical abuse (e.g., sexual, domestic violence, and neglect), and (d) war (e.g., Vietnam, Gulf War, Iraq, and Afghanistan) continue to shed light on the subject of one such occupational hazard, CF (Adams et al., 2008). As a result of attention given to the vulnerability of mental health professionals, empirical data surrounding the phenomenon of CF has continued to emerge in the research literature (Adams et al., 2006). The concept of CF has become more commonly

accepted and regarded as a threat to clinicians and calls for prevention strategies to protect clinicians have become more prevalent (Cohen, Gagin, & Peled-Avram, 2006; Jenkins & Baird, 2002).

Traumatic Events and Trauma Diagnoses

The diagnosis of trauma, particularly PTSD, is the only *DSM IV's* diagnosable condition that requires that "the person has been exposed to an event" (APA, 1994) that results in traumatization, which is classified as acute if the duration is less than 3 months and chronic when the symptoms persist more than 3 months. This definition does not exclude more than one event as in the case of physical, sexual, or emotional abuse, but it requires at least one traumatic event (Payne, Joseph, & Tudway, 2007). A catastrophic event is defined as "an extra-ordinary event or series of events which is sudden, overwhelming, and often dangerous, either to oneself or significant others" (Figley, 1985, p. xviii). Approximately 500 major disaster events occur worldwide each year that affect millions of people as they experience death, destruction, injury, and displacement (Norris, Baker, Murphy, & Kaniasty, 2005). Nearly 5 million people are displaced from their homes annually, and more than 80 million have a lack of fresh water, food, and medical attention (Norris et al., 2005).

The definition of trauma, according to the *DSM-IV* (1994), is an exposure to a risk of an individual's self-preservation, vulnerability to life-threatening danger, and adverse experiences that overwhelm the mental and emotional capacities to cope (APA, 1994, 309.81). According to Trippany et al. (2004), trauma can be described as "as an exposure to a situation in which a person is confronted with an event that involves actual or

threatened death or serious injury, or a threat to self or others' physical well-being" (p. 1). There are several sources of trauma through traumatic events or long-term exposure that can shock and overwhelm individuals (e.g., combat, rape, earthquakes, domestic violence, criminal assaults, accidents, sexual abuse, emotional abuse, and disasters) and are capable of causing a disorder (McNally, 2003). The intensity and duration of the traumatic event are factors that influence the incidence of posttraumatic reactions (Ekblad, 2002).

Natural Hazards and Environmental Disasters

Natural disasters can be traumatic events. Galambos (2005) described a natural disaster as ecological phenomena that occur without notice with a magnitude that requires assistance and interventions. According to Galambos, natural disasters are often devastating because of the increase in denser populations living within dynamic and active planetary regions that express natural movements, shifts, and changes in the elements (e.g., seismic earthquakes, volcanic activities, floods, wildfires, weather patterns, climate changes, etc.). The natural changes often create sudden environmental hazards, which lead to regional disasters all over the globe that overwhelm the resources of rescue systems (Galambos, 2005, p. 89).

Regional populations living near or around hazardous coastlines, rivers, volcanoes, and fault lines predispose individuals to higher levels of vulnerability to disasters that can cause trauma. Severe natural events such as hurricanes or earthquakes pose risks to humans in loss of life, property damage, financial instability, and health crises (Hultman & Bozmoski, 2006; World Health Organization [WHO], 2008).

Researchers have revealed how individuals cope with the resulting trauma caused by the loss of life, physical injury and dismemberment, disease, destruction of property, and the loss of socioeconomic stability (Norris et al., 2005).

Traumatic events are frequently compounded and exacerbated by human-generated interference, lack of preparation, poor building materials, or political resistance. Catastrophic events have necessitated the mobilization of mental health providers. According to the WHO (2008), "Many survivors may also require psychosocial support to deal with the mental trauma of the cyclone and its aftermath" (p. 1). Mental health providers may be called up on treat those who have experienced a traumatic event.

Human-generated Traumatic Events

According to Figley (2002), clinicians experience CF when working with patients who experienced the following human-generated traumatic types of events:

September 11, 2001, and terrorism. Researchers have focused on trauma and PTSD in relationship to human-generated acts of terrorism (Fraley, Fazzari, Bonanno, & Dekel, 2006). In the United States, the Oklahoma City bombings, the World Trade Center 1995 bombing, and the terrorist attacks on September 11, 2001, as well as the following anthrax scare, have all fostered a state of fear of future events (Greenberg, 2003; Morgan, 2004). In the post 9/11 world, some individuals experienced shock, confusion, mayhem, disruption, and the shutdown of complete biopsychosocial systems that acts of terrorism cause. In such circumstances, individuals remain defensive, if not hyper vigilant about possible future terrorist attacks (Shamai, Kimhi, & Enosh, 2007). For some victims, the

9/11 terrorist attacks were the genesis of developing trauma reactions and PTSD (Noppe, Noppe, & Bartell, 2006). The attacks left people in need of psychological treatment, and consequently mental health professionals who provided emergency and ongoing mental health services were affected as they dealt with thousands of people in the following days, months, and years (Padgett, 2002).

Physical, emotional, sexual abuse, and violence. Another source of trauma stems from some sort of threat of harm to a person or their body. Physical and sexual abuses and rape are other sources of trauma that clinicians are exposed to while working with victims (McNally, 2003). Rosen, Ouimette, Sheikh, Gregg, and Moss (2002) studied substance abuse in women and found that a majority of women seeking treatment for substance abuse are victims of sexual and physical abuse, although men are less likely to report that they were sexually or physically abused as children. Rosen et al. also stated that severe interpersonal difficulties and comorbid psychiatric disorders such as PTSD are the outcomes of physical abuse (p. 683). Ultimately, emotional abuse and neglect may not leave physical or visible scars, but such abuses can be traumatic to those most vulnerable, namely women, children, and the elderly. Smullens (2002) argued that

> Because the behaviors which constitute emotional abuse appear on the surface at least as less transgressive within our cultural norms, this attitude is more likely to attach and find a foothold in the discussion of emotional abuse than in that of sexual or physical abuse. (p. 16)

Smullens held that emotional abuse, although destructive, may not be readily visible.

Clinicians who are exposed to traumatic material may be negatively influenced. Saltson and Figley (2003) studied clinicians who worked with victims of physical, emotional, and sexual violence and found that some clinicians who worked with victims of sexual abuse were at risk for being vulnerable to developing CF. Therefore, it is important that mental health practitioners be provided with the tools needed to prevent the onset of CF.

War-related trauma and PSTD. Wars are another source of trauma for soldiers and civilians alike. The Vietnam War and the psychological and emotional effect it had on the soldiers who returned was instrumental in bringing awareness of the diagnosis of PTSD into the psychiatric field of medicine (Taft et al., 2005). Although war can be considered a "human-generated" trauma-inducing activity (Walsh, 2002), researchers have treated war-related trauma separately from acts of terrorism. Terrorism is seen as an act of criminal violence that international, antiterrorism laws seek to prosecute in world courts (Miller, 2002; Weiss, 2002). The world courts, on the other hand, state that wars are an act of declared war by one nation against another (Johnson, 2007).

War-related PTSD mainly affects U.S. soldiers returning from foreign wars. Soldiers who have faced physical danger from land mines, shelling, sniping, and combat experience heightened awareness and hyper vigilance of imminent harm and death (Walsh, 2002). Additionally, soldiers' immediate family members are often vulnerable to being adversely affected as a result of living with the soldier's PTSD symptoms (e.g., anger, paranoia, and aggression) or combat stress reactions (Walsh, 2002).Civilians caught in the middle of a war also experience traumatization (Solomon & Berger, 2005). Personal risks and fear for the safety of loved ones keeps individuals in survivor mode.

War-related stress as a result of fleeing violence, limited availability of food and fresh water, and witnessing death becomes a source of traumatic stress for those trying to survive war (Hobfoll et al., 1991). The experiences of loss and separation from parents, children, and siblings may cause the surviving persons to be left with traumatic memories and experiences (Sims, Hayden, Palmer, & Hutchins, 2000).

Mental Health Providers for the General Population

In the United States, after the terrorist attacks on the World Trade Center and the Twin Towers, mental health clinicians had to provide mental health treatment to the masses. According to Novick (2003), social workers played a role in answering the need for large numbers of mental health workers in the aftermath of the U.S. World Trade Center attacks. Novick reported that more than a 1,000 social workers were contacted through their local chapters to provide mental health assistance to victims of the attacks (p. 153). To accentuate the potential number of clinicians who may be exposed to trauma victims in the wake of disasters, the Red Cross reported that 40% of its volunteers were social workers prior to World Trade Center attacks (as cited in Webb, 2000). Research focused on the risks associated with mass traumatization in relation to trauma work has increased because of the number of catastrophic events that called for responses by greater numbers of mental health workers (Figley, 1988; Novick, 2003). Catastrophic events have brought about a heightened research interest concerning the effect of trauma on individuals and on the general population, highlighting the need for more effective disaster mental health responses (Goodman & West-Olatunji, 2008).

Despite the increased need for more mental health services, there may be a shortage of professionals who can provide mental health treatment. According to the WHO "there is a shortage in the number of mental health professionals in the world as a whole" (as cited in Saxena et al., 2006, p. 179). Mental health professionals are shouldering heavier caseloads in order to make up for the shortage, thus exposing them to higher stress levels, risks, and traumatic material. Mental health providers play a role in answering a global need for psychological services. The WHO stated that "mental health professionals form the backbone of the mental health care delivery system" (as cited in Saxena, et al., 2006, p. 179). As a result of the worldwide shortages in mental health providers, existing mental health workers are being called upon to fill the gap in providing psychological services whenever a disaster strikes. Filling the shortage gap increases existing clinicians' exposure to the traumatic material of disaster victims. As trauma, domestic violence, war, and environmental change continues to be a societal concern, safeguarding mental health providers' emotional well-being is essential for ensuring that trauma victims will continue to receive the professional health care that they need.

Expansion of Trauma Diagnosis

Mental health clinicians seeing increased prevalence of trauma cases within their professional settings may be because of the historical and modern broadening of understanding what causes PTSD. Since the Vietnam War, the mental health profession has made headway concerning the diagnosis and treatment approaches of trauma (Walsh, 2002). McNally (2003) argued that "the *Diagnostic and Statistical Manual* (4th ed.)

significantly broadens the definition of a traumatic stressor," which contributes to higher numbers of individuals being diagnosed with PTSD (p. 230). The *DSM-IV* (1994) stated that exposure to a traumatic event is experienced when both of the following are present: (a) the person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to physical integrity of self or others; and (b) the person's response involved intense fear, helplessness, or horror (p. 209). The *DSM-IV's* expansion of criteria for developing PTSD has subsequently resulted in an increased number of individuals diagnosed with the disorder, which has also increased the number of mental health providers needed to treat these individuals, thus exposing more providers to the associated risks. In addition to answering the mental health needs of those who experienced disaster events, mental health professionals are providing routine psychological treatment for survivors of criminal victimization, such as in cases of domestic violence, sexual abuse, child neglect, abuse, racial attacks, homicide, and criminally negligent accidents (Salston & Figley, 2003).

Beyond disaster events, there are clinicians who routinely work with victims of abuse, rape, sexual assault, work-related accidents, and accidents that deal with the traumatic material their clients present. Trippany et al. (2006) asserted that adult survivors of sexual abuse often manifest symptoms within the trauma framework and that "mental health counselors need to consider if the symptomatic behaviors are more indicative of a posttraumatic response, specifically trauma reenactment" (p. 95). Sexual abuse, along with a wider spectrum of trauma-exposing events and behaviors, is now

more readily diagnosed as antecedent to PTSD (Grubaugh, Elhai, Cusack, Wells, & Fruch, 2007).

PTSD: Prevalence in the General Population

The prevalence and influence of PTSD in both adults and children has accumulated from a review of World War II and the Vietnam War, which identified the stressful effects of war as having negatively affected returning veterans and their families (Walsh, 2002). However, researchers and practitioners identified PTSD symptoms in segments of the general population that mirrored the PTSD symptoms that veterans brought back from wars, thus underscoring that PTSD was common beyond a war-specific diagnosis. Wilson, Raphael, Meldrum, Bedosky, and Sigman (2000) stated that "the effects of psychological trauma and the types of events that cause PTSD are neither unidimensional nor equivalent" (p. 181). A wider spectrum of trauma causes is now routinely assessed when individuals seek help. McNally (2003) stated, "Despite references to life threat and injury, *DSM-IV* significantly broadens the definition of a traumatic stressor" (p. 229). Breslau (2002) asserted that "changes in the *DSM-IV* definition of 'stressor' have increased the number of traumatic events experienced in the community that can be used to diagnose PTSD and thus, the number of PTSD cases" (p. 923). War veterans and their families can both experience symptoms of PTSD.

PTSD studies with different populations have broadened the range of understanding how individuals become traumatized as a result of a variety of stressful events. Wilson (1994) argued that PTSD is a potential outcome of normal human stress reactions to life threats and that a rapid increase in research studies with a variety of

populations that experienced trauma gave rise to new questions and modifications in understanding the complexity of stress-response syndromes. Souza and Spates (2008) have brought awareness of PTSD's nature and its relationship with different comorbid conditions in which PTSD is more likely to occur when other psychological conditions are pre-existent. Wilson (1994) looked at PTSD survivors and emphasized the need to look at pre-existing comorbid psychological conditions. Wilson stated, "Although PTSD was initially a controversial diagnostic category in some medical-legal circles, the net effect to date has been to stimulate more research programs, promote clarification in terms of differential diagnosis and the understanding of comorbid conditions" (p. 692). Mueser et al. (1978) found that "the rate of PTSD was highest in patients with depression (58%) and borderline personality disorder (54%), followed by other diagnosis (47%), bipolar disorder (40%) and all other personality disorders (40%), and lowest in schizoaffective disorder (37%) and schizophrenia (28%)" (p. 497). Awareness among researchers and clinicians about the causes of trauma now extend beyond the war-related concerns to encompass a gambit of causations, such as domestic violence, sexual abuse, disasters, HIV, and terminal illnesses.

Human suffering related to traumatic events is more prevalent in the general population than may be expected. Researchers continue to reveal how pervasive trauma might be as a societal condition. McNally (2003) argued, "A person who merely learns about someone else being threatened with harm qualifies as having been exposed to trauma and is therefore eligible for a PTSD diagnosis (assuming fulfillment of symptomatic criteria)" (p. 229). Furthermore, Wilson (1994) asserted that "the existence

of PTSD [as a diagnosis] also helped to validate and legitimize the suffering of those victimized by stressful life-events" (p. 692). The legitimizing of trauma as a diagnosable condition also is important for those who are charged with their professional care. Therapist-client interactions, treatment, and routine exposure to those diagnosed with PTSD raise concerns about the subsequent potential health risks and harm that the providers themselves may experience.

PTSD: Increased Awareness

Increased awareness about the causes of PTSD may contribute to the likelihood that more people will seek professional treatment (Miller, 2002). According to Liebschutz et al. (2007), "Media coverage of the 2001 World Trade Center attacks increased American awareness of posttraumatic stress disorder (PTSD) as an important psychiatric diagnosis" (p. 719). Because of the media coverage, the acronym PTSD has become an integral part of mainstream society's lexicon, as the subject of trauma is frequently discussed via popular media forms (e.g., news reports, informational websites, documentaries, movies, and commercials), which often focus on the psychosocial issues related to relatively recent events of the decade, such as the World Trade Center attacks, Hurricane Katrina, Southeast Asia tsunami, and the Iraq War. Additionally, attention given to the causes and symptoms of PTSD as a result of publicized domestic homicides among veterans and military families have also increased the collective awareness that PTSD is a social concern that needs to be addressed (Taft et al., 2005).

A Need for a Paradigm Shift

There has been an increase in the number of PTSD cases being diagnosed in the general population, which means that more mental health professionals are being exposed to the consequences of treating PTSD (Stein, Walker, Hazen, & Forde, 1997). The hazardous nature of working with patients who have experienced a traumatic event ultimately calls for a paradigm shift in how mental health professionals not only treat PTSD, but also a heightened awareness of the potential risks to themselves as treating professionals. The new paradigm of resilience versus CF needs to be added to the repertoire of coping strategies. Furthermore, a strengths-perspective paradigm based on existing knowledge of human resilience and how individuals can enhance their resilience may aid clinicians in their important work with trauma victims.

Resilience Theory

Resilience Definition

There are a variety of definitions of resilience. Collins (2007) defined resilience as "an adaptive state and personality trait evident in many people, including social workers, but it is influenced by many variables such as culture" (p. 255). According to Hernandez et al. (2007) resilience is "the way in which trauma survivors access adaptive processes and coping mechanisms to survive and even thrive in the face of adversity" (p. 229). Agaibi and Wilson (2005) found that resilience was characterized as a behavioral reaction with favorable outcomes in the face of a traumatic life event. Resilience is also viewed in the literature as being a "buffer" that protects the individual from negative environmental influences and forces. Resilience has, likewise, been described in relation

to the personal traits and internal resources of coherence and self-efficacy (Moen & Erikson, 1995; Moos, 2002). The multidimensional nature of resilience is also important to note because resilience can encompass many dimensions (e.g., competence, cognitive outcome, academic achievement, self-esteem, social resources, self-efficacy, and life satisfaction); yet, an individual does not necessarily need to be resilient in all dimensions for favorable outcomes (Tiet & Huizinga, 2002).

Background of Resilience

Psychologists have researched resilience and coping since the 1970s (Kitano & Lewis, 2005). The investigation of resilience, both theoretically and constructively, has also extended to the fields of developmental psychology (e.g., the works of Piaget, Erickson, and Vaillant) and clinical social work, with the bulk of the research being focused on children and youth developmental issues and with less emphasis given to adult concerns (Collins, 2007). Historically, researchers have focused on the negative effects mental health professionals working with victims of trauma experienced. There is an increased interest in the potential hazards and consequences of treating trauma victims for the helping professional (Saltson & Figley, 2003). Attention to the potential risks of developing CF has also become more pertinent because of the higher numbers of disaster-related trauma victims clinicians are treating (Cunningham, 2003).

However, little information exists concerning resilience in clinicians working with trauma victims (Killian, 2008). The basic nature of trauma entails some aspect of violent and horrifying images related to physical and mental threats of death, pain, torture, or unusual treatments (Deighton, Gurris, & Traue, 2007; Souza & Spates, 2008;). There is a

potential for the mental health professional to experience a negative effect on their professional and personal lives;in turn, the potential for detrimental effects upon the quality of care is a pressing issue. On the other hand, possibly more incidents exist of mental health providers who remain resilient and yet go unnoticed and unstudied.

A concept of resilience that describes how clinicians maintain functioning in the face of persistent exposure to the traumatic material of their clientele has not yet been examined (Bonanno, Galea, Bucciarelli, & Vlahov, 2007). Pearlman and Saakvitne hypothesized that "maladaptive defense styles among therapists may create vulnerability to trauma-related symptomatology" (as cited in Adams & Riggs, 2008, p. 26). Therefore, understanding why some clinicians are more resilient than their counterparts would be valuable information for the mental health profession to develop preventive methods that could aid clinicians in staving off the risk of developing CF (Hernandez et al., 2007).

Resilience theory has resurfaced in importance in the past decade, perhaps because of the aftermath of several catastrophic events as a means of studying how people survive, cope, and even thrive through the life-threatening situations and life-altering challenges (Hultman & Bozmoski, 2006). *The Social Work Dictionary* (4th ed.), described resilience as "The ability to recover, spring back, or return to previous circumstances after encountering a problem or stresses. This is a factor that social workers consider in answering their clients and in developing prognoses and treatment plans" (as cited in Baker, 1999, p. 411). Saleebey (1997) argued that resilience may be seen as a component of human strength, an idea that is continually evidenced through the ages in various forms of narrative communications, arts, and literature, such as "folk

talk," poetry, novels, metaphors, venerable archetypes, and idioms of culture. From a humanistic perspective, these forms of traditional storytelling highlighted examples of "the strength that it takes to be a person" as the narrative stories celebrated rites of passage, comings of age, and great historical achievements in the face of adversity that elevated the human spirit and resilience (Saleebey, 1997). This humanistic perspective ultimately places more emphasis on the resilience and empowerment derived from circumstances of adversity by placing the narrative of human resilience in the center of the cultural life and the psyche of a society, which Saleebey conceptualized as the strengths perspective.

Both concepts of resilience and strengths perspective are commonly viewed as similar, but Norman (2000) stipulated that "although resilience and the strengths perspective are frequently discussed together, the terms are not interchangeable." Norman further clarified the differences:

> Resiliency best describes the application or operationalization of the strengths perspective while 'the focus of the strengths perspective is on empowerment,' which is in terms of supporting individuals, groups, families, and communities 'to discover and expand the resources and tools within them and around them. (p. 40)

Saleebey (1997) not only acknowledged resilience as a component within the strengths-perspective construct but further asserted that the nature of resilience is important to understanding how social constructs (e.g., family, social institutions, and faith groups) can contribute to a synergistic exchange of strengths that, in turn, produce resilience as a result that is greater than the sum of their individual effects.

Resilience and Developmental Psychology

Developmental psychology deals with the changes and growth in cognitive, social, and emotional functioning that transpires throughout the human lifespan. Developmental psychology is also directly concerned with how humans remain resilient while navigating through the stages of life using adaptation to navigate conflicts and adversities presented by each stage (Collins, 2007). Resilience theory has made inroads into the realm of human developmental research beginning with early childhood and adolescence; however, more research on resilience throughout the adult lifespan is needed. Refining the theory of resilience in terms of other lifespan stages continues to be an ongoing interest in the research (DiRago & Vaillant, 2006). Piaget (1962) and Erikson (1959) laid the foundation for researchers and practitioners interested in lifespan research.

According to Piaget's stage theory of cognitive development, each stage of cognitive development depended upon the previous stage's achievement of complex interactions (e.g., sensory-motor assimilations, object conservation, problem solving, and schema integration) that transpired between the internal and external worlds of the child (as cited in Robinson, 2000). Piaget and Inhelder (1969) described functional assimilation as the child's cognitive tasks of adapting the environment to him or herself. Piaget (1962) believed that individuals seek a balance between their inner selves and their external environment and observed that children developed an ability to organize their cognitive experiences in order to achieve this balance (p. 242). The child's need to construct an internal constancy and continuity is essential for the child's wellbeing. Children need to

assimilate different constructions, the old to the new, in order to ensure their survival and development (DuPont, 1994).

Correspondingly, Erikson's (1959) theory of eight lifespan stages provided lifespan theorists with the framework for human psychosocial development that occurs in stages in order to identify categories of behaviors and mechanisms (such as perception, information processing, action control, attachment, identity, and personality traits) that emerge, develop, and strengthen as a result of stage mastery. Erikson (1959) focused less on pathology and more on how individuals achieved and maintained levels of success in overall psychosocial health. Erikson (1950) stated, "We cannot even really know what causes neurotic suffering until we have an idea of what causes real health" (p. 93). Essentially, Erikson laid the foundation for understanding human resilience through adaptive coping mechanisms and behaviors.

Resilience has been studied particularly in child development. There is a growing body of researchers who have addressed the constructs of resilience in terms of "at-risk" children and adolescents (Miller, 2003). Researchers have examined how some children overcome or "beat the odds" of a particular adversity while other children succumb. Fostering resilience in at-risk children by identifying proactive approaches that enhance children's ability to cope with and manage traumatic experiences has been the goal of researchers interested in defining resilience skills so that they may be taught to children (Alvord & Grados, 2005). Understanding the development of child confidence is also essential for creating practical approaches to ensure that children, especially those who

are at-risk, get the right kinds of programs and supportive systems that foster resilience (Masten & Coatsworth, 1998).

Children who function fairly well and are described as *stress resistant* have also been labeled as resilient. Alvord and Grados (2005) studied the nature of resilience in children and suggested proactive clinical methods for enhancing child resilience. Attempts to understand how these children adapt to environmental stresses have researchers looking to identify protective factors that insulate them from potential harm. The notion that some children may be emotionally resilient and possess "a general capacity for flexible and resourceful adaptation to external and internal stressors" is thought by some to result from personality development (Collins, 2007, p. 256).

Adolescent resilience is also an important area of resilience research. DiRago and Vaillant (2007) evaluated resilience by examining the longitudinal literature concerning 456 inner-city youths who Glueck (1950) selected and tracked from adolescence to 65 years of age. DiRago and Vaillant examined participants' lifelong occupational outlooks across the human lifespan. DiRago and Vaillant found that childhood protective environmental factors and family social class were predictors of occupational status later in early adulthood, but became increasingly less significant when assessed at ages 32, 47, and 65. DiRago and Vaillant found that childhood development was more significant as a predictor than childhood social environment.

Theoretical Framework of Resilience

Historically, resilience has had an intuitive appeal to researchers, which is evidenced by a considerable body of literature exploring a range of resilience

characteristics associated with the lifespan stages of human development throughout childhood (Luthar & Zigler, 1991), adolescence (Braverman, 2001), adulthood (Vaillant, 2000), family development (Black & Lobo, 2008; White, Richter, Koeckeritz, Lee, & Munch, 2002), old age and geriatrics (Nygren et al., 2005), disease (Denz-Penhey & Murdoch, 2008), and ultimately death (Glantz & Johnson, 1999). Likewise, resilience as a theory and as a construct is also evolving in the research literature (Bonanno, Galea, Bucciarelli, & Vlahov, 2007; King, King, Vogt, Knight, & Samper, 2006; Luthar, Cicchetti, & Becker, 2000). Both resilience theory and resilience frameworks have been the focus of developmental psychology with children (Gjerde, Block, & Block, 1986; Miller, 2003). However, a burgeoning interest in resilience in relation to a variety of other contexts has emerged in recent years (Ablett & Jones, 2007; Connolly, 2005).

Resilience Construct: Critics and Proponents

Arguments for resilience as a construct are evident in favor of its validity. Luthar, Cicchetti, Becker, and Bronwyn (2000) asserted that "resilience is a dynamic developmental construct" (p. 555). Although some critics of resilience theory have asserted that the construct has dubious scientific value and expressed misgivings about the rigor of resilience theory, proponents of resilience seek to establish its construct validity and argue that a theory of resilience is making headway through the critical evaluations (Luthar, Cicchetti, Becker, & Bronwyn, 2000). According to Luthar, Cicchetti, Becker, and Bronwyn (2000), researchers have expressed some criticism concerning the rigor of theory in the area of resilience with a few scholars asserting that the construct of resilience has uncertain or ambiguous scientific value (Cicchetti &

Garmezy, 1993; Luthar, 1993). However, Luthar, Cicchetti, Becker, and Bronwyn (2000) critically evaluated the construct of resilience and contended, "We do not believe that existing studies on resilience have inadequate bases in theory or that they lack conceptual recognition of transactions involving contexts of development" (p. 552). Furthermore, resilience as a theory has played an important role in longitudinal life span and life-cycle developmental theories (Luthar, Cicchetti, & Becker, 2000; Smith-Osborne, 2007). Resilience has several theoretical assumptions that are interrelated. Green, Galambos, and Lee (2003) listed some of the key theoretical assumptions of resilience:

- A biopsychosocial and spiritual phenomenon
- Involves a transactional dynamic process of person-environment exchange
- Encompasses an adaptation process of goodness-of-fit
- Occurs across the life course with individuals, families, and communities experiencing unique paths of development
- Is linked to life stresses and people's unique coping capacity
- Involves competence in daily functioning
- May be on a continuum—a polar opposite to risk
- May be interactive, having an effect in combination with risk factors
- Is enhanced through connection or relatedness with others
- Is influenced by diversity including ethnicity, race, gender, age, sexual orientation, economic status, religious affiliation, and physical and mental ability

- Is expressed and affected by multilevel attachments, both distal and proximal, including family, school, peers, neighborhood, community, and society; consequently, resilience is a function of micro-, exo-, mezzo-, and macrofactors
- Is affected by the availability of environmental resources
- Is influenced by power differentials

Researchers who have studied the constructs of resilience have supported arguments for (a) its theoretical basis (Luthar et al., 2000), (b) it being measurable (Conner, 2006), (c) it being used as a predictor (Hjemdal, Aune, Reinfjell, Stiles, & Friborg, 2007; Smith-Osborne, 2007), and (d) it being researched across differing demographics. Furthermore, reviews focused on resilience as a construct, although relatively limited, are increasing in the literature, providing parallel evidence and applying various measuring strategies about the correlates of resilience with empirical evidence to establish the construct validity (Conner & Davidson, 2003).

Resilience and Similar Constructs

Constructs used to describe the terms resilience, hardiness, and self-efficacy are frequently used interchangeably because of overlapping conceptual similarities (Collins, 2007). Almedon (2005) suggested that a theory of salutogenesis encompasses the related concepts of resilience and hardiness. Bonanno (2004) argued that hardiness was one of several pathways to resilience when an individual is confronted by stressful circumstances.

The constructs of resilience and posttraumatic growth also have some overlap in the research literature around the subject of positive adaptations (Harvey, 2007). Arnold, Calhoun, Tedeschi, and Cann (2005) argued that posttraumatic growth was an outcome that was self-reported by 18 of 21 psychotherapists in the course of their work with trauma victims. Scurfield (2005) examined the literature on positive posttraumatic event responses in the wake of Hurricane Katrina and emphasized the positive adaptive outcomes related to the concepts of resilience and posttraumatic growth. Resilience and posttraumatic growth have overlapping construct elements but are equally different.

Resilience as Positive Outcomes

Resilience is conceptually operationalized in terms of positive outcomes. Resilience is not just identified as one or a few specific characteristics, but rather resilience is identified as the positive outcome of a total sum or aggregate of personal qualities, character traits, and responsive patterns that are activated in the face of adversity (Bain & Neal, 2004; King et al., 2003). Luthans, Vogelgesang, and Lester (2006) asserted that "extensive clinical research also established that both external (contextual) and internal (psychological) characteristics influence one's capacity for resilience" (p. 28). Smith-Osborne (2007) found "a positive relationship between a number of individual traits and contextual variables and resistance to a variety of risk factors" (p. 152).

Resilience as an adaptational mechanism as measured by *DSM-IV's* Defense Function Scale, may be viewed as a form of coping strategy, which helps the individual overcome threats (Vaillant, 2000). Furthermore, researchers have identified and explored

several characteristics attributed to resilience outcomes in face of adversity: adaptation (Tiet & Huizinga, 2002), positive adjustment (Luthar, Cicchetti, & Becker, 2000), active avoidance behaviors (Salston & Figley, 2003), coping skills (Dunkley & Whelan, 2006; Rexrode, Petersen, & O'Toole, 2008), social networking (Edward, 2005), denial (Reeves, Merriam, & Courtenay, 1999), repressive coping (Coifman, Bonanno, Ray, & Gross, 2007), culture-specific predictors (Utsey, Bolden, Lanier, & Williams, 2007), religious belief and spirituality (Weaver, Flannelly, Garbarino, Figley, & Flannelly, 2003), dissociation (Bonanno et al., 1995; Coifman et al, 2007), and numerous other characteristics.

According to Mancini and Bonanno (2006), the operational concept of resilience has to be placed within the context of an "outcome after a highly stressful event" (p. 972), such as in the face of potential trauma or life-threatening situations. Other adverse situations examined in relation to resilience span from a single stressful life experience to trauma related to war (Luthar, Cicchetti, & Becker, 2000). Studies focused on resilience characteristics are concurrently related to different studies regarding risks, adversities, and vulnerabilities that trigger one or more resilience characteristics that are commonly observed in human behavioral response patterns (Haeffel & Grigorenko, 2007). These triggered resilience-responsive characteristics are meant to counteract risk factors (Luthar, 1991; Meyer, 2003). Interest in resilience as an aspect of coping with PTSD is another area of research related to coping with traumatic risks (King et al., 2006).

Resilience: Human Trait or Human Process?

Resilience has met some definitional challenges throughout the research literature. In the resilience literature, there is a limited agreement about its definitions with variations about the operationalization and constructs of resilience (Luthar, Cicchetti, & Becker, 2000) being based upon the diverse research contexts. One of the critiques of the resilience construct has been about the ambiguity that has existed with its definition during the past few decades. Conceptually, there is a dichotomy of definitions of resilience throughout the research literature. The subtle ambiguity appears to be related to two directions found in defining resilience. This dichotomy may lead to a questioning of whether resilience is a basic human characteristic or a human process related to internal and external dynamic factors.

Resilience as a Human Trait

The view that resilience is an innate human character trait that interacts with the environment is supported by many lifespan researchers, who have acknowledged resilience as an aspect of stage mastery. Advances in the fields of biology and neuroscience can support the definition for resilience as a human developmental trait (Smith-Osborne, 2007, p. 160). Resilience theory holds that these personal, protective traits are activated in response to environmental adversity (Smith-Osborne, 2007). Erikson (1959) stated that a healthy psychosocial epigenesis of personality development through childhood and adolescence depended on an individual's ego self-identity being solidified through stage mastery that carried on throughout his or her lifespan. Erikson believed that life-stage mastery was achieved as the ego develops through interactions

and adaptations to the immediate social environment (as cited in Smith-Osborne, 2007). Erikson implied that the individual ego develops as a result of dynamic interactions between self and environmental adversity (as cited in Markstrom, Li, Blackshire, & Wilfong, 2005). Subsequently, the innate human need to survive activates an internal adaptive ability that then struggles and perseveres through the adversity.

A biopsychosocial model of human development may substantiate arguments supporting the innate nature of human resilience. Smith-Osborne (2007) asserted, "Resiliency theory has, from its inception, been remarkable for encompassing the broad biopsychosocial aspects of human development, as well as for cross-referencing empirical findings on normative healthy human development with findings on pathological development" (p. 158). Studying human resilience through biopsychosocial lenses incorporates the realms of organic brain research, neuroscience, genetics, and clinical psychology. Brendtro and Longhurst (2005) studied the "resilient brain" and found that

> Perhaps the most exciting finding is that the human brain is designed to be resilient. Resilience is universal across all cultures and encoded in human DNA. New imaging techniques are providing a better understanding of key brain-based processes impacting risk and resilience. It turns out that the brain is in the business of overcoming risk. (p. 52)

The notion that the brain is designed for survival through instinctual behaviors (e.g., fight or flight) has long been the premise for several fields of psychology (e.g.,

neuroscience, psychoanalysis, clinical psychology, lifespan psychology, and developmental psychology) and is supported by Darwinian theories of evolution (as cited in Coss & Charles, 2004). Built-in human survival instincts may be an aspect of what is viewed as human resilience. Resilience is an innate human trait—a drive for survival (Brendtro & Longhurst, 2005; Jacelon, 1997). The National Institute of Mental Health (NIH, 2010) found that a mechanism that explains resilience to stress and vulnerability to depression was linked to a molecule gene regulator, deltaFosB, which was increased in stress-induced mice that experienced other aggressive mice for 10 days; triggering deltaFosB in the reward circuit's hub contributed to resilience in that it protected the mice from depression-like symptoms. The level of deltaFosB the stress induced determined susceptibility or resilience to developing the depression-like behaviors (e.g., social withdrawal, avoidance, defeatedness, etc.), which meant that the more resilient mice produced higher levels of this molecule that protected them from depression (NIH, 2010).

Charney (2004) asserted that resilience is part of a neural mechanism related to reward and motivation. Furthermore, advances in psychobiological research have provided evidence that the human mind-brain is intended for resilience through successful adaptations to a constantly changing environment. Psychobiological research on resilience provides a new paradigm for investigating the nature of trauma, PTSD, and other anxiety disorders based on a "resilience-survival" perspective (Charney, 2004).

The concept of *fear circuitry* implies that anxiety is a form of "switched on resilience-survival-related brain functions" that are stuck in the "on" position and cannot be switched "off" (Stefan, 2006). Fear circuitry, as studied in clinical child psychology, is

linked to separation anxiety and the notion that children, and thus adults, become conditioned to "internal cues of arousal with distress reactivity," as well as experiences that "increase alertness to internal somatic events that signal the possibility of becoming anxious" and therefore, develop avoidance behaviors as "a function of coping skills an individual employs to deal with unexpected panic" (Mineka & Suomi, 1978).

PTSD symptoms include hyper vigilance, avoidance, and jumpiness. In contrast to PTSD, routine self-protective behaviors (alertness, avoidance, quick reactivity, etc.) that are typically activated in lesser threatening situations (e.g., staying alert for bears while hiking in the woods, riding a bicycle on a busy road while watching out for cars, or skiing down a hazardous slope) can be deactivated when the situation has passed (Felder, Monson, & Friedman, 2007). On the other hand, if the brain, as a result persistent trauma or abuse is being chronically stimulated, the brain will go into a survival mode and act as if it is in constant threat (Perry, 2009). This over-reactive neurological response, the need to survive, may have contributed to humans' primal evolutionary predisposition to be resilient, and thus survive and even thrive in adversity.

Researchers who have conducted neuropsychological studies of patients who are split-brain patients point to the brain's important neurocognitive ability called *the interpreter*, which allows the brain to integrate and interpret cause and effect through sensory inputs (Gazzaniga, 1988: Peterson, Seligman, & Vaillant, 1988; Seligman, 1991). Vance (2001) found that the interpreter function in resilient individuals is biased toward specific patterns of interpretation that may be viewed as "protective perceptions," which allowed for resistance to feelings of helplessness and for a leaning toward a more positive

outlook (p. 66). With an emerging host of new studies in brain functioning based on the advances in the biological sciences, the argument for resilience being a "trait" of human psychobiological complexity continues to be advanced.

Resilience: A Dynamic Process

Resilience has also been viewed as a function of human processes, as indicated by subtle definitional differentiations. According to Haeffel and Grigorenko (2007), resilience is "a dynamic process encompassing the manifestation of positive functioning despite possessing vulnerabilities or the presence of high risk" (p. 435). Luthar, Cicchetti, and Becker (2000) also described resilience as "a dynamic process encompassing positive adaptation within the context of significant adversity" (p. 543). Resilience, a process that builds strength of self-esteem and self-efficacy, occurs through interactions between the individual's self-protective factors and environmental risk factors, which lead to successful navigation of the environment. The individual calls upon internal strength-based resources (e.g., confidence, resolve, and determination) and external resources (eg., family, friendships, religious faith, health-care providers) for support and strength (Smith, 2005).

A Metatheory of Resilience: Simultaneous Trait and Dynamic Processes

Researchers have examined resilience of individuals throughout the human lifespan in a variety of situations related to health, education, trauma, and other life events. Some scholars have examined resilience as a trait and others have viewed resilience as a process; however, less agreement exists about resilience as a process. Although the resilience definitions meet a figurative "fork in the road" regarding trait

versus process, the definitional and theoretical roads appear to reconnect to a central conceptual and operational understanding that emphasizes that resilience traits are not only developmentally innate, but also depend upon dynamic, process-driven interactions with an adaptation to the environment (Jacelon, 1997).

According to White, Driver, and Warren (2008), the research literature lacks a universal definition of resilience, and yet, they found agreements in the literature among the qualities believed to characterize resilience: "(a) psychological and dispositional attributes, (b) family support and cohesion, and (c) external support systems" (p. 10), which integrate traits and internal-external processes. Richardson (2002) attempted to further integrate the subtle discrepancies in the resilience literature by presenting a metatheory of resilience, which argued that the differences were because of ongoing resilience research in the past several decades that emerged in different "waves" of inquiry. Richardson (2002) explained resilience research in the following three waves:

> The identification of resilient qualities was the first wave characterized through phenomenological identification of development assets and protective factors; the second wave described resilience as a disruptive and re-integrative process for accessing resilient qualities; the third wave exemplified the postmodern and multidisciplinary view of resilience, which is the force that drives a person to grow through adversity and disruptions. (p. 307)

Richardson's (2002) metatheory synthesized previous resilience literature based on a gathering of theoretical concepts from physics, psychology, and medicine, thus

strengthening resilience as a theoretical construct (White, Driver, & Warren, 2008). Some of the more recent definitions of resilience include a definitional integration of both traits and processes. For example, Hernandez, Gangsei, and Engstrom (2007) included both trait and process in their use of resilience and defined resilience as "the way in which trauma survivors access adaptive processes and coping mechanisms to survive and even thrive in the face of adversity"(p. 229). According to White, Driver, and Warren (2008), "Resilience is considered a multidimensional, dynamic construct made up of a variety of personal qualities. Individuals who posses these personal qualities are more likely to positively adapt when exposed to a traumatic event" (p. 10). Likewise, Collins (2007) asserted that resilience is "an adaptive state and personality trait evident in many people, including social workers, but it is influenced by many variables" (p. 255).

The literature has evolved to reflect emerging areas of agreement with the definitions of resilience: (a) becoming more global as a human survival trait that is activated in the face of risks and adversity and manifested in behavioral responses (Smith-Osborne, 2007) and (b) acknowledging the trait-process duality of resilience that one cannot exist without the other; in other words, the innate function of the character trait is intertwined with the other external processes, such as social support (Jacelon, 1997; Richardson, 2002, White et al., 2008). According to Jacelon (1997), "Resilience has been identified as a constellation of traits; it has also been identified as a process by which individuals respond to environmental stimuli" (p. 128). The metatheoretical argument about resilience being either a trait or a process is aligned with the "nature versus nurture" arguments that are frequently made concerning numerous

biopsychosocial research issues such as genetics and human behavior, genetics and sexual orientation, genetics and diseases, genetics, and interactions with the environment in the process of human development.

Resilience Characteristics

Researchers have identified and examined characteristics of resilience. Friborg et al. (2003) viewed resilience as a construct that involved both internal protective characteristics and external resources that interact to help the individual achieve a homeostatic balance when facing adversity. Friborg et al. created the Resilience Scale for Adults, which is a questionnaire with 33 items identified in subcategories: personal strength, social competence, structured style, family cohesion, and social resources. Connor (2006) conceptualized resilience as a means of measuring the ability to cope with stress. Resilience is, therefore, described in personal characteristics that make it possible to cope with stressful events. In order to identify and quantify the various characteristics of resilience, Connor (2006) developed the CD-RISC, which is used to measure resilience in relationship to PTSD and trauma. See Table 1 below for information about the characteristics of resilience after trauma.

Table 1
Characteristics of Resilience Assessment of Resilience in the Aftermath of Trauma

Characteristic	Source
Internal locus of control	Kobasa, 1979
Strong sense of commitment to self	
Sense of meaningfulness	
Ability to view change/stress as a challenge	
Engaging the support of others	Rutter, 1985
Secure attachments to others	
Personal or collective goals	
Self-efficacy	
Sense of humor	
Strong self-esteem	
Action-oriented approach	
Ability to perceive the strengthening effects of stress	
Ability to adapt to change	
Ability to use past successes to confront current challenge	
Patience	Lyons, 1991
Tolerance of negative affect	
Optimism	Connor and Davidson, 2003
Faith	

Resilience and Competence

Harney (2007) identified competency in functioning as one of the key components of resilience. Connor (2006) asserted that "resilient individuals were characterized by their personal competence and determination," (p. 47). How well an individual remains competent in the face of adversity across domains of psychosocial functioning has been identified as an indicator of resilience (Jacelon, 1997). Harney asserted that unidimensional definitions of resilience included "a sense of competency, effectiveness, and connected to the broader community" (p. 76). Conversely, a negative effect on an individual's ability to remain resilient when faced with adversity would be indicated by a loss of competency and an increase in dysfunction within a domain that

was once a domain of competent functioning by that individual. Likewise, manifestations of pathological dysfunction as a result of experiencing adversity has been identified in part as being the antithesis of resilience as defined by Miller (2003):

> Resilience is more than whether an individual has pathological symptoms or disorders of some sort after experiencing a major negative life event. But individuals who do not show such symptoms or disorders despite the fact that clinically and statistically we would expect them to (due to the nature of a given stressor) illustrate resilient behavior. (p. 245)

Resilience and Self-efficacy

Moen and Erickson (1995) identified self-efficacy as a trait of resilience. Moen and Erickson asserted that "the psychological component of resilience consists of feelings of control and mastery. Mastery refers to beliefs individuals hold about their abilities to act, to shape their own life" (p. 183). Constantine, Benard, and Diaz (1999) studied resilience traits in youth and argued that self-efficacy was a subtrait of personal autonomy and a sense of self. When considering an individual's overall lifespan of resilience traits, Smith-Osborne (2007) identified self-efficacy as a protective factor that becomes operational when the individual is faced with vulnerability. Bandura's (1977) self-efficacy theory, which is based on self-attribution of behavioral change, coincides with resilience theory and lifespan concepts of mastery. Bandura believed that an individual's capacity for positive self-evaluation after a successful experience or mastery of a problem reinforced confidence (as cited in Griez, Faravelli, Nutt, & Zohar, 2001). Resilient individuals have the capacity for self-evaluation of his or her self-efficacy,

which in turn, promotes optimism that the individual is able to use to manage and navigate through current problems in order to achieve personal survival and success. Shih (2004) argued, "Seeing that one is doing just as well or even better than others in similar circumstances increases one's sense of self-efficacy" (p. 179). Self-efficacy in social roles is also a factor that researchers have identified as bolstering individual resilience (Moen & Erickson, 1995).

Resilience and Interdomain Buffering

According to Luthar, Cicchetti, and Becker (2000), resilience is identifiable in terms of multidimensional areas of functioning, such as educational, emotional, and social, and identified these areas as *adjustment domains* (p. 7). In a study of psychological resilience and PTSD in the aftermath of a disaster, Bonanno, Galea, Bucciarelli, and Vlahov (2007) found that the lack of PTSD symptoms among participants suggested a possibility that other domains of adjustment were effected outside of the domains examined in the research. It may be that, although an individual may be resilient within the domain that the adversity was encountered, such as when challenged by a potentially life-threatening disaster, illness, or accident, the individual does not necessarily manifest resilience across all domains of his or her life; the individual may manifest competence in some domains but exhibit problems in other domains. For example, according to Luthar, Cicchetti, Becker, and Bronwyn (2000), 66% of students manifested resilience in the social competency domain, but only 21% manifested resilience in the academic domain. Luthar, Cicchetti, Becker, and Bronwyn asserted:

> It is unrealistic to expect any group of individuals to exhibit consistently positive or negative adjustment across multiple domains that are conceptually unrelated, for every trajectories of 'normally' developing children do not reflect a uniform progression of diverse cognitive, behavioral, and emotional capacities. Unevenness in functioning across domains is a common occurrence in the process of ontogenesis. (p. 548)

Lepore (1992) asserted that support from one domain can have a positive effect on another domain within an individual's life may be applicable to resilience theory and to the understanding of CF. The effect identified as cross-domain buffering, where the stress from one domain in conflict may be offset by the emotional support received from another domain, might contribute to an understanding of how clinicians identified with characteristics of resilience remain functional or symptom-free of any PTSD, secondary traumatic stress, or VT conditions that other clinicians vulnerable to CF may experience. Cross-domain buffering may also be applicable to personal competency and self-efficacy in one domain, which may then counteract any stressors within the second, adverse domain, and thus contribute to an individual's resilience. The notion of cross-domain buffering is supported by Luthar, Cicchetti, Becker, and Bronwyn (2000), who found that there was an argument for "uniformity across theoretically similar adjustment domains, but not across those that are conceptually distinct" (p. 7). An individual may prove to be resilient across parallel domains and yet exhibit problems in other areas.

Resilience Predictability

Whether resilience is predictable is a contested question among researchers. The question of predictability is important for establishing whether the ability (a) to assess individuals for resilience, (b) to identify pathways to developing and sustaining resilience, and (c) to evaluate resilience as a protective mechanism to thwart the development of CF is possible. Resilience is expected to exist in the human biopsychosocial make up (Charney, 2004; Haglund, Nestadt, Cooper, Southwick, & Charney, 2007); resilience is a common responsive behavioral manifestation in times of adversity (Agaibi & Wilson, 2005); resilience is part of human development beginning in early childhood and manifested through adolescence (DiRago & Vaillant, 2007); and resilience has a range of antecedent factors that are correlates of the construct's predictability (Bonanno, Galea, Bucciarelli, & Vlahov, 2007; Masten & Coatsworth, 1998).

Resilience, as a predictive construct allows for more research focus to be given to the protective factors that counterbalance the stressors in order to sustain levels of health during adverse times. Examining different variables for predicting levels of resilience may be factored into research that looks for ways to bolster particular vulnerabilities related to demographics. Bonanno et al. (2007) stated, "Multivariate analysis indicated that the prevalence of resilience was uniquely predicted by participant gender, age, race/ethnicity, education, level of trauma exposure, income change, social support, frequency of chronic disease, and recent and past life stressors" (p. 671).

Lightsey (2006) eluded to resilience predictability in relationship to its operational potential. Lightsey stated, "Psychological resilience in this conceptualization would be a measurable, modifiable, psychological mechanism that enables successful coping with adversity—an awareness of one's strengths or capacities that allows one to better cope with future stressors and to use available resources" (p. 101). According to Bonanno et al. (2007), researchers who have studied the predictors of resilience have paid attention primarily to person-centered variables through multivariate adverse events. Bonanno et al. stated that the risk factors or predictor variables connected to the likelihood of developing PTSD have been related to female gender, minority ethnicity, lack of education, and younger or older ages. Bonanno et al. asserted, "It seems plausible that the inverse of at least some of these factors (i.e., male gender, Caucasian ethnicity, level of education, older age) would predict increased likelihood of resilient outcomes" (p. 672). If some variables are consistently predictors for negative outcomes in the face of adversity, then the opposite for predicting positive outcomes should be possible.

The Resilient Clinician and Coping Skills

Resilience as an essential characteristic that gives clinicians the ability to work with human suffering on a daily basis without succumbing to psychological pain and despair. Resilience implies a source of personal ability and characteristics that help the individual to rebound and cope successfully, in spite of significant hardships or adversity (Collins, 2007). Understanding what protective factors are being activated in resilient clinicians is an important task for developing a new paradigm of how to interact and treat trauma victims while remaining psychosocially healthy and functional.

Jacobson et al. (2004) looked at mental health social workers in relationship to their reactions to fatal and nonfatal client suicidal behaviors. Jacobson et al. found that therapists typically reported reactions to client statements of suicidal ideation and overtures that ranged from stressful to extremely traumatic. Some therapists also reported doubt about their abilities to treat suicidal clients or their abilities to provide services. Jacobson et al. also noted that male and female therapists reacted differently to the stress, with female therapists reporting that they experienced more shame and guilt following fatal client suicidal behaviors. Males and females may use different means of coping with intense stress situations (e.g., avoidance, compartmentalization, and internalization), which may have resilient outcomes as opposed to other means of coping (eg., shame, guilt, self-doubt, and preoccupation), which may lead to negative outcomes.

Few researchers have identified the resilient clinician as an individuals who use protective coping to successfully adapt and protect against trauma (Ting, Jacobson, & Sanders, 2008). Lazarus and Folkman (1984) emphasized adaptive strategies used as "constantly changing cognitive and behavioral efforts to manage the specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person" (p. 141). In contrast, maladaptive behaviors and conditions that impair adaptive strategies have been identified as creating clinician vulnerability. Lawson and Venart (2005) argued that therapeutic impairment is experienced when "a significant negative impact on a counselor's professional functioning which compromises client care or poses the potential for harm to the client" (p. 243). Lawson and Venart identified several threats to the counselor's ability to sustain a healthy functionality, which were substance abuse,

mental illness, personal crisis, physical illness, or debilitation. Lawson and Venart also identified traumatic events as being a contributor to VT or burnout. On the other hand, Lawson and Venart found that protecting against vulnerability to impairment, therefore, entailed effectively using adaptive coping mechanisms that accessed 10 different self-care activities that included

> (1) discussing cases with colleagues; (2) attending workshops; (3) spending time with family or friends; (4) travel, vacations, hobbies, and movies; (5) talking with colleagues between sessions; (6) socializing; (7) exercise; (8) limiting case load; (9) developing spiritual life; and (10) receiving supervision. (p. 245)

Solomon and Berger (2005) assessed resilience in 87 ZAKA (Hebrew initials for identification of disaster victims) body handlers, a post that involves repeated exposure to the aftermath of terror attacks, and found that only 2.3% (two participants) reported criteria for PTSD, and 18.4% (16 participants) showed signs of subclinical posttraumatic disorder. Solomon and Berger postulated that several factors contributed to the workers' ability to cope, namely "positive feelings that stem from altruistic and religious extrinsic rewards" (p. 599). Some branches of Judaism represented in the ZAKA group viewed their contribution as a spiritual experience fulfilling a religious mission by performing a Mizva (a blessing), which is attributed to promoting resilience. Religious coping is experienced as a means of attaching meaning and purpose to an experience that ultimately allows for a sense of control (e.g., locus of control) to be activated within the coping individual (Solomon & Berger, 2005). Religious coping is helpful to counteract

the effect of trauma that comes in the wake of an act of terrorism because the terrorism is viewed as an "act of evil," which shatters any sense of meaning, safety, and control over an individual's world. Re-establishing meaning and control is vital for self-coherence and psychological well-being (Davidowitz-Farkas & Hutchison-Hall, 2005, p. 568).

Ablett and Jones (2007) examined antecedent factors that played a role in promoting resilience and maintaining a sense of well-being in palliative care nurses. Ablett and Jones identified constructs related to hardiness and a sense of coherence that facilitated both meaning and purpose in the face of stressful cancer care work with repeated exposure to the pain, suffering, and death of patients. Ablett and Jones revealed that the palliative care nurses in the study did not report higher levels of psychological distress, which was attributed to "believing that they could make a difference," and "awareness of their own mortality and their spirituality," were additionally significant themes that contributed to resilience (p. 735). Personal attitudes, job satisfaction, and ways of coping also helped keep the nurses resilient. Ablett and Jones concluded that the nurses' adaptive attitude toward change was the determining factor for hardiness and resilience.

Further research identifying characteristics that promote resilience in clinicians is needed in order to develop strategies for protecting the health and welfare of mental health providers and trauma victims. Several implications exist for the mental health field that may emerge from the study of resilience. Ultimately, it may be possible to identify predictors of resilience in relationship to the personal traits of mental health professionals. Investigating how these predictors influence positive outcomes that protect

clinicians from CF may lead to ways of operationalizing them in preventive strategies that can be employed among the general population of clinicians.

CF and Satisfaction

CF as a concept is relatively new in the research literature. Joinson (1992) was the first to introduce the term CF in the nursing literature. Joinson described four reasons for being aware of CF's hazards to clinicians: "(1) Compassion fatigue is emotionally devastating, (2) caregivers' personalities lead them toward it, (3) the outside source that cause it are unavoidable, (4) compassion fatigue is almost impossible to recognize without a heightened awareness of it" (p. 116). Figley (2002) later expounded CF in the realm of the trauma-related psychology literature. Bride et al. (2007) also contrasted CF with the phenomena of VT and burnout as a distinct conceptual construct that describes the detriments specific to helping professionals' experiences in relationship to trauma work. Figley (1995) expanded the concept of CF to describe an emotional, mental, or physical exhaustion along with the secondary stress reaction as a consequence of therapeutic interactions with persons who have experienced traumatic events. CF is a breakdown in the human capacity to sustain care because of psychological exhaustion. Figley also indicated that CF may be synonymous with secondary traumatic stress disorder (STSD) and the same as PTSD in symptomatological identification (Stebnicki, 2000, p. 23).

CF across Care-Giving Professions

CF is not unique to only one of the helping professions; several have identified CF as endemic to the role of caregiver. Adams et al. (2008) viewed caregivers as being vulnerable to CF and stated that "the formal caregiver's reduced capacity or interest in being empathic or bearing the suffering of clients and is the natural consequent behaviors and emotions resulting from knowing about a traumatizing event experienced or suffered by a person" (p. 103). Compassion extended by helping professionals throughout a lengthy period of time may come with a price to the professional. The nature of psychotherapeutic interventions, including the need for routine contact with victims and their family members, causes a situation where clinicians are repeatedly exposed to and share the thoughts, memories, and emotional intensity of the traumatic event, thus rendering clinicians at risk for negative psychological consequences (Trippany et al., 2004). Figley and Figley (2006) noted that clinicians working in various disciplines—nurses in hospice (Abendroth, 2005), social workers dealing with victims of the World Trade Center terrorism (Boscarino et al., 2004), social workers who worked with assortments of trauma clients in Georgia (Bride, 2004), chaplains working after 9/11 in New York City (Roberts, Flannelly, Weaver, & Figley, 2003), child protection workers (Nelson-Gardell & Harris, 2003), disaster workers (Walsh, 2002), law enforcement (Wee & Myers, 2002), and prison guards (Ortlepp, 2002) reported CF within their professional ranks. CF also occurs among different disciplines including nurses in palliative and cancer care (Sabo, 2008); public health nurses working with hurricane victims (Frank & Karioth, 2006); hospital social workers (Badger, Royse, & Craig, 2008); emergency room

social workers (Somer, Buchbinder, Peled-Avram, & Ben-Yizhack, 2004); therapists identified as trauma therapists (Deighton, Gurris, & Traue, 2007); rural therapists working with trauma (Sprang et al. 2007); social workers working with sexual and physical abuse, military combat, or community disasters (Jenkins & Baird, 2002); and professionals and volunteers who work with survivors of criminal victimization (Salston & Figley, 2003).

Because regular and routine meetings with clients are a necessary function of therapy, clinicians experience repeated exposure to their clients' traumatic materials, and thus increase their risk for experiencing VT, or they may become at risk for experiencing CF (Sabo, 2008). In the course of a therapist's private practice or when working for an organization, the mental health professional may grow fatigued as a result of repeated exposure to and bombardment of negative emotions as presented by their trauma clients.

CF: Distinct from Burnout and VT

Traditionally, counselors' reactions to client traumas have been identified as counter-transference (Figley, 1995). However, CF, burnout, and VT are also potential reactions to trauma. Adams et al. (2008) differentiated between CF, burnout, and VT, distinguishing CF as a distinct construct from the other two constructs. The distinction is that "CF is a hazard associated primarily with the clinical setting and with first responders to traumatic events" (Adams et al., 2008, p. 103). Adams et al. asserted that CF was a consequential outcome of mental health professionals' direct experiences in the course of working with traumatized individuals for a length of time that repeatedly exposes the clinician to the traumatic material.

Although the concepts of burnout, VT, and CF have some similarities, they are not synonymous. Burnout and secondary trauma are possible components of CF, but most researchers maintain a distinct difference in definition between CF and burnout (Adams et al., 2006). The concept of burnout is distinct from CF and is most often characterized as an individual's experience with physical, emotional, and mental exhaustions (Bride, 2004). Clinicians can experience burnout, but burnout can be experienced by anyone who works too hard, too long, or under too much stress without being exposed to trauma or trauma survivors, as is necessary in a CF assessment. Burnout pertains to the work environment, whereas CF pertains to the emotional involvement of extending empathy to trauma survivors.

VT, likewise, is developed by working with traumatized individuals, and comes as a result of empathetic therapist-client or -clients relationship (Simon et al., 2005). VT is further differentiated from CF in the following description:

> The term vicarious trauma has been used to describe counselors' trauma reactions that are secondary to their exposure to clients' traumatic experiences. The construct of VT provides a more complex and sophisticated explanation of counselors' reactions to client trauma and has implications for preventing counselors' VT reactions. VT has been referred to as involving "profound changes in the core aspects of the therapist's self. (Pearlman & Saakvitne, 1995, p. 152)

VT has been shown to cause disruptions to the cognitive schemas of a counselors' identity, memory system, and belief system, which may contribute to a change in how

trauma counselors perceive themselves (Pearlman & Saakvitne, 1995). The results of VT affect personal and professional relationships.

The Client's Traumatic Material

The U.S. Bureau of Census (2005) estimated that there were 5.4 million personal crime victims in the United States. Additionally, an estimated number of violent crime offenses were more than 1.4 million as reported by the Federal Bureau of Investigation (2006). These statistical percentages allow researchers to postulate about the number of incidents that contribute to the level of traumatic victimization in this country. Kilpatrick et al. (2003) asserted that crime victims have a higher percentage of developing PTSD during their lifetime compared with individuals who have not be victimized (25% vs. 9.4%). There may be a relationship between the number of trauma victims and an increase in clinicians treating them, as well as in the potential number of clinicians being exposed to trauma material.

There are a high number of mental health professionals are working with trauma victims of all sorts. Little data exists regarding the estimated numbers of psychotherapists working with different types of trauma survivors (e.g., terrorism, disasters, domestic violence, sexual assault, etc.); however, Phelan (2002) estimated that "93% of psychotherapists surveyed reported having treated at least one sexual assault survivor" (p. 60), which is just one segment of the total population of trauma survivors being treated.

The Consultation Room: The Witnessing Professional and Vicarious Agency

Ground zero for the clinician's risks and vulnerability to developing CF is in the consultation room or place of practice. The consultation room is transformed into a space

where traumatic memories, sounds, horror, and guilt are relived by the traumatized victim. The therapist's role is to help the trauma victim begin the process of confronting the traumatic imagery by "accompanying" the victim through the landscape of personal suffering (Miller, 2002). Additionally, the role of the clinician requires regular and repeated contact with their clients in order to build a therapeutic alliance (Pearlman & Courtois, 2005; Smith, 2005). This repeated contact exposes the clinician to the thoughts, images, feelings, and memories of the victims of trauma that affects the clinician's internal framework (Pearlman & Courtois, 2005). According to Thomas and Wilson (2004), "The therapist is vulnerable through his or her empathic openness to the emotional and spiritual effects of vicarious traumatization. These effects are cumulative and permanent, and evident in a therapist's professional and personal life" (p. 23). Ongoing exposure is a potential occupational hazard related to the clinician's functional relationship with the client (Saltson & Figley, 2003).

Deighton, Gurris, and Traue (2007) studied psychotherapists in the therapeutic process with trauma survivors. As the trauma survivor faces the clinician, he or she has experienced events that have left violent images and sounds that mentally replay themselves again and again. In the course of the therapeutic session, describing the trauma in terms of vivid images related to the scenes and sounds is an important aspect of the treatment process. In this process the clinician becomes a participant in the trauma as a "professional witness." Lifton (1973) described the role of the witnessing professional as one who must deploy "professional expertise within a carefully drawn ethical and historical framework to address both the individual survivors of traumatic situations,"

which is parallel to the experiences of mental health professionals who are also the "witnessing professionals" to their traumatized clients (Weine, 1999, p. 171). Wegner, Sparrow, and Winerman (2004),identified the phenomenon of vicarious agency as a personal system for authorship processing, which they defined as, "a set of mental processes that monitors indications of authorship to judge whether an event, action, or thought should be ascribed to self as a causal agent" (p. 838). Vicarious agency is a mental process whereby ownership of another's actions is internalized by the observer with potential emotional and physiological reactions that follow.

On an emotional level, the observer clinician internalizes an authorship for the actions of others through extending empathy to the client (Saltson & Figley, 2003: Wegner et al., 2004). An example of vicarious agency may be seen at a basketball game when a player shoots the ball toward the hoop and people in the audience are observed to move physically, both bodily and with hand motions, to "help shoot the ball" and also "nudge the ball" into the hoop. Individuals in the audience have extended themselves into the game arena and are "feeling and reacting" on an unconscious-to-conscious level as tough they were the player shooting the ball.

The phenomenon of vicarious agency may present researchers in the fields of mental health and psychotherapy with a new paradigm for understanding the potential correlations for vicarious traumatization and ultimately CF. The psychotherapist, as a witnessing professional, may be extending him or herself into the mental and emotional experiences of the trauma victim, like the basketball game audience, and through vicarious agency take on authorship of the horrific images, terrifying experiences, and

emotional reactions of the client. Figley (2002) argued, "We cannot avoid our compassion and empathy. To see the world as our clients see it enables us to calibrate our services to fit them and adjust our services to fit how they are responding" (p. 1434). This ability to place oneself into the experiences of others through empathy may be the vehicle for vicarious agency and authorship to happen.

Eisenberg et al. (1988) studied variously induced emotional reactions in children and found that vicarious responding fosters aversive responses such as apprehension or anxiety when a child sees another being disciplined. An innate proclivity exists to experience vicarious threats to self-associated with cognitive processing of information relevant to one's own situation. Eisenberg et al. also suggested that a cognitive authorship of external experience (e.g., traumatic memories, emotional reactions, and fear) creates an internalized reaction. Repeated exposure to these experiences by the witnessing professional may also lead to a classical conditioning through the vicarious observation and authorship of the traumatic experiences of the trauma victim (Lanzetta, 1980). Pearlman and Mac Ian (1995) agreed that by active listening and empathic tuning into the details of the clients' traumatic experiences during counseling sessions, the clinician becomes a witness to the traumatic experiences.

Furthermore, research into "mirror neurons" or what has been labeled as the *empathy neuron* supports the notion that the phenomenon of mirroring takes place on a neurological level (Wegner et al., 2004). Neuroscientists have found that "the identical sets of neurons can be activated in an individual who is simply witnessing another person performing a movement as the one actually engaged in the action or the expression of

some emotion or behavior" (Berrol, 2006, p. 302). Adenzato and Barbarini (2006) also identified activity of bimodal neurons as being activated "when an object is under observation, a motor schema appropriate to the characteristics of that object is activated (e.g., for shape, size and spatial orientation) as if the observer were interacting with it" (p. 749). This presents a hypothetical implication for mental health providers observing as the witnessing professional in that while simply witnessing (listening, observing, empathizing, etc.) their clients' traumatic material (images, feelings, thoughts, and the reaccounting of their tragedies) in the consultation room, the activation of mirror neurons are possibly taking place within the clinician; thus the clinician is experiencing the traumatic material as if she or he were interacting with the material. A clinician's neuro-reaction becomes as though the clinician is the one who is actually engaged in the action or the expression of some emotion related to the client's traumatic material, just by listening and extending empathy for another person who is retelling a traumatic event, (Wegner et al., 2004). The clinician, as the witnessing professional, extends his or her empathy into the trauma along with the survivor. This causes the clinician to vicariously take on authorship, creating a symbiotic experience around the emotional and mental images, and he or she develops feelings of authorship for the traumatic experiences that belong to the client.

The Clinician's Exposure to Trauma and Impairment

Ultimately, a clinician's impairment is a hazard of CF. Lawson and Venart (2005) noted that "therapeutic impairment occurs when there is a significant negative impact on a counselor's professional function which compromises client care or poses potential for

harm to the client" (p. 243). CF is a form of impairment to the clinician resulting from interpersonal relationships within the context of the therapeutic alliance and trauma treatment. Figley (2002) pointed out that CF might be a result of a lack of self-care to maintain wellness in the course of working with trauma survivors who deplete the clinician's internal resources through repeated exposure. Figley (2002) also argued that therapists forget they are human and that they require various areas of support from colleagues, friends, family, social activities, and the like in order to maintain healthy levels of internal resources. Personal wellness for a mental health professional is essential to upholding the quality of client care. Lawson (2007) pointed to a correlation between counselor wellness and self-care and a positive effect on the ability to provide professional services to meet the needs of their clients. CF is not only a detriment to the professional, but also to the client entrusted to his or her care.

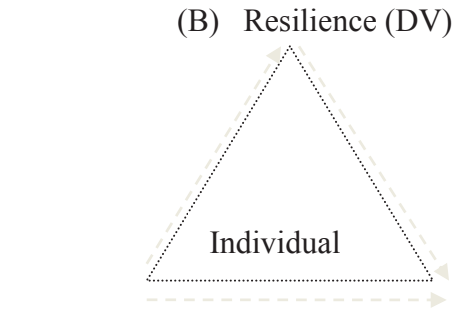
The Clinician's Personal Experience and Trauma History

Evaluating a clinician's previous personal history with traumatic experience is important for assessing the degree of vulnerability or resilience that he or she may manifest when repeatedly exposed to the client's traumatic material. An existing trauma history may affect the clinician's ability to function on some level. Itzhaky and Dekel (2005) noted that "there is ample evidence that therapists who have been exposed to traumatic events in the past experience greater distress than their unexposed counterparts in the process of treating trauma victims" (p. 337). Figley (1995) argued that a clinician's trauma history may be influential in contributing to the likelihood of developing CF. Additionally, a clinician's personal family history with trauma may be an indicator of

one's level of vulnerability to another's traumatic experiences. Miller (2002) pointed out that "family therapists recognize that the effects of successive traumas are often cumulative and therapy for terrorist bereavement may have to deal with unresolved traumatic material from the past, which will almost certainly be re-evoked by the more recent trauma" (p. 292). Bride (2004) also suggested that there may be a connection with personal trauma history, especially in childhood, as a potential to be a risk factor to developing CF. A clinician's personal experience with trauma is key consideration for assessing a clinician's predisposition to developing CF.

Convergence of Constructs between Resilience and CF

There are interconnections found between the constructs of resilience and CF within the context of mental health professionals' working with trauma survivors. The following are some of the overlapping variables that are endemic to both resilience and CF constructs, which may be viewed as conceptually binding the two together. Figure 1 indicates that trauma (independent variable) acts as a stressor upon the individual requiring a set of responsive reactions, which can either result in experiencing resilience or CF. The five demographic variables may play a role in how the individual responds to the trauma-stressor.



Demographic Variables:
1. Gender (female/male/transgender)
2. Years of experience working with trauma clients
3. The number of trauma clients treated in practice
4. Clinician's previous personal history of trauma
5. Professional degree/training

Figure 1. Overlapping constructs and demographics.

Trauma

Trauma overlaps with both resilience and CF. Resilience and CF are concepts that have been studied in conjunction with PTSD sufferers (Adams et al., 2008; Collins & Long, 2003; Figley, 2002). Both resilience and CF are in relationship to trauma, traumatic events, and adversity. There is a triangulation of concepts between trauma, to CF and trauma, to resilience, which points to potential corollary relationships between CF and resilience. Gentry (2002) believed that resilience was a goal to aim for in treatment of STS beyond a resolution of symptoms. Gentry asserted that

> Through our continued working with caregivers suffering the effects of secondary traumatic stress and burnout, we have been able to distill two primary principles of treatment and prevention that lead to a rapid resolution of symptoms and sustained resilience from future symptoms. (p. 27)

Lawson and Venart (2005) asserted correlations between counselor vulnerability and impairment in relationship to trauma and resilience. Lawson and Venart asserted that as a counselor witnesses or experiences violence firsthand, that counselor may become vulnerable to traumatic stressor. Lawson and Venart further asserted that the primary objective for a taskforce on impaired counselors is to increase awareness of impairment risks and resilience strategies for remaining psychologically healthy.

In both the CF and resilience literature, trauma is acknowledged as a potential risk for the clinician. Adams et al. (2004) argued, "Compassion fatigue is a hazard associated primarily with the clinical setting or among first responders to traumatic events and is composed of at least two components—secondary trauma and job burnout" (p. 2). Additionally, Pearlman and Mac Ian (1995) stated, "individuals' adaptations to trauma as interactions between their own personalities (defensive styles, psychological needs, coping styles) and salient aspects of the traumatic events, all in the context of social and cultural variables that shape psychological responses" in relationship to vicarious traumatization, a concept closely related to CF (p. 558). Likewise, in connecting trauma and CF, Sprang et al. (2007) asserted that "workers with high caseloads of survivors of violent or human-induced trauma seemed to be at greater risk for CF and STS" (p. 262).

According to McCann and Pearlman (1990), the key premise for the constructivist self-development theory is that

> adaptation to trauma is a result of a complex interplay between life experiences (including personal history, specific traumatic events, and the social and cultural context) and the developing self (including self-capacities, ego resources, psychological needs, and cognitive schemas about self and world). (p. 137)

Understanding trauma as a common denominator between resilience and CF may provide researchers with conceptual overlaps that can be operationalized into preventive measures for mental health providers.

Adversity

Resilience, CF, and PTSD all include some sort of exposure to an aversive experience as being a prerequisite for measuring each construct. Adversity or adverse conditions, as the existence of a potential for harm in a particular situation, are variables addressed in both the resilience and CF literature. Adams et al. (2007) identified the potential for CF in clinicians working with clients with psychological trauma as a result of adverse situations (e.g., sexual and physical abuse, military combat, or community disaster). Hernandez et al. (2007) viewed resilience as the ability to deal with trauma by accessing adaptive processes and coping mechanisms when challenged with some sort of adversity that may be traumatic.

Adversity is also linked to the definition of resilience. Feleten (2000) defined adversity as “the ability to spring back from after adversity” (p. 104). Rotenberg and

Boucsein (1993) noted that a certain level of emotional tension is adaptive when facing adverse situations and helps the individual to solve problems or to navigate hurdles. Rotenberg and Boucsein stated, "An optimal level of emotional tension is adaptive in helping the individual to solve problems and to overcome obstacles without any negative outcome for the organism" (p. 210).

Risk

Risk has also been identified in the literature as a common variable connecting resilience and CF. Researchers have treated all three concepts through the lenses of risk factors. For example, risk plays a role in CF as identified by Bride et al. (2007) who asserted:

> It is now widely recognized that the indirect exposure to trauma involves an inherent risk of significant emotional, cognitive, and behavioral changes in the clinician. This phenomenon variously referred to as vicarious traumatization, secondary traumatic stress, and compassion fatigue, is now viewed as an occupational hazard of clinical work that addresses psychological trauma. (p. 155)

Resilience is conceptually defined by a necessary factor—adversity—which implies that an individual is, therefore, vulnerable to risk (Tugade, Fredrickson, & Barrett, 2004). Greene, Galambos, and Lee (2003) argued that risk is an essential ingredient that is required in order to operationalize the concept of resilience; if there are no risks, there is no need for resilience, nor is there a way to quantify the phenomenon of resilience within an individual. Resilience in social and health problems is measured by the risks and

successfully meeting the challenges associated with adversity. Without facing risks involved in adversity, resilience is not activated within the human psychological framework, and subsequently, cannot be measured. Bonanno et al. (2007) quantified resilience "as having 1 or 0 posttraumatic stress disorder symptoms (in the face of a traumatic event) and as being associated with low levels of depression and substance abuse" (p. 671).

Resilience characteristics have been identified around central themes of positive outcomes in the face of risk, adversity, and vulnerability (Hopwood & Treloar, 2008; McAdames, Reynolds, Lewis, Patten, & Bowman, 2001). The human propensity to strive and even thrive in the face of adversity is the foundation of understanding humans as resilient beings (Utsey et al., 2007). Resilience is considered to be a natural human response to exposure to stress risks (Hernandez et al., 2007). Researchers who have studied resilience, beginning with how human beings negotiate risks through childhood developmental stages, have identified the human ability to overcome risk factors, which is fundamental to the theoretical foundation of lifespan psychology (Condly, 2006; Greene et al., 2003).

The theoretical framework of resilience has evolved around a central theme related to the ultimate health outcomes of individuals facing risks throughout different stages of the human lifespan. Resilience is considered in terms of positive outcomes of sustained biopsychosocial health throughout a life- and health-threatening experience (Lawson, Vernart, Hazler, & Kottler, 2007; Valliant & Davis, 2000). The researchers have focused on counterbalancing risks to a person's health and wellbeing by achieving

functional outcomes through positive responses toward health development, maintenance, and preventive behaviors (Smith-Osborne, 2007). There are various approaches to the theoretical frameworks of resilience through the lenses of cognitive models of personality development (Freitas & Downey, 1998), adaptive behaviors (Connor, 2006), adventure education (Neill & Dias, 2001), aging and self-transcendence of the elderly (Nygren, Jonsen, Gustafson, Norberg, & Lundman, 2005), children and adolescents (Alvord & Grados, 2005; Luthar, Cicchetti, & Becker, 2000), resilience of military personnel (King et al., 2006), PTSD (Perez-Sales, Cervellon, Vazquez, Vidales, & Gaborit, 2005), Holocaust victims (Baranowsky, Young, Johnson-Douglas, Williams-Keeler, & McCarrey, 1995), social competence among high-risk adolescents (Luthar, 1991), ethnic resilience in higher education (Morales, 2008), and other areas of research interest.

Risk is also implied in relationship to resilience. Collins (2007) stated, "The expression of resilience is seen by many researchers not to be a fixed attitude, but dependent on changing, interacting circumstances that affect vulnerability, risk, and protective mechanisms" (p. 258). Some sort of risk is implied in the quantification of resilience, because logically, there is no need to measure resilience if some sort of risk is not involved for which one needs to be resilient. Likewise, Ong and Bergeman (2004) argued that conceptions of resilience "have differentiated resilience as recovery from risk and adversity" (p. 223). Risk, therefore, is a variable that crosses both concepts of CF and resilience. Risk is part of the assessment for determining the potential hazards to which the clinician is being exposed.

Adaptation

Relevant concepts and theories concerning adaptation as a basic human tendency for survival stretch far back to Piaget and Erikson's works and beyond (Bauer & McAdams, 2004). Resilience theory is markedly dependent on theories and concepts related to humanity's cognitive-behavioral ability to adapt to adversity (Mancini & Bonanno, 2006; Tiet & Huizinga, 2002). Resilience is a relatively new concept compared to adaptation, and according to Eisold (2005), lifelong resilience is just beginning to get the attention that is needed from psychologists and epidemiologists in order to understand this positive human phenomenon. The examination of perceptual and personality factors implicit in personal adaptive styles is the key to understanding resilience over a lifetime. Paralleling lifelong resilience studies, a theory of resilience has also evolved through decades of research with a focus on the human ability to adapt to changes and various adversities through varying developmental stages (Vaillant & David, 2006).

Looking at resilience as an absence of adaptive failures, Patterson, Woods, Cook, and Render (2005) pointed out that "The concept of resilience is founded upon the belief that failures are breakdowns in the normal adaptive processes necessary to cope with the complexity of the real world" (p. 155). Conceptualizations of resilience also include personality development as a determinant of an individual's adaptive mechanisms as coping outcomes beginning in childhood and continuing through the various stages of adulthood (Hopwood & Treloar, 2008). Piaget (1953) and Erikson (1963) focused on human developmental-growth goals, which involved innate tendencies toward adapting to environmental challenges as part of formal operational development and stage mastery

(Bauer & McAdams, 2004; Millstein, 1993). Piaget (1953) observed how children adapted to their environment by learning. Piaget also observed that individuals adapt, beginning in child development, by seeking a balance between their internalized schemas and their external environment. Piaget explained this process of ongoing balancing, problem solving, and adjustment in operational terms by saying, "A state of equilibrium, it should be remembered, is one in which all the virtual transformations compatible with the relationships of the system compensate each other" (p. 41). Piaget and Inhelder (1969) further described the concept of functional assimilation as "the child's cognitive tasks of adapting the environment to themselves" (p. 7).

Piaget's theory of cognitive development laid the groundwork for research into stage-like developments that occur throughout adulthood (as cited in Cook-Cottone, 2004). Piaget (1930) observed how children adapted to their environments by learning. Piaget believed that individuals seek a balance between their inner selves and their external environments. Piaget observed that children developed an ability to organize their cognitive experiences in order to achieve this balance (p. 242). Subsequent to Piaget's works, Erikson took the stage development beyond Piagetian formal operations and tied the developmental stages to personality development throughout the human lifespan, making crisis resolution and psychosocial adaptation a function of healthy self-development, such as in identity development, autonomy, generativity, reflexivity, intimacy, ego integrity, and so on (as cited in Baltes, Staudinger, & Lindenberger, 1999; McAdams et al., 2001).

Vaillant (1977) studied the human ability to cope and adapt to life's changing circumstances, challenges, and adversities by following a group of participants in what became known as the Grant Study. Vaillant followed the lives of 268 male university undergraduate students, recruited among the brightest and fittest, with the intent of examining how individuals navigated different stages of the human life cycle. The undergraduates who were recruited between 1939 and 1944 were from the top half of their class as sophomores, and had no known mental or physical illness. After 40 years of data collection by numerous Grant Study researchers, Vaillant reported the findings about the use of different adaptive-coping mechanisms in different ways to successfully adapt throughout ups and downs of a lifetime. Vaillant clarified the Grant Study's conceptualization of adaptation:

> In writing of mechanisms of adaptation, I am not writing about conscious avoidance of problems, or about willpower, nor do I mean perseverance or turning to others. I am discussing a far more subtle and almost entirely unconscious process. Indeed, the ego mechanisms of adaptation went unrecognized until described by Sigmund Freud in his earliest psychiatric papers of 1894–1896. (p. 8)

Taylor (1983) proposed a theory of cognitive adaptation that focused on how individuals respond to life-threatening events, which yielded three themes: the search for meaning, attempts to regain mastery, and efforts to restore self-esteem. Taylor proposed that these three themes were adaptive reactions for women facing breast cancer. Taylor maintained that successful adjustment means that the women were able to sustain an

"illusion" that they were "better off" than others who they viewed as less fortunate. Taylor postulated that "people construct mental illusions to cope with everyday experience" and that "cognitive adaptation occurs as people reassess situations and outcomes that have not met their expectations," and that ultimately, "individuals draw upon psychological resources to serve as buffers that can enable more effective coping" (p. 57). The adaptation theory, as developed by Taylor (1983), was originally identified and conceptualized as being a psychological response that enhanced self-esteem in women faced with the mortality of breast cancer. Taylor pointed out that women made social comparisons to enhance their feelings of being "better off" than others with more serious problems thus bolstering their self-esteem.

Successful adaptation as a key characteristic of resilient coping strategies and mechanisms. For example, Taylor (1983) observed that "people successfully adjust to threatening events, such as a diagnosis of breast cancer, by engaging in a series of mildly positive self-relevant distortions that buffer current threats as well as possible future setbacks" (p. 1161). Taylor and Brown (1988) posited that adaptive cognitive perceptions that entail mental illusionary strategies of "overly positive self-evaluations" and "exaggerated perceptions of control or mastery and unrealistic optimism are characteristic of normal human thought" and that these "promote other criteria of mental health" in individuals facing threatening or adverse situations (p. 193).

There is a relationship between CF and deficient or inadequate adaptive skills. Figley (1995) viewed CF and its parallel with VT through "the larger context of human adaptation and quest for meaning" (p. 153). Figley furthermore stated that "individual

adaptation has an important social component that serves as a buffer against disease and stress, and is also a mediator of healing and recovery from the effects of STS" (p. 181). Pearlman and Mac Ian (1995) viewed "individuals' adaptations to trauma as interactions between their own personalities (defensive styles, psychological needs, coping styles) and salient aspects of the traumatic events" (p. 558). Pearlman and Mac Ian found that therapists with personal-trauma histories fared better when working with trauma survivors than therapists without personal-trauma histories. Pearlman and Mac Ian stated that a possible reason for this outcome was that therapists with personal-trauma histories appeared to know what to expect and how to manage their clients' trauma materials more effectively. They had coped with their own personal traumas and they used those coping skills to manage their clients' traumas. Pearlman and Mac Ian revealed that therapists without trauma histories reported higher disruptions in self-intimacy and other-esteem than their counterparts who had reported personal histories of trauma. Prior trauma required the therapists to invoke personal adaptive skills (e.g., coping, self-care, reaching out for support, etc.) in order to manage their traumas, as well as manage the potential for succumbing to the deleterious effects of VT.

The correlation between VT and personal adaptation leads to the notion of a connected relationship between CF and adaptation because VT and CF are commonly viewed as similar occupational hazards related to clinical work with trauma survivors (Bride et al., 2007). Additionally, adaptive behaviors indicate that loss, change, and illness require adaptive coping skills and that depressive feelings are a part of the natural process of bereavement (Bonanno, Moskowitz, Papa, & Folkman, 2005). However, if the

individual is unable to successfully use the adaptive mechanisms, the result may be the onset of chronic depression (McFarland, 2005). Maladaptive coping skills are notable behaviors because they increase self-destructive behaviors (e.g., alcoholism, drug addiction, isolation), as well as reduce the individual's long-term sense of self-efficacy and resilience (Johnson et al., 2000). Maladaptive behaviors that undermine resilience are indicators for understanding psychopathological development in individuals (Masten, 2006).

Both constructs of resilience and CF also include the understanding of adaptive coping mechanisms within individuals. The ability or the inability to adapt to traumatic stress involves an individual's style of coping and how well the individual adapts. Therefore, when considering a variable that connects both resilience and CF, adaptation may be viewed as a variable that facilitates resilience as a byproduct of positive adaptation, and CF comes as a result of a lack of adaptation skills or the consequences of inadequate adaptation.

Positive Adaptations that Contribute to Resilience

Researchers have identified several positive adaptations in response to adversity as being components of resilience (Luthans et al., 2006). Connor (2006) asserted, "Resilient individuals believe that stress can have a strengthening effect, and they are more capable of adapting to change" (p. 47). Connor also identified adaptive social behavior (altruism, bonding, and teamwork) as beneficial character traits that resilient individuals possess. Encouraging the individual to use an adaptive trait in the pursuit of goals that aim for positive changes is empowering to the individual.

Some sort of ability or innate skill exists to deal with change that occurs when facing adversity. Connor and Davidson (2003) identified "the ability to adapt to change" as a basic characteristic of resilience. Conceptually, one of the theoretical foundations of resilience includes the human ability to make adaptations to situations and environmental changes as a normal part of successful human development. Baltes, Staudinger, and Lindenberger (1999) argued that adaptation is a complex process that involves ongoing changes that happen regardless of age based on "task demands and outcome criteria and the capacity to move between levels of knowledge and skills rather than to operate at one specific developmental level of functioning" (p. 471). For example, resilience of individuals with a disability is dependent upon the family's ability to make adjustments to the changes that the family experiences (Frain et al., 2007). The threat of change that occurs whenever one is faced with adversity frequently invokes stress and fear of the "unknown factors" of change and the possibility of losing something of value (e.g., life, property, a loved one, security, health, etc.). Adversity thus poses the threat of drastic and sudden changes (e.g., harm and loss) that are psychologically destabilizing to the individual. Thus Baltes, Staudinger, and Lindenberger (1999) argued that the developmental goals of adaptation are "growth, maintenance, and regulation of loss" (p. 471). Therefore, how the individual changes to compensate for the loss is fundamental to sustaining psychological composure, and thus resilience, through difficult times.

Adaptive Coping Mechanisms

Throughout the different human developmental stages of life, adaptive coping mechanisms that help individuals deal with change are essential to psychological balance

and stabilization. Vaillant (2000) looked at adaptation as an aspect of psychological coping patterns and identified "adaptive mental mechanisms" as being significant indicators of psychological well being. Vaillant stated, "Included within the 'high adaptive level' of DSM-IV are the defenses of anticipation, altruism, humor, sublimation, and suppression. These adaptive mental mechanisms 'maximize gratification and allow conscious awareness of feeling, ideas, and their consequences'" (p. 89; American Psychiatric Association, 1994, p. 752). Baltes et al. (1999) also examined lifespan psychology's basic premise that adaptive processes that help individuals face change involve acquisition, maintenance, transformation, and attrition in psychological structures and functions, and argued that these adaptive processes are nonlinear, multidimensional, and multifunctional (p. 471).

Competence stems from being able to effectively cope with life changes. A child's mental development around attitudes and personal dispositions contribute to adaptive capabilities in the face of changing life situations. Palmer (2000) argued:

> Temperament seems to have been particularly significant to how children adjusted to separation and alternative care. Existing research suggests that children with calm, easy-going, sociable dispositions, who are self-confident and willing to take initiative, have a special capacity to adapt to change and to elicit positive responses from others. (p. 39)

Freitas and Downey (1998) examined personality developmental processes in light of processes underlying resilient and nonresilient outcomes and looked at youths identified as resilient based on adaptive outcomes when coping with stressful situations. Freitas and

Downey stated, “An appropriate first step in such research is to delineate the characteristics of individuals who have managed to achieve adaptive outcome in the face of stress” (p. 264). Dumont and Provost (1999) also looked at adolescents faced with changes (e.g., family structure changes, school changes, and accidents) and argued that some adolescents who successfully adapt to these sorts of changes were found to be positively stimulated toward academic achievement, community involvement, or sports. On the other hand, Dumont and Provost found a decrease in competence in those who were unsuccessful at adapting to change, which was evidenced by increases in negative social or illegal activities (e.g., drugs, gangs, truancy, etc.). Furthermore, competence with change appears to be an outcome of adaptation that ultimately leads to resilience. For example, Birman, Trickett, and Vinokuov (2002) identified adaptation across life domains when they examined the acculturation of Soviet Jewish adolescent refugees in Maryland. Resilient adolescents can successfully adapt to new cultures and environmental circumstances. Psychological mechanisms for activating adjustment patterns in behaviors occur particularly when the individual is confronted with adverse conditions.

Researchers have indicated adjustment patterns as antecedents of resilience (Luthar, Cicchetti, & Becker, 2000). Masten and Coatsworth (1998) observed that early childhood competence was developed through adaptive interactions between children and their environments. Masten and Coatsworth believed that successful adaptation to the environment through the developmental years produced an internal locus of control that promoted a sense of real competence in the individual. Luthar, Cicchetti, and Becker

(2000) proposed that the evidence of positive adaptation observed in children is dependent upon two conditions: "the presence of a threat to a child's well-being and evidence of a positive adaptation" (p. 546).

Developmental psychologists' work on resilience can be extended to adults faced with the threat of change in adverse situations who react similarly based upon their childhood and adolescent developmental experiences with adapting to change and their subsequent development of competence (Masten & Coatsworth, 1998). The ability to maintain relative stability and healthy levels of psychological and physical functioning as an outcome of adaptation is the basis for resilience (Bonanno et al., 2007). Tomich and Helgeson (2006) substantiated this notion in their research with women who were dealing with breast cancer. The women used positive self-esteem, optimism, and control in relationships as adaptive coping skills that contributed to their health outcomes. Vaillant (2000) noted that positive mental health consists of adaptive defenses that "reduce conflict and cognitive dissonance during sudden changes in internal and external reality," and this serves to "restore psychological homeostasis" (p. 90). The defenses offer a suspension of cognitive reality in order to make sense of one's change in self-images.

The ability to make positive adjustments that allow for change is a well-established correlate of self-esteem for children and adolescents (Dubois, Bull, Sherman, & Roberts, 1998), particularly in relationship to trauma. Hernandez et al. (2007) argued that resilience in trauma survivors was an outcome of how "trauma survivors access adaptive processes and coping mechanisms to survive and even thrive in the face of adversity" (p. 229), which is accomplished by being able to manage changes in life.

Felder, Monson, and Friedman (2007) stated, "An adaptive psychobiological response to traumatic stress is one that mobilizes these mechanisms for adequate coping and adaptation but which returns to normal function when the demands of traumatic even exposure have ceased" (p. 86).

Level of Psychosocial Functioning

A potential correlation exists between CF and resilience as they are both defined by their functional outcomes. Resilience as used by Luthar, Cicchetti, and Becker (2000), is defined as "a dynamic process encompassing positive adaptations within the context of a significant adversity" (p. 543). Haffae and Grigorenko (2007) also identified resilience as the manifestation of positive functioning in the face of an individual's vulnerability or the presence of risks. Resilience is also defined as "the ability to maintain healthy levels of psychological and physical function . . . as well as the capacity for generative experiences and positive emotions" (Mancini & Bonanno, 2006, p. 972), and resilience is identified as "the ability to continue fulfilling personal and social responsibilities and to embrace new tasks and experiences" (Bonanno et al., 2007, p. 671) after experiencing a posttraumatic event. Resilience is also described as an ability to continue forward with life in face of a hardship or adverse situation (Miller, 2003).

Contrasted with the concept of resilience, CF is identified as the risk of reduction in personal and professional functioning associated with clinicians working with trauma survivors as the potential outcome of developing CF. Figley (2002) stated, "Compassion fatigue, like any other kind of fatigue, reduces our capacity or our interest in bearing the suffering of others" (p. 1434). Figley also identified "life disruptions as the unexpected

changes in schedule, routine, and managing life responsibilities that demand attention (e.g., illness, changes in lifestyle, social status, or professional or personal responsibilities" (p. 1438) as potential outcomes to which CF contributes.

Compassion Satisfaction and Resilience

Ting et al. (2006) pointed to the need for understanding the relationship between CF and factors that increase resilience. The concept of compassion satisfaction (Figley, 2002) may also be a component of resilience related to the clinician's adaptive coping styles based on psychological defenses that are identified as active, problem-focused strategies that result in reporting of fewer PTSD symptoms (Schauben & Frazier, 1995; Weaks, 2000). Compassion satisfaction may also be related to the clinician's means of psychologically deriving rewards from the work and results that he or she experiences in the course of working with traumatized clients. Extrapolating personal gratification from an individual's work by "creating meaning" around work, may act as a protective defense that helps reduce the risk of becoming CF'd with the trauma material the client presents (Figley, 2002).

Assessing Clinicians for Resilience

The question of whether a potential predictability exists for CF and VT if an individual is inept at using adaptive coping skills has been suggested by researchers (Salston & Figley, 2003). There may be a value in being able to assess or evaluate an individual's coping patterns or adaptive skill sets in relationship to being resilient to stressors (Ong, Bergeman, Bisconti, & Wallace, 2006). Luthar et al. (2000) proposed that the evidence of positive coping observed in children is dependent upon two

conditions: “the presence of a threat to a child’s well-being and evidence of a positive adaptation” (p. 546).

Luthar et al. (2000) argued that positive coping as a function of a child’s response patterns to a potential threat was the antecedent of resilience and also supported the notion that resilience can be assessed and predicted in adults who use positive coping skills. Consequently, successful coping that promotes resilience in the therapist requires that the mental health professional maintains a level of self-awareness, which facilitates awareness of an individual’s current psychological health and awareness that promotes a healthy emotional distancing that protects the clinician from exposure to risks (Hernandez et al., 2007). Ego-functioning that includes the capacity for self-supervision is how some individuals are able to sustain a self-protective, homeostatic psychological resilience; however, these functions can become strained and leave the individual vulnerable (Shubs, 2008). Vaillant (1994) stated, “Defense mechanisms refer to innate involuntary regulatory processes that allow individuals to reduce cognitive dissonance and to minimize sudden changes in internal and external environments by altering how these events are perceived” (p. 44). Vaillant also believed that the perception of self, others, and ideas are changed by the use of defense mechanisms. Pearlman and Ian (1995) held that each individual’s personality used differing defensive styles to adapt to the salience of the traumatic events as a means of psychological coping.

It may not be possible to only assess clinicians for vulnerability to CF, but also for their propensity toward resilient coping strategies. Lindy and Lifton (1997) identified the three-fold coping process as “(a) dealing with one’s trauma, (b) keeping appropriate

distance, and (c) dealing with the client's trauma" (p. 46). Lindy and Lifton further described the process of being exposed to trauma victims as "maintaining the emotional and intellectual distance necessary to the witnessing professional, even as he tried to cope with his [or her] own painful experiences of survivor-witness" (p. 216). This three-fold coping process provides researchers and practitioners with guideposts to understanding how clinicians may remain resilient when dealing with trauma victims.

The synthesis of research literature conducted within all disciplines related to resilience and CF provide a foundational platform for assessing and intervening with clinicians treating victims of trauma. Thus far, few researchers have incorporated these constructs toward the synthesis of a collective theory that addresses this subject matter. Extensively integrating the constructs and implications of the theories related to resilience and CF within the context of mental health clinicians treating trauma victims will facilitate the development of an effective methodology to describe the theoretical connections that will ultimately incorporate the research findings into practical applications that can alter the way in which mental health professionals manage and prevent CF.

Summary

The potential for understanding the effect that the characteristics and levels of resilience may have on mitigating vulnerability to the onset of CF among clinicians working with trauma survivors is crucial for creating strategies of prevention (Killian, 2008). Researchers have conceptualized psychological resilience as the ability to maintain mental well-being and the capacity to bounce back and recover from a life

challenge or adversity (Neil, 2001). CF, on the other hand, can lead to psychological vulnerability that can be detrimental to mental health providers' emotional and mental well being (Figley, 2002). Identifying the factors that lead to understanding of how clinicians remain resilient while dealing with the insidiousness of trauma is essential for laying the groundwork for psychological immunization that aids in preventing CF (Neil, 2001).

Evaluating both of these constructs conjunctively is noteworthy because the need for understanding how to protect against the debilitating effects of CF is paramount for ensuring that mental health professionals are protected, as well as their clientele (Figley, 2002). By increasing the characteristics of resilience as identified by the CD-RISC (2003) through graduate education and postgraduate continuing-education training, researchers have postulated that clinicians may experience an increase in mental wellbeing and possibly compassion satisfaction, a subscale of the ProQOL-V CF (Stamm, 2009). In Chapter 3, I will discuss the methodology for the study.

Chapter 3: Research Method

Introduction

This chapter includes a description of the design, sample, instrumentation, and procedures used in this study. This study is quantitative in design. The sampling came from mental health professionals treating trauma survivors whom I recruited and asked to participate in this study. I used electronic data collection via an online survey instrument that was confidential and easily accessed by participants through a secured Internet connection in the privacy of each individual's home, office, or other private domain. The web-based survey included items for demographic data, as well as data that can be used to identify the variables associated with the constructs of resilience and CF. The instrument was used to quantitatively measure for the characteristics of resilience as identified by the Connor-Davidson Resilience Scale (2003), for CF as identified by the ProQOL-V (Stamm, 2009), and for demographic variables.

Background

Mental health clinicians are subjected to the traumatic memories, emotions, images, and recollections of their clients, which can cause harm to both their personal and professional well-being (Adams et al., 2008). Risking exposure to CF is inherent in the mental health professionals' work with traumatized clients (Figley, 1995). The consequences of such work can lead to negative effects known as CF, which can leave the mental health professional impaired. The need to protect clinicians from CF has yielded research into the antecedents of CF's development, along with the development of other constructs such as STS (Adams et al., 2008). According to Adams et al. (2008),

vulnerability to CF has been identified by demographic variables, including gender, race or ethnicity, age, marital status, and years of working in professional counseling. Being female, and particularly a female with a previous history of personal trauma, may be a risk factor for attaining CF (Sprang et al. 2007).

Studying the phenomenon wherein some clinicians remain more resilient than others is essential for contributing to a comprehensive understanding of how clinicians respond to trauma. Resilience—viewed as positive adaptations to trauma, adversity, and stress—may prove to be a valuable construct to operationalize within the mental health profession in order to help protect clinicians from the onset of the symptoms of CF (Luthar et al., 2000). Resilience may be enhanced within a practitioner's clinical practice and yet the practitioner may suffer in other personal domains. According to Vanderbilt-Adriance and Shaw (2006), "Resilience is not an all-or-nothing phenomenon; in fact studies demonstrate that resilience is often inconsistent across domains" (p.888). However, it might be possible to enhance or strengthen an individual's resilience within a particular domain (e.g., family, community, career, clinical practice, etc.) by focusing on the protective factors associated with resilience (e.g., self-confidence, self-efficacy, compassion satisfaction, etc.) by strengthening these factors through education, training, and support (Sprang et al., 2007). Harnessing resilience-promoting factors might not only protect the health and well-being of mental health professionals, but also protect the integrity of the professional services they provide (Bonanno et al., 2007).

Research Design

The research design of this study is based on an explorative-descriptive, quantitative methodology. I looked at the context of mental health professionals working with individuals who are being treated for trauma and how they cope with and manage their clients' traumatic material in view of the occupational risks involved with developing CF. Furthermore, I explored the resilience of clinicians working in this context and aimed to discover how, if any, identifiable level of resilience as indicated by the CD-RISC (2005) has an effect on identifiable indicators of CF, burnout, and compassion satisfaction as revealed by the ProQOL-V (Stamm, 2009). I examined a select population of mental health professionals whose routine professional duties bring them into contact with the traumatic material of their clients.

I selected a quantitative methodology because the amount of data collected requires data analysis in order to portray the characteristics of the population of mental health professionals in the United States and to ascertain, evaluate, and generalize the findings in relationship to resilience and CF found among mental health clinicians treating trauma victims.

Survey Design Methodology

I collected confidential survey data from mental health clinicians who self-reported that they have direct clinical experience with clients who have experienced or who have been diagnosed with some form of trauma or PTSD. Clinicians were requested to complete a survey. Clinicians who self-identified as involved with treating trauma

clients were requested to participate in the survey and were directed to complete the web-based online survey instruments.

I selected a web-based survey design method for data collection because this method offered an easier means for clinicians to participate in this study (a) within the comfort and convenience of their personal surroundings, (b) across state boundaries throughout the United States, (c) within a confidential setting of each clinician's own choosing (e.g., in the office behind closed doors, in the privacy of his or her home, etc.), (d) with minimal distractions, and (e) with a level of anonymity that will allow for honest and frank reflections when responding to each survey item. Another reason I selected a web-based survey design was to achieve a more reliable snapshot of the clinicians' current states of mind, personal history with treating trauma clients (e.g., emotional state of mind, personal trauma history, etc.), and consequential experiences (e.g., personal biopsychosocial effects, professional effects, etc.) at the time of data collection. In the web-based survey, I asked for demographic data, as well as data that can be used to identify the variables associated with the constructs of resilience and CF. I collected the data by using two survey instruments: (a) the CD-RISC (Connor & Davidson, 2003) and (b) the ProQOL-V (Stamm, 2005).

Population, Sample, and Participants

I targeted a specific population among a broad range of psychotherapists, social workers, counselors, and other mental health professionals (e.g., nurses and doctors) who self-reported that they are involved in treating trauma and PTSD clients. I selected study samples from the membership rosters of the New England Society for the Treatment of

Trauma and Dissociation, the NASW Dallas listserv, the Georgian Therapists Network, and from the Metropolitan Atlanta Therapists Network e-mail listing, regional treatment facilities, and mental health hospitals. In the recruitment message, I targeted graduate-level professional psychotherapists, nurses, psychiatrists, and other mental health professionals.

Procedure

Statement of Intent, Request for Consent, and Statement of Appreciation

Participants received a cover letter via e-mail (see Appendix A) describing the intent of this study. The cover letter included an appeal for their consent to participate in this study. A statement explaining the intent of this research and its objective was sent via e-mail to potential participants in the aforementioned study sample (see Appendix A). In the request to the recipients, I asked them to forward the survey web link and the accompanying cover letter to any of their professional mental health colleagues who may be working with victims of trauma. I also asked for the recipients' personal consent to participate in this study. The recipients were asked to complete the demographic and professional experiences questionnaire. I explained the purpose of the study, and the procedures to be used to ensure confidentiality. Additionally, I discussed my availability if there were any questions. Finally, I expressed my appreciation for participating in the study.

The cover letter included the aim of the study, the criteria for which the recipient was selected for participation, the meaning and implications of this study, the precautions and measures taken to ensure confidentiality, and my availability for inquiries and

answers to questions. I e-mailed the cover letter in English to potential respondents. The questionnaires were in English, as well. I did not identify any subculture or subgroup requiring language sensitivity; therefore, instruments and correspondence were in English. Finally, a statement of appreciation for the recipient's willingness to participate in the study was included in the cover letter.

Web Address Link

Participants were directed to go to a secured web link and to sign in using an encrypted password. The website also included the CD-RISC (Connors & Davidson, 2003) and the ProQOL: CF and Fatigue Subscales –Version V (Stamm, 2009; see Appendix C). The website also provided a demographic questionnaire.

Confidentiality

Participants were not asked to provide any identifying information. In a one-page informed consent form, I described the risks and benefits, including the risk that the participant may be reminded of unpleasant memories while completing the survey instrument. Additionally, participants were reminded that participation is completely voluntary and they are free to withdraw at any time.

Researcher Contact Information

The participants were provided with my contact information and contact information for the dissertation advisor, so that participants may ask questions or express concerns about the research study either by e-mail or by phone. Recipients were asked to include their e-mail addresses on the survey if they wished to receive the results of the research. They were reminded to only use nonidentifying e-mails (e.g., not

first.last.name@hotmail.com) if they wished to remain completely anonymous. In order to maintain anonymity, the e-mail addresses were not disclosed.

Demographic Variables

There are several demographic and variable relationships among aspects of trauma therapy: variables related to the therapist, CF, and the psychological functioning of the therapist in relationship to his or her response to trauma. Dependent variables that might indicate the existence of CF and independent variables that might predict it have been revealed in the research literature. Adams et al. (2006) identified five demographic variables in researching social workers and CF: gender, race/ethnicity, age, marital status, and years of experience of working as a counselor (p. 105). In addition to these demographic variables, Bride (2004) identified the most commonly researched variables, which included age, gender, exposure levels, training, occupation, trauma history, and trauma symptoms. I identified the following demographic variables to examine: (a) gender, (b) years of experience, (c) estimated number of trauma clients treated in an individual's practice, (d) the clinician's previous trauma history, and (e) level of education within the various mental health-related professions of psychology, social work, nursing, counseling, and psychiatry. Participants were asked to self-report on the demographic questionnaire the type of trauma treated and the number of clinical trauma clients they have treated. Only clinicians who have treated trauma within the past 3 months were included in this study. Upon receipt of the completed survey questionnaires and following the screening of respondents who have worked with trauma victims, I statistically analyzed the data.

Instrumentation

The research survey included the following three instruments: (a) the demographic and professional experiences questionnaire, which was developed for this study (see Appendix C); (b) the CD-RISC; and (c) the ProQOL-V (Stamm, 2009). The questionnaire covering the nature of the professional's level of experiences and the demographic information provided a means to filter out anyone who did not meet the criteria for the survey. Participants were asked to self-report whether they have worked specifically with clients affected by traumatic events within the past 3 months. Clinicians who had not worked with trauma clients during the past 3 months were filtered out of the study. The last part of the questionnaire was used to elicit information regarding age, gender, professional degree, years of experience as a mental health provider, marital status, receiving supervision, geographical location, years of experience working with traumatized clients, home life, and personal trauma history.

CD-RISC

I obtained permission to use the CD-RISC instrument from Davidson, the coauthor of the CD-RISC, who provided the written permission to use the instrument. The CD-RISC (2001, 2003, 2007, 2009) is a 25-item self-report and self-rated questionnaire instrument that is used to quantify resilience and establish reference values. The CD-RISC was initially developed by Connor and Davidson (2003) who reported its psychometric data to establish the validity and reliability of the resilience scale. The CD-RISC has shown good internal consistency and test-retest reliability in both community and clinical samples (Connor & Zhang, 2006). According to Lamond et al. (2008), the

Chronbach's Alpha scale for the CD-RISC was 0.923, which was viewed as a satisfactory result. Karairmak (2010) wanted to ensure that the Turkish version of the CD-RISC was a reliable and valid measure of resilience and found that the Chronbach's Alpha scale for the Turkish version of the CD-RISC was 0.92, therefore establishing reliability.

According to Connor (2006), the mean scores in specific populations in the original validation study are as follows in Table 2:

Table 2
Populations in the Original Validation Study

U.S. general population	80.7
Primary care patients	71.8
Psychiatric outpatients	68.0
Generalized anxiety	62.4
2 PTSD samples	47.8 & 52.8

Connor (2006) conceptualized resilience as "a measure of stress-coping ability" and stated, "It describes personal qualities that allow individuals and communities to grow and even thrive in the face of adversity" (p. 46). The CD-RISC has been used in preliminary analyses to measure resilience in the U.S. general population and in various contexts involving college students, primary care patients, psychiatric outpatients, and among suffers of generalized anxiety and PTSD (Campbell-Sills & Stein, 2007). Other researchers who either cited or reported original research about resilience and the CD-RISC instrument included, but are not limited to, the following subjects: PTSD, anxiety, neuropsychopharmacology and depression, and mental health and life satisfaction (Connor, 2006).

According to Tusaie and Dyer (2004):

> The Connor-Davidson Resilience Scale has used the research literature to guide its development [sic] but has a wider adult sample consisting of a community group, primary care outpatients, psychiatric outpatients, subjects in a study of generalized anxiety disorder, and subjects in clinical trials for PTSD. This scale may assist in the process of identifying levels of resilience in a wide range of populations as well as quantifying changes in resilience during therapy. (p. 6)

Researchers used the CD-RISC in an exploratory factor analysis (EFA) in a general sampling of 577 adults, which established a five-factor solution that pointed to "personal competence, high standards, and tenacity," "trust in one's instincts, tolerance of negative effect, and strengthening effects of stress," "positive acceptance of change and secure relationships," "control," and "spiritual influences" (Connor & Davidson, 2003, p. 80). The EFA identified these as characteristics of resilience in relationship to life adversities, stress, or trauma.

Scoring the CD-RISC is based on the 25-item scale instrument that uses a 5-point Likert scale (0 = *not at all* to 4 = *true nearly all the time*) for participant responses. The CD-RISC has a potential range and score of 0 to 100 with each survey item being scored from 0–4 multiplied by 25 items. The score of 0 reflects no resilience and the score of 100 reflects the highest level of resilience. The scores reflect levels of personal resilience perceptions and self-evaluations in relationship to exposure to trauma (Campbell-Sills & Stein, 2007; Connor, 2003, 2006).

According to Campbell-Sills and Stein (2007), the psychometric analysis and refinement of the CD-RISC using empirically-driven modifications, showed that the paired down CD-RISC 10-item instrument used in studies of exposure to trauma presented above average to excellent psychometric properties and allows for efficient measurement of resilience; this also suggests the potential for using it as a subset of the CD-RISC. Connor (2006) reported, "The 5 items that exhibited the highest statistical significance (all $p<.001$) involved: gaining confidence from past successes, feeling in

control, having the ability to cope with stress, knowing where to turn for help, and being able adapt to change" (p. 48).

ProQOL-V

The ProQOL V (Stamm, 2009) assessment measures CF, compassion satisfaction, VT, and potential for burnout in mental health counselors (Stamm, 2009). The ProQOL V is a modified instrument based on the previous ProQOL – R-III (Stamm, 2002) and R-IV (Stamm, 2005) and has demonstrated greater psychometric reliability. The original version had needs for psychometric improvements; therefore, the fifth revision has been established as more reliable. The original was based on a 66-item survey. However, in order to develop increased psychometric integrity, the ProQOL V was restructured and shortened to a 30-item version.

ProQOL-V's Subscales

Compassion satisfaction, burnout, and CF/STS were retained in the subscale structure. The ProQOL-V's psychometric properties are identified as the following: compassion satisfaction alpha = .88 (n = 1130), burnout alpha = .75 (n = 976) and CF alpha = .81 (n = 1135). According to Stamm (2009), the ProQOL-V is a shorter version tested for greater reliability. Stamm also reported that the original reliability score on the earlier version (III) was .82 and the comparable reliability on the abbreviated scale would be .69. In addition, Stamm reported that measures for each item-to-scale statistics have yielded substantial improvements as a result of increased specificity.

Scales were aimed to target two primary purposes: "(a) to further develop an understanding of the constructs of compassion fatigue, and (b) to assist in clinician

identification of whether they are personally vulnerable to compassion fatigue" (Racanelli, 2004, p. 115). The instrument is used to measure three interconnected and overlapping constructs: (a) resilience, (b) CF, and (c) burnout. Each construct is defined as follows:

Compassion satisfaction: Compassion satisfaction is defined as satisfaction that emanates from feelings of doing an individual's work with efficiency. Stamm (2005) indicated, "Higher scores on this scale represent a greater satisfaction related to your ability to be an effective caregiver in your job" (p. 5). A higher score of compassion satisfaction may be a trait and a leading indicator of a clinician's resilience.

Burnout: Burnout is a sense of overall hopelessness and feelings of being ineffective on the job. Burnout comes about gradually and usually results from high workloads and intense work-related stress. Higher scores indicate a higher risk level for developing burnout (Stamm, 2005).

CF/Secondary trauma: CF is also known as secondary trauma and is interrelated to VT. CF is work-related secondary exposure to stressful events or intense secondary exposure to the trauma material or PTSD of trauma victims and survivors (Stamm, 2005). A higher score on the CF scale may be an indicator of low levels of resilience.

According to Figley (1995), the scoring is calculated as follows on Table 3:

Table 3
CF or Secondary Trauma Scoring

< 94 = low risk for CF
95–128 = some risk of CF
128–172 = moderate risk for CF
>173 = high risk for CF

Identifying Potential Correlations between Resilience and Compassion Satisfaction

There is a possible correlation between compassion satisfaction and resilience (Sabo, 2008), I asserted the following hypotheses:

The following hypotheses in relationship to the aforementioned research questions are as follows:

H_o1: There is no relationship between the level of resilience as measured by the Connors-Davidson Resilience Scale (2001, 2009) and the three compassion fatigue subscales—compassion fatigue, burnout, and compassion satisfaction—as measured by the Professional Quality of Life Revision IV (Stamm, 2009).

$H_1 1$: There is a relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and the three compassion fatigue subscales—compassion fatigue, burnout, and compassion satisfaction—as measured by the ProQOL-V (Stamm, 2009).

$H_0 2$: The level of resilience as measured by the CD-RISC (2001, 2009) does not predict any changes in the compassion fatigue subscales as measured by the ProQOL-V, Stamm (2009).

$H_1$2: There is no relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and demographic variables.

1. There is no relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and gender.
2. There is no relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and years of experience.
3. There is no relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and level of education.
4. There is no relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and prior history of trauma.
5. There is no relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and the number of trauma clients treated.

H_0*3*: There is a relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and demographic variables.

1. There is a relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and gender.
2. There is a relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and years of experience.
3. There is a relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and level of education.

4. There is a relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and prior history of trauma.

5. There is a relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and the number of trauma clients treated.

A positive correlation between higher scores of compassion satisfaction on the ProQOL-V and higher scores of resilience on the CD-RISC may indicate a correlation between the two constructs (Radey & Figley, 2007; Sabo, 2008). The following questions that cross-reference both instruments may indicate a relationship between resilience and compassion satisfaction: Questions 5, 11, 21, 22, 23, 25 on the CD-RISC instrument coincide with ProQOL-V Questions: 3, 6, 12, 16, 18, 20, 22, 24, 27, and 30. I posited the overall hypothesis that a negative correlation exists between an increase of resilience and a decrease of CF. A potential positive correlation also exists between an increase in resilience and an increase in compassion satisfaction. See Figure 2 below.

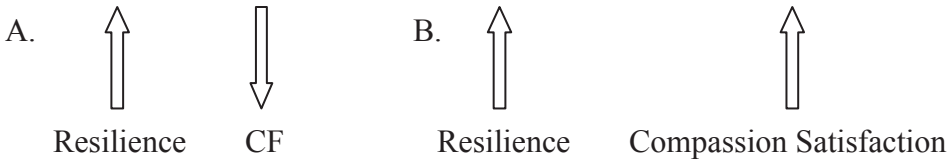


Figure 2. Correlations between resilience, compassion satisfaction, and CF

According to Stamm (2005), the qualities of compassion satisfaction on the ProQOL are described as follows:

> Pleasure you derive from being able to work well. For example, you may feel like it is a pleasure to help others through your work. You may feel positively about your colleagues or your ability to contribute to the work setting or even the greater society. Higher scores on this scale represent a greater satisfaction related to your ability to be an effective caregiver on your job. (p. 1)

Correlating pleasure as an emotional state of mind, which Stamm (2005) described, may be a parallel with Connor's (2006) assertion that "resilience is regarded as a way of measuring emotional stamina" (p.46). Connor also identified a sense of meaningfulness, sense of humor, optimism, and faith as characteristics of resilience. These characteristics of resilience may involve positive, pleasurable states of emotion than can be associated with compassion satisfaction.

Additionally, correlating competence as "being able to work well," "feel positively about your . . . ability to contribute to your work setting or even the greater society," and "your ability to be an effective caregiver on your job" as Stamm (2005, p. 1) described may reflect a parallel with Connor's (2006) identified characteristics of resilience: competence, self-efficacy, internal locus of control, sense of meaningfulness, ability to use past successes to confront current challenge, and the ability to adapt (p. 47). Likewise, Miller and Daniel (2007) asserted that resilience involves being competent in

response to the demands imposed on the ability to cope and thrive, may correlate with Stamm's definition of "being able to work well" (p. 47).

Compassion satisfaction may be a characteristic of resilience as it relates to the clinician's adaptive coping style based on psychological defenses that are identified as active, problem-focused strategies that result in the reporting of fewer PTSD symptoms (Schauben & Frazier, 1995; Weaks, 2000). The implications for these correlations may mean that strategies for enhancing mental health providers' levels of resilience may ultimately prevent the onset of CF.

Data Analysis Procedures

I used two different types of analysis in this study: multiple regression analysis and one-way ANOVAs. Analysis for Research Question 1 included the predictor variables CF, burnout, and compassion satisfaction as measured by the ProQOL-V (2009), three subscale's scores and cross analyzed with the criterion variable, and the level of resilience, as measured by the CD-RISC (2001, 2009), in order to ascertain whether a relationship can be identified between both predictor variables and criterion variables.

For Research Question 2, I conducted three one-way ANOVAs on the following independent variables: gender, prior history of trauma, and level of education across the dependent variable, and level of resilience, as measured by the CD-RISC (2001, 2009). Additionally, I conducted a separate multiple regression analysis on two continuous independent variables, which are (a) years of experience and (b) the numbers of trauma

clients treated and across the dependent variable: level of resilience as measured by the CD-RISC (2001, 2009).

Sample Size, Power, and Significance

It is important to establish the necessary sample size for the statistical analysis a priori while considering the power, population effect size, and level of significance. As Cohen (1992) stated,

> Statistical power analysis exploits the relationships among the four variables involved in statistical inference: sample size (N), significance criterion (ft), population effect size (ES), and statistical power. For any statistical model, these relationships are such that each is a function of the other three. For example, in power reviews, for any given statistical test, we can determine power for given a, N, and ES. For research planning, however, it is most useful to determine the N necessary to have a specified power for given a and ES" (p.98).

Because sample size requirements for a Pearson product-moment *r* correlation are higher than that of a linear regression, I determined the minimum sample size for a Pearson product-moment *r* correlation.

It was also necessary to determine an acceptable significance level for determining when to reject the null hypothesis (i.e., the probability of committing a Type I error). The standard values for significance level represented by α are set at 10%, 5%, and 1% as a matter of policy (Aczel et al., 2006). This means that an $\alpha = 0.05$ corresponds to $(1 - \alpha) = 0.95$ probability of a correct statistical conclusion when the null

hypothesis is true (Lipsey, 1990). Additionally, a 0.95 probability is equivalent to a 95% confidence level to reject H_0 (Aczel, et al, 2006). For the purposes of this research, the level (α = 0.05) will be chosen for the analysis that is the most commonly designated value in social science research for this parameter (Lipsey, 1990).

Statistical power is also an important factor to consider a priori. As Cohen (1992) stated, "The statistical power of a significance test is the long-term probability, given the population ES, a, and TV of rejecting. When the ES is not equal to zero, H, is false, so failure to reject it also incurs an error. This is a Type II error" (p. 98). Power is the probability of rejecting the null hypothesis if the null hypothesis is really false. An acceptable level of power for this study is .80, making the Type II error 4 times as likely as the Type I error. Because it is typically more serious to make a false positive claim than it is to make a false negative one, this is an acceptable level and will be considered in determination of the sample size a priori (Cohen 1992).

According to Cohen (1992), *r* effect sizes are small if they are 0.10, medium if they are 0.30, and large if they are 0.50. In choosing an effect size, this is in essence deciding how small of a difference is acceptable to still find the results worthwhile. If allowing a small effect size, then a large sample is required. If requiring large differences, then a small sample size is required. The larger the effect size, the greater the power of the test. I determined a medium effect size as appropriate for this study and used it in the determination of the sample size. This is considered an average effect and is appropriate for the analysis. Considering this medium effect size of 0.30, a generally accepted power

of 0.80, and a 0.05 level of significance, the necessary sample size to achieve empirical validity for this study is 85.

Statistical Tests

Pearson *R*

A Pearson product-moment *r* was conducted to assess whether relationships exist between variables in the study. Correlation is an appropriate statistical measure when the research purposes "are concerned primarily with finding out whether a relationship exists and with determining its magnitude and relationship" (Pagano, 1990, p. 117). Person *r* correlation (product-moment correlation) is a bivariate measure of association (strength) of the relationship between two variables. Pearson *r* "is the slope of the least-squares linear regression line when the scores are plotted as *z* scores . . . and measures the extent to which paired scores occupy the same or opposite positions within their own distributions" (Pagano, 1990, pp. 119–120). Given that all variables are continuous (interval/ratio data) and I sought to assess the relationships, or how the distribution of the *z* scores varies, Pearson *r* correlations are the appropriate bivariate statistic.

Correlation coefficients, *r*, vary from 0 (no relationship) to 1 (perfect linear relationship) or -1 (perfect negative linear relationship). Positive coefficients indicate a direct relationship where, as one variable increases, the other variable also increases. Negative correlations coefficients indicate an indirect relationship, where as one variable increases, the other variable decreases. I used Cohen's standard to evaluate the correlation coefficient, where .2 represented a weak association between the two

variables, .5 represented a moderate association, and .8 represented a strong association (Howell, 1992).

Linear Regression

I conducted a linear regression to assess whether the independent variables predicted the dependent variable (criterion). A linear regression is an appropriate analysis when the goal of the research is to assess the extent of a relationship among a set of dichotomous or interval/ratio predictor variables on an interval/ratio criterion variable. I used the following regression equation: $y = b_1*x + c$, where y = estimated dependent, c = constant, b = regression coefficients, and x = independent variables (Tabachnick & Fidell, 2001).

I used the F test to assess whether the set of independent variables predicted the dependent variable. R^2 was reported and used to determine how much variance in the dependent variable can be accounted for by the independent variable. I used the t-test to determine the significance of the predictor and beta coefficients to determine the extent of prediction the independent variable. For a significant predictor, every one unit increase in the predictor, the dependent variable will increase or decrease by the value of the unstandardized beta coefficient.

I assessed the assumptions linear regression, linearity, and homoscedasticity. Linearity assumes a straight line relationship between the predictor variables and the criterion variable and homoscedasticity assumes that scores are normally distributed about the regression line. I assessed linearity and homoscedasticity by examining scatter plots.

Summary

I investigated the issues discussed in the previous chapter using data from a sample of clinicians who have been or who are currently treating victims of trauma (e.g., natural disasters, terrorism, physical abuse, sexual abuse, etc.). A sampling of clinicians is appropriate based on parallel research into CF, VT, and STS. Research about STS and clinicians was accomplished by sending a questionnaire to a list of 1,000 social workers generated from the National Association of Social Workers. One thousand questionnaires were sent out, and 515 were returned. Ting et al. (2005) took a subsample of 275 respondents who indicated "they had experience with being impacted by their work with traumatized clients," which provided a statistical significance for analyzing the study's hypotheses (p. 182).

Initially, achieving a sample size needed for a statistical analysis a priori, while allowing for the power, population effect size, and level of significance to be considered, was the goal of this study. According to Salkind (2000), "Power is a construct that has to do with how well a statistical test can detect and reject a null hypothesis when it is true" (p. 178). A statistical power analysis makes use of the relationships between the four variables concerned with statistical inference: (a) sample size (*N*), (b) significance criterion (*ft*), (c) population effect size (*ES*), and (d) statistical power (Cohen 1992). An adequate sample size is necessary to establish an acceptable significance level for determining when to reject the null hypothesis (i.e., the probability of committing a Type I error). The aim of this study was to collect an adequate data sample size in order to

decrease the potential for Type II errors (Salkind, 2000). In Chapter 4, I will provide the results of the study.

Chapter 4: Results

Introduction

The purpose of this study was to evaluate the potential relationship between resilience as measured by the CD-RISC (2001, 2009) and CF, burnout, and compassion satisfaction as measured by the ProQOL-V (Stamm, 2009). Initially, I sent e-mails via Metropolitan Atlanta Therapist Network, Dallas Chapter NASW listserv, the Georgia Therapist Network and the New England Society for the Treatment of Trauma and Dissociation membership pools. From two rounds of sending e-mails out to the membership pools, the response was 131 participants. I sent two rounds of e-mails and collected data from July 25 to August 15, 2011.

Descriptive Analysis

The data were entered into SPSS version 19.0 for Windows. Initially, 146 participants responded to the survey. However, I removed 15 participants for not answering a large portion of the survey. Therefore, 131 participants remained. The majority of the participants were female (110, 84.0%). A large number of the participants were older than 55 years (54, 41.2%). A large number of the participants were affiliated with social work (62, 47.7%). For many of the participants, the highest level of education was a master's of social work (58, 44.3%). Most of the participants had been in the professional practice as clinicians for more than 15 years (71, 55.0%) and most had worked with victims of trauma for more than 15 years (68, 51.9%). Most of the participants had experienced a traumatic event (82, 63.1%), and most of the participants knew friends or relatives who had experienced a traumatic event or had been diagnosed

with PTSD (110, 84.6%). Many of the participants received informal supervision (48, 36.9%). Table 4 presents frequencies and percentages for participant demographics.

Table 4

Frequencies and Percentages for Participant Demographics

Demographic	*N*	%
Gender		
Male	21	16
Female	110	84
Age		
21–25	1	0.8
26–35	12	9.2
36–45	29	22.1
46–55	35	26.7
Older than 55	54	41.2
Professional affiliation		
Social work	62	47.7
Psychiatry	4	3.1
Clinical psychology	15	11.5
Counseling psychology	44	33.8
Family therapy	5	3.8
Highest level of education		
MD	3	2.3
PhD	23	17.6
PsyD	3	2.3
EdD	4	3.1
MSW	58	44.3
MA	23	17.6

(table continues)

Years in professional practice as a clinician		
Less than 1	2	1.6
1–5	19	14.7
6–10	22	17.1
11–15	15	11.6
More than 15	71	55
Years working with victims of trauma		
Less than 1	3	2.3
1–5	16	12.2
6–10	32	24.4
11–15	12	9.2
More than 15	68	51.9
Experienced traumatic event		
Yes	82	63.1
No	48	36.9
Friends/relatives who have had a traumatic event or diagnosed with PTSD		
Yes	110	84.6
No	20	15.4
Clinical supervision		
Group supervision	35	26.9
Individual supervision	33	25.4
Informal supervision	48	36.9
None	14	10.8

During the last 30 days, the minimum number of clients a participant had who had suffered from diagnosable trauma or life-threatening traumatic events was one. The maximum number of clients a participant had was 10. During the last 30 days, on average, the participants had 6.52 clients who had suffered from diagnosable trauma or life-threatening events (*SD* = 3.51).

Research Variables

I created the compassion satisfaction subscale by summing ProQOL Questions 3, 6, 12, 16, 18, 20, 22, 24, 27, and 30. I created the burnout subscale by summing ProQOL Questions 1, 4, 8, 10, 15, 17, 19, 21, 26, and 29 after reverse coding Questions 1, 4, 15, 17, and 29. I created the CF subscale by summing ProQOL Questions 2, 5, 7, 9, 11, 13, 14, 23, 25 and 28. Last, I created the resilience subscale by summing Questions 1 through 25 of the CD-RISC survey.

I conducted Cronbach's alpha reliability on the subscales. Using George and Mallery's (2003) suggested guide to reliability, compassion satisfaction and resilience had excellent reliability, and burnout and CF had good reliability. Table 4 presents means, standard deviations, and Cronbach's alpha reliabilities for the research variables.

Table 5

Means, Standard Deviations, and Cronbach Alpha Reliability for Research Variables

Variable	*M*	*SD*	α	Number of items
Compassion satisfaction	42.27	4.79	0.91	10
Burnout	19.05	4.99	0.80	10
Compassion fatigue	19.68	5.13	0.83	10
Level of resilience	77.37	11.73	0.92	25

Research Question 1

Research Question 1 asked: What is the extent of the relationship between the level of resilience as measured by the Connors-Davidson Resilience Scale (2001, 2009) and the three compassion fatigue subscales—compassion fatigue, burnout, and compassion satisfaction—as measured by the Professional Quality of Life Version V (Stamm, 2009)? Do the scales show that when the level of resilience is measurable that an inverse relationship exists with measuring compassion fatigue and burnout? In other words, when the level of resilience is reported to be substantial among participants, is the presence of compassion fatigue and/or burnout markedly more or less measurable?

$H_0$1: There is no relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and the three compassion fatigue subscales: compassion fatigue, burnout, and compassion satisfaction as measured by the ProQOL-V (Stamm, 2009).

$H_1$1: There is a correlation between the level of resilience as measured by the CD-RISC (2001, 2009) and the three compassion fatigue subscales: compassion fatigue, burnout, and compassion satisfaction as measured by the ProQOL-V (Stamm, 2009).

$H_0$1: The level of resilience as measured by the CD-RISC (2001, 2009) does not predict any changes in the compassion fatigue subscales as measured by the ProQOL-V (Stamm, 2009).

*H_1*1: The measure of resilience does predict negative correlations with the compassion fatigue subscales as measured by the ProQOL-V (Stamm, 2009).

To examine Research Question 1, I conducted a multiple regression analysis to assess whether compassion satisfaction, burnout, and CF predicted the level of resilience. I assessed the assumption of normality by examining a P-P plot. In the scatterplot, I found few signs of deviation from normality, and the assumption was verified. I assessed the assumption of homoscedasticity by examining a residuals plot. In the scatterplot, I found no signs of not being random, and the assumption was verified. All of the variance inflation factors were below 10, verifying the assumption of absence of multicollinearity.

The results of the multiple regression were significant, F (3, 127) = 32.89, $p <$ .001, suggesting that compassion satisfaction, burnout, and CF successfully accounted for (R^2) 43.7% of the variance in the level of resilience. I found that compassion satisfaction was a significant predictor of level of resilience, B = 0.94, $p <$ .001, suggesting that for every one point increase in compassion satisfaction, the level of resilience also increased by 0.94 points. I also found that burnout successfully predicted the level of resilience, B = -0.92, $p <$ .001, suggesting that for every one point increase in burnout, level of resilience

decreased by 0.92 points. Compassion satisfaction, burnout, and CF together made a significant model. However, when testing for a correlation between CF and resilience alone, CF, on its own, was not a significant predictor. Based on the multiple regression, $H_0$1 can be rejected in favor of $H_1$2; the overall model with the CF subscales predicting level of resilience was significant. Table 5 presents the results of the regression.

Table 6

Multiple Regression with Compassion Satisfaction, Burnout, and CF Predicting Level of Resilience

Source	*B*	*SE*	β	*t*	*p*
Compassion satisfaction	0.94	0.23	0.38	4.15	.001
Burnout	-0.92	0.25	-0.39	-3.64	.001
Compassion fatigue	0.23	0.19	0.10	1.17	.243

Research Question 2

Research Question 2 asked: What is the relationship between the level of resilience as measured by the Connors-Davidson Resilience Scale (2001, 2009) and the following demographic variables?

1. What is the relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and gender?

Previous researchers who have studied CF have identified gender as a provider characteristic that was significant to account for because of the statistical outcome differences between male and female providers. The amount to which CF, compassion satisfaction, and burnout vary as a function of provider gender was studied and was found

to be a significant variable as females, more than males, were likelier to develop CF and STS (Adams et al., 2008; Sprang et al., 2007).

2. What is the relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and years of experience?

Researchers who have studied CF have identified that years of professional experience were linked to a decreased potential for developing vicarious trauma and CF (Adams et al., 2008; Sprang et al., 2007); thus, I evaluated years of professional experience and the level of resilience to determine whether this is a significant variable.

3. What is the relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and level of education?

Education level was found to mitigate the potential for developing CF in previous studies and, therefore, understanding whether education level significantly affected resilience in relationship to CF may point to a strategy for increasing resilience by targeted educational and continuing-education trainings (Adams et al., 2008; Sprang et al., 2007).

4. What is the relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and the prior history of trauma of the clinician?

Previous history of trauma was identified as being a significant variable associated with increased risks for vicarious trauma and CF. Measuring resilience in coping styles may be a more exacting determinant of whether a professional resists or succumbs to CF (Adams et al., 2008; Sprang et al. 2007).

5. What is the relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and the number of trauma clients treated?

Exposure factors such as caseloads and long hours were significant variables in increased levels of CF and STS (Sprang et al., 2007). Therefore, measuring levels of resilience may be a marker for a professional's ability to cope with exposure factors (Adams et al., 2008).

With regard to Research Question 2, $H_0$2 states that no relationship exists between the level of resilience as measured by the CD-RISC (2001, 2009) and demographic variables.

1. There is no relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and gender.
2. There is no relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and years of experience.
3. There is no relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and level of education.
4. There is no relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and prior history of trauma.
5. There is no relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and the number of trauma clients treated.

Additionally, with regard to Research Question 2, $H_1 2$ stated that a relationship exists between the level of resilience as measured by the CD-RISC (2001, 2009) and demographic variables.

1. There is a relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and gender in that being either male or female has a significant role in determining the level of resilience.
2. There is a relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and years of experience in that more or fewer years of experience has a significant role in determining the level of resilience in the provider.
3. There is a relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and level of education in that the provider's level of education has a significant role in determining the level of resilience in the provider.
4. There is a relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and prior history of trauma in that a prior history of trauma has a significant role in determining the level of resilience in the provider.
5. There is a relationship between the level of resilience as measured by the CD-RISC (2001, 2009) and the number of trauma clients treated in that this is an indicator of the level of exposure, which has a significant role in determining the level of resilience in the provider.

To examine Research Question 2, I conducted three ANOVAs and one multiple regression to assess the relationship between level of resilience and gender, prior history of trauma, level of education, experience in professional practice, and number of trauma victims the participants treated in the last 30 days. In the three ANOVAs, I looked at the level of resilience by gender (male vs. female), prior history of trauma (experience trauma vs. not), and level of education. Because there were three ANOVAs that were conducted, a Bonferroni adjustment was made to the level of significance. The level (0.05) was divided by 3 to create a new level of significance at 0.017. Level of education was condensed into two categories: master's level degree vs. doctoral level degree. The multiple regression had years of experience in professional practice and the number of trauma victims the participant treated in the last 30 days as predictor variables.

ANOVA: Gender

In the first ANOVA, I examined the level of resilience by gender. Normality of level of resilience was assessed using a Kolmogorov Smirnov test. The results were not significant. I assessed the assumption of equality of variance with a Levene's test. The result of the test was not significant, verifying the assumption of equality of variance. The results of the ANOVA were not significant, F (1, 129) = 0.19, p = .193, suggesting there was no statistical difference in the level of resilience by gender. Table 6 presents the results of the ANOVA. Table 7 presents the means and standard deviations for level of resilience by gender.

Table 7

ANOVA for Level of Resilience by Gender

Source	*SS*	*df*	*MS*	*F*	*p*	Partial η^2
Gender	26.69	1	26.69	0.19	.661	<.01
Error	17863.72	129	138.48			

Table 8

Means and Standard Deviations for Level of Resilience by Gender

Gender	*M*	*SD*	*N*
Male	76.33	9.91	21
Female	77.56	12.08	110
Total	77.37	11.73	131

ANOVA: Trauma Experience

In the second ANOVA, I examined the level of resilience of those who have experienced trauma. The assumption of normality has already been verified. I assessed the assumption of equality of variance and verified with the Levene's test. The results of the ANOVA were not significant, F (1, 128) = 0.17, p = .685, suggesting no statistical difference existed in the level of resilience of those who have experienced trauma and those who have not. Table 8 presents the results of the ANOVA. Table 9 presents means and standard deviations for level of resilience of those who have and have not experienced trauma.

Table 9

ANOVA for Level of Resilience by Trauma Experience

Source	*SS*	*df*	*MS*	*F*	*p*	Partial η^2
Trauma experience	23.13	1	23.13	0.17	.685	<.01
Error	17861.64	128	139.54			

Table 10

Means and Standard Deviations for Level of Resilience by Trauma Experience
Trauma experience

	M	*SD*	*N*
Experienced	77.71	11.16	82
Not experienced	76.83	12.86	48
Total	77.38	11.77	130

ANOVA: Education

In the third ANOVA, I examined the level of resilience by education. I condensed the level of education to those who have master's level degrees vs. doctoral degrees. The assumption of normality was already been verified. I assessed the assumption of equality of variance and verified with the Levene's test. The results of the ANOVA were not significant based on the Bonferonni adjustment, F (1, 129) = 4.11, p = .045, suggesting no statistical difference existed in the level of resilience of those who have master's degrees and those who have doctoral degrees. Table 10 presents the results of the ANOVA. Table 11 presents means and standard deviations for level of resilience by education.

Table 11

ANOVA for Level of Resilience by Education

Source	*SS*	*df*	*MS*	*F*	*p*	Partial η^2
Education	551.98	1	551.98	4.11	.045	0.03
Error	17338.43	129	134.41			

Table 12
Means and Standard Deviations for Level of Resilience by Education

Education	*M*	*SD*	*N*
Master's level	78.49	11.60	101
Doctoral level	73.60	11.58	30
Total	77.37	11.73	131

Multiple Regression

The predictor variables for the multiple regression were the years of experience and the number of trauma victims treated during the last 30 days. Because years of experience was an ordinal-level variable, it was dichotomized into less than 15 years of experience vs. 15 years or more based on a median split. The number of trauma victims treated was an interval-level predictor.

I assessed normality by observing the P-P plot for deviation from normality. In the plot, I found little deviation, and the assumption was verified. I assessed homoscedasticity by viewing the residuals plot for an observed pattern. I found little

signs of patterns with the residuals, and the assumption was verified. Years of experience and number of trauma clients were together to control for Type I error, and I entered them into the regression together. By measuring them separately, there was an increased chance of a Type I error, so I tested them simultaneously. The results of the multiple regression were not significant, F (2, 126) = 0.85, p = .430, suggesting the years of experience and the number of trauma clients treated did not predict the level of resilience. Results of the regression are presented in Table 12.

Table 13

Multiple Regression for Years of Experience and Number of Trauma Clients Predicting Level of Resilience

Source	*B*	*SE*	β	*t*	*p*
Years of experience	2.10	2.03	0.09	1.03	.303
Trauma clients treated	-0.29	0.30	-0.09	-0.97	.336

Summary

The data I collected and analyzed in this study yielded support of the first research hypothesis, showing that there is significant evidence of a correlation between the level of resilience as measured by the CD-RISC (2001, 2009) and the three compassion fatigue subscales—compassion fatigue, burnout, and compassion satisfaction—as measured by the ProQOL-V (Stamm, 2009). Additionally, I found some support for the measure of resilience does predict negative correlations with the compassion fatigue subscales as measured by the ProQOL-V (Stamm, 2009). In Chapter 5, I will present my conclusions and recommendations for future study.

Chapter 5: Discussion, Conclusions, and Recommendations

Overview

The purpose of this study was to explore and evaluate the role resilience may have in mitigating the risks associated with developing CF among mental health clinicians who work with trauma survivors. Researchers have identified CF as an occupational hazard for mental health providers in the course of their work with trauma survivors (Bride et al., 2007). In this study, I examined whether a correlation existed between CF and resilience, and what role, if any, the level of resilience has on mitigating CF in mental health clinicians. I pondered the possible reasons a majority of clinicians remain resilient rather than developing CF, in spite of treating traumatized clients.

Interpretation of Findings

Theoretical Frameworks

Figley (2002) suggested that working with trauma survivors is a hazardous part of any mental health provider's job. The cases of diagnosable trauma have increased among the general U.S. population with more individuals being able to identify trauma events (e.g., rape, physical violence, domestic violence, bullying, sexual abuse, emotional abuse, etc.). Also, with U.S. soldiers returning from a recent decade of wars in Iraq and Afghanistan, more clinicians are being exposed to the psychological manifestation of traumatic experiences and/or posttraumatic stress (Breslau, 2002), which may be harmful to the clinicians.

Researchers who have studied the psychosocial consequences of CF, burnout, and secondary trauma have added to the knowledgebase during the past decade (Figley, 1993,

2003; Racanelli, 2005; Stamm, 2005) and continue to inform the various mental health professions about the harmful implications, as well as a need for clinicians to protect themselves in the line of professional duty.

Resilience Psychology

Resilience is a psychological construct that researchers have identified in traumatic stress studies (Charney, 2004; Connor, 2006). Resilience, as an ability to adapt positively to adversity, occurs more frequently in clinicians than CF or burnout, yet the focus of the past decade of research has been on CF among mental health clinicians treating trauma survivors.

The aim of this study was to identify resilience as a construct in conjunction with trauma and to evaluate how resilience could play a role in protecting individuals from the deleterious effects of CF and burnout, which is essential for adding to the understanding of how mental health clinicians may ultimately protect themselves from potential harm when working with trauma survivors. In the literature, there is a common focus on the antecedents of CF, VT, STS, and burnout. Some researchers have suggested the need to understand why some individuals do not experience deleterious effects when compared to others who did (Adams et al., 2006; Bride, 2007; Figley, 2002; Sabo, 2006).

Some individuals are able to access adaptive processes and coping mechanisms that psychologically protect them in the face of adversity (Masten & Coatsworth, 1998; Walsh, 2003). However, these adaptive processes are not identified or qualified as characteristics of resilience in conjunction with the problem of CF among mental health clinicians. Hernandez et al. (2007) postulated that vicarious resilience was a result of

some therapists' abilities to gain strength from their clients' abilities to draw something positive, meaningful, or inspirational from their traumatic experiences.

Resilience in relationship to trauma and among mental health clinicians is a fairly recent consideration. Understanding the phenomenon of resilience as it occurs among trauma therapists more regularly than the occurrences of CF presents important implications for researchers and practitioners concerned with finding strategies to prevent CF among mental health providers working with or specializing in treating trauma survivors.

Addressing Potential Research Skewing and Biases

Questions of skewing and biases based on clinicians answering the survey because of their personal interests related to their work with survivors of PTSD, CF, or burnout are common concerns for quantitative research, particularly in disseminating research survey instruments. During the actual data-collection process, I approached several groups of mental health providers and used them for survey distribution. I addressed this concern by using listservs from the New England Society for the Treatment of Trauma and Dissociation, which primarily has mental health clinicians interested in treating trauma survivors. I used an online, secure, survey service to send out the request for participation to each listserv group one at a time. The first group survey, New England Society for the Treatment of Trauma and Dissociation, made up an estimated 36% of the original respondents. The next groups were nonspecific to trauma clinicians, such as the Metropolitan Atlanta Therapists Network, Dallas Chapter NASW listserv, and the Georgia Therapist Network, which made up the remainder of the survey

respondents. I sent out survey participation requests to one listserv at a time and got daily updates as to the number of anonymous, graduate-level respondents who completely filled out the survey instruments, thus facilitating my monitoring of the approximate number of respondents for each group surveyed. Although New England Society for the Treatment of Trauma and Dissociation was a significant contributor, the survey went out to more than 1,000 graduate-level, licensed social workers, psychologists, and counselors in the state of Georgia through the Metropolitan Atlanta Therapist Network and the Georgia Therapists Network. These individuals were not focused on trauma only but were more random in their work with trauma survivors as only a fraction of their routine practices. Therefore, the results are more random than skewed.

This Study's Findings and Significance

A summary of what I found confirms that the data I collected and analyzed yielded support of the first research hypothesis, showing that here is significant evidence of a correlation between the level of resilience as measured by the CD-RISC (2001, 2009) and the three compassion fatigue subscales—compassion fatigue, burnout, and compassion satisfaction—as measured by the ProQOL-V (Stamm, 2009). Additionally, I found some support for the second hypothesis: The measure of resilience does predict negative correlations with the compassion fatigue subscales as measured by the ProQOL-V (Stamm, 2009).

Research Question 1 Results

In regard to Research Question 1, I found that CF, burnout, and compassion satisfaction have a correlation with an individual's level of resilience. Compassion

satisfaction and resilience had excellent reliability and showed a correlation between the measurements of both. I found that resilient clinicians are likely to report a higher level of compassion satisfaction than nonresilient clinicians. What may be deduced from the analyses is that clinicians who report lower levels of compassion satisfaction tended to report experiencing higher levels of either burnout and or CF. The analysis may be used to help researchers postulate about the nature of compassion satisfaction and how it may be viewed and studied as being a possible a characteristic of resilience. Resilience is a factor in whether a clinician experiences burnout or CF.

Earlier in this study, compassion satisfaction was postulated as being a characteristic that plays a role in enhancing a clinician's resilience. The concept of compassion satisfaction (Figley, 2002) may also be a component of resilience related to the clinician's adaptive coping style based on psychological defenses that are identified as active, problem-focused strategies that result in reporting of fewer PTSD (Schauben & Frazier, 1995; Weaks, 2000). Compassion satisfaction was a significant predictor of level of resilience, $B = 0.94$, $p < .001$, suggesting that for every 1 point increase in compassion satisfaction, the level of resilience also increased by 0.94 points.

Compassion satisfaction, burnout, and CF together made a significant model. However, one anomaly that came out of the data analysis happened when testing for a correlation between CF and resilience alone; CF, on its own, was found not to be a significant predictor. No apparent reasons for this result exist, which may warrant future testing and theoretical considerations.

Research Question 2 Results

The data I collected and analyzed with regard to Research Question 2 yielded results concerning demographic variables that were mixed. The data analyses findings are as follows:

Gender. Gender was not a significant predictor of resilience, and thus made no statistical difference, according to the data analysis. In spite of the fact that there were more female respondents than males in this study, I did not find that women tended to be more vulnerable to VT and subsequently more susceptible to developing CF.

Years of experience. The findings of this study may be different compared to some of researchers who have found that experience contributes to overall well being and healthy coping with the trauma material of the clients. I looked at years of experience as an ordinal level variable that was then dichotomized into two subgroups based on a median split of fewer than 15 years of experience versus 15 years or more. The results of the analyses were not significant, F (2, 126) = 0.85, p = .430, suggesting the years of experience did not predict the level of resilience.

Education level. In the third ANOVA, I examined the level of resilience by education. Level of education was condensed to those who have master's level degrees versus doctoral degrees. The assumption of normality was already been verified. I assessed the assumption of equality of variance and verified with the Levene's test. The results of the ANOVA were not significant, suggesting that those with master's level degrees experienced no notable difference in level of resilience than those with doctoral degrees. I found no significant different in degree levels.

Personal History of Trauma

Personal history of trauma was not found to have a significant effect on whether an individual has a statistical difference in the level of resilience. I did not find support for what other researchers have identified about previous trauma histories (Adams et al., 2008), which suggested that those with a personal history of trauma contributed to poor psychological health.

Number of Trauma Victims

The number of trauma victims treated was an interval level predictor. During the last 30 days, the minimum number of clients a participant had who had suffered from diagnosable trauma or life-threatening traumatic events was one. The maximum number of clients a participant had was 10. During the last 30 days, on average, the participants have had 6.52 clients who have suffered from diagnosable trauma or life-threatening events (*SD* = 3.51). The results were not significant, suggesting the number of trauma clients treated did not predict the level of resilience.

Further Discussion

Resilience is a complex phenomenon that is a result of complex biopsychosocial traits working succinctly in a systemic process to create the human capacity for navigating adversities (Vaillant, 2000; Zautra, Hall, & Murray, 2008). The ultimate goal of resilience is survival. Resilience is a routine part of sustaining life. Human beings experience resilience every day of their lives until the mechanisms finally wear out or they succumb to an adversity (e.g., disaster, accident, disease, crime, old age, etc.). The qualities of resilience as identified in the research literature encompass the notions of

personal adaptability, skill at overcoming obstacles, building resistance to hazardous conditions, survival tactics, coping strategies, positive shifts in mental states of mind and affects (e.g., satisfaction, gratitude, positive affirmations, etc.), and thus emotionally navigating through difficult times (Bonanno, 2008; Edward, 2005; Killian, 2008; Miller & Daniel, 2007;Tedeschi & Kilmer, 2005) and becoming active agents to ensure human resilience.

Metatheory of Resilience

I found that a metatheory of resilience is possibly at play in clinicians who are more physically adaptable and mentally resistant to the negative influences of working with trauma survivors. In the chronology of metatheory, Richardson (2002) suggested that identification of resilient qualities was the first wave of resilience research characterized through phenomenological identification of development assets and protective factors. The second wave of research includes resilience as a disruptive and reintegrative process for accessing resilient qualities. The third wave exemplified the postmodern and multidisciplinary view of resilience, which is the force that drives a person to grow through adversity and disruptions.

Human experience is a dynamic exchange between the individual's internal world and external reality (Zeman, 2002). Zeman (2002) described human consciousness as "the interplay of sensation, memory, emotion, and action is the foundation of ordinary experience" (p. 18). Resilience is a state of mind wherein the internal world coincides with navigating an individual's external world. Resilience can be identified as a psychological or mental state of mind as well as identified as a set of behavior-based and

task-oriented strategies for overcoming adversity (Richardson, 2002). Collins (2007) asserted that resilience is "an adaptive state and personality trait evident in many people, including social workers, but it is influenced by many variables" (p. 255). Connors (2006) defined resilience as "personality hardiness," (p. 46) which is marked by emotional stamina derived from an adaptive psychological set of processes (e.g., coping skills, mental rigidity vs. flexibility, etc.). Hernandez et al. (2007) included both a personal trait and a behavioral process in their use of "resilience" as they defined resilience as "the way in which trauma survivors access adaptive processes [behavior] and coping mechanisms [psychological] to survive and even thrive in the face of adversity" (p. 229). Finally, White, Driver, and Warren (2008) viewed resilience as encompassing "a multidimensional, dynamic construct made up of a variety of personal qualities. Individuals who posses these personal qualities are more likely to positively adapt when exposed to a traumatic event" (p. 10).

The convergence of the two views, resilience as a set of mental states of mind and as a set of adaptive behavioral processes, are implied in both instruments for resilience (CD-RISC, 2009) and for CF, compassion satisfaction, and burnout (ProQOL-V, 20xx). Both instruments are used to query the respondent's recollections, memories, or traumatic events. Also, both instruments are used to query the respondent about positive or negative effects, states of mind, and the outcomes of adaptive- or maladaptive-type behaviors. For example, the CD-RISC (2009) instruments' first question, "I am able to adapt when changes occur," points to a behavioral process of adaptation. Likewise, ProQOL-V statements such as, "I feel invigorated after working with those I [help]" points to mental

states that are a result of strategies of action or behaviors and a favorable self-evaluation as a person looks back over his or her behaviors or actions, whereas, Question 22 states, "I feel in control of my life," implying a confident state of mind based on the individual's positive self-evaluation, which relates to an individual's locus of control.

Resilience and States of Mind

Resilience as a byproduct of states of mind that aid the individual with harnessing mental fortitude in order to navigate through or overcome adversity should be a theoretical consideration (Richardson, 2002). Conner (2006) listed the following qualities of resilience related to emotional or psychological states of mind: "internal locus of control, sense of meaningfulness, sense of humor, strong self-esteem, ability to perceive the strengthening effect of stress, ability to adapt to change, patience, tolerance of negative affect, optimism, and faith" (p. 47). On the other hand, negative states of mind, such as a lack of confidence, pessimistic outlook, self-doubt, perceived external locus of control, or poor self-evaluation may indicate maladaptive mental states that undermine resilience.

Resilience may result from self-evaluations that modulate more positive personal states of mind leading to confidence regarding favorable perceptions about and individual's personal work and actions or behaviors that produce some type of beneficial emotional outcome and/or secondary gain (e.g., rewards, self-concept, self-evaluation, etc.) for the individual. The mental practice of "staying positive" may increase resilient responses to stress or to the traumatic material that the clinicians hear about in sessions with trauma survivors. Conversely, negative self-evaluations about an individual's work,

behaviors, or lack of coping skills may contribute to low tolerance and low resilience to the same. These negative self-evaluations may indicate maladaptive coping patterns that lead to succumbing to CF or burnout. Self-doubt or questioning a person's decisions or capabilities may be detrimental to sustaining resilience in the face of adversity.

Positive outlook statements, such as "I am able to adapt when changes occur," "I can deal with whatever comes my way," or "Past successes give me confidence in dealing with new challenges and difficulties," as was indicated on the CD-RISC (2009), may contribute to an individual's personal mental fortitude.

Resilience and Adaptive Behavioral Processes

Contrasting resilience as an effective state of mind with resilience as a set of adaptive behavioral strategies is also found in the literature. Connors (2006) identified behaviorally-based qualities that make some individuals resilient, such as "engaging the support of others, personal or collective goals, and action-oriented approach" (p.46). How an individual evaluates his or her skills and abilities when employed during difficult situations may make a difference in whether he or she sustains personal resilience or succumbs to CF and burnout. Adaptive behaviors that sustain resilience may involve the individual consciously employing strategies or action steps that successfully help him or her overcome adversity. Positive self-evaluations based on an individual's behaviors or ability to successfully navigate adversities may be the key toward aiding individuals to develop self-mastery in the face of a challenge and ultimately serve to sustain ongoing resilience.

I found that mental states surrounding beliefs, moods, perspectives, and attitudes may be self-generated or influenced by external sources. Either through self-generated states (e.g., happy, satisfied, contentment, etc.) and external influences (e.g., encouragement, emotional support, recognition, rewards, etc.), individuals may be able to nurture and sustain mental states that contribute to their resilience. Likewise, mental states generated by an individual's actions or behaviors (e.g., peer supervision, taking breaks during the day, training, going to yoga classes, etc.) may be used to increase and sustain resilience.

Implications for Social Change

Protecting mental health providers from developing CF, secondary trauma, and burnout is a societal concern because there are a large number of returning military people coming back from wars in Afghanistan and Iraq who will need treatment for trauma and PTSD. If mental health providers become disabled from treating war veterans, the news about such disabilities could effectively discourage mental health providers from pursuing work with traumatized veterans. Likewise, any disabling of clinicians treating traumas such as victims of rape, disasters, violent crimes, or the like could discourage social workers, counselors, nurses, psychologists, and medical professionals from wanting to work with these trauma populations for fear of being disabled. Therefore, protecting clinicians needs to be a larger priority than currently emphasized in the realm of the mental health field.

This research is not only important for mental health providers, it is also extremely important for anyone who is in a position of responding to trauma victims, care

giving, and personal service fields (e.g., firefighters, police, nurses, physicians, etc.). I believe that in the future this study and other studies into resilience can have a positive impact on people who risk the hazards of compassion fatigue. It is extremely important to protect people in the line of duty when it comes to answering the call of duty. If these results from this study, which indentifies a relationship between the characteristics of resilience and compassion fatigue, had been formulated in some preventive education, perhaps other paraprofessionals and professionals could have been protected from compassion fatigue in the aftermath of the terrorist attacks of September 11, 2001.

Recommendations for Action

I recommend taking action in order to improve the potential wellness of clinicians. I suggest going forward to enhance personal resilience and mental/emotional fortitude and to reduce risks for developing CF. Mental health practitioners, along with academics and educators responsible for graduate counseling, social work, psychology, and nursing programs, need to educate their students that resilience can protect against CF and burnout. First, preventative steps should be taken to protect against disability among mental health providers. Radey and Figley (2007) pointed to a new goal for research, "Too often we focus on disorders, psychopathology, dysfunction, and problems. We must balance these negative elements with a focus on altruism, compassion, resilience, success, and thriving" (p. 208). Prevention can be achieved by educating graduate students about CF and trauma. Likewise, ongoing education among professional associations such as the NASW, APA, and other similar organizations could serve to raise awareness and alert clinicians in the field about the positive effects of resilience.

Second, educating graduates and clinicians about the biopsychosocial components of resilience can serve to empower individual clinicians and future clinicians with the knowledge that they can use to keep themselves healthy. Currently, social work educators focus on the strengths perspective, a foundational concept for generalists. Incorporating resilience psychology into the educational foundation of graduate students may be an effective way to alert future clinicians to the importance of doing and practicing activities that strengthen personal resilience. Third, more research into what cognitive behavioral techniques can increase self-resilience is needed. Finally, professional groups such as the New England Society for the Treatment of Trauma and Dissociation, APA, The Society for Traumatic Stress Studies, and others that provide information to their professional members may be disseminate the results of this study. Subsequently, dissemination of the research outcomes into the professional population in the field to raise awareness is important for continuing professional education.

I suggest changes in the education and training of future graduates and current mental health providers. Ultimately, to safeguard clinician's health and livelihoods, educators must teach resilience on all levels of the biopsychosocial model. More research into what sorts of activities and experiences enhance personal resilience is needed. Just as vitamins, exercise, and healthy nutrition are important for a healthier life, implementing resilience-enhancing activities ought to be routine for clinicians working with populations who experience trauma (e.g., rape victims, abuse victims, military veterans, etc.).

Resilience training is not unheard of and is not a new concept. For example, athletes competing in the Olympics are actually training their minds and bodies to be

more resilient to fatigue and fend off bodily injury through repetition and strength building. Endurance training for people going out into the wilderness is actually about training to be resilient in adverse weather and natural environments. Likewise, training future graduates and helping current clinicians to access a variety of biopsychosocial mechanisms related to resilience (e.g., exercise, social support systems, family and friends, mental attitudes, etc.) in order to protect them from succumbing to deleterious hazards of burnout and CF may be the foundation for developing resilience-enhancing programs. I suggest a resilience training program that would contribute to healthier mental health clinicians. Strategies for enhancing resilience in clinicians working with trauma survivors may be developed in graduate programs or as ongoing continuing professional education seminars for practitioners already in the field. Biopsychosocial training of graduate level clinicians may take on the theme related to *Enhancing Professional and Personal Resilience through Personal Wellness and Social Support* training. Therefore, graduate programs and curricula could educate and teach future clinicians about resilience as a psychological construct.

Recommendations for Further Study

I found evidence that resilience and CF, burnout, and compassion satisfaction were correlated. Not enough is yet known about how some individuals become more resilient than others. It is not yet understand how to help someone who may not be inclined toward resilience to experience the changes necessary to enhance personal resilience. However, researchers have pointed to where definitional and theoretical roads appear to reconnect to a central conceptual and operational understanding of resilience,

which implies that resilience traits are not only developmentally innate, but also depend upon dynamic process-driven interactions that facilitate adaptation to an individual's environment, particularly in the face of adversity (Jacelon, 1997). Deciphering mental states and benefits gleaned from adaptive behaviors may help to understand how to develop a two-pronged approach toward training and educational programs that enhance individual resilience. The first approach is toward increasing resilience with an emphasis on nurturing mental states of mind (e.g., positive mood states, dialectical perspectives, flexible attitudes, etc.) within the individual. This may be done through using meditation practices. The second approach may be learning to take active part in rewarding activities and behaviors, so that individual learns to engage in such behaviors in order to facilitate healthier mental states; for example, individuals nurturing uplifting mental states that are nurtured as a result of participating in supportive community activities (e.g., support groups, supervision groups, spiritual activities, etc.).

There is a need for further study about resilience occurring among mental health providers treating trauma victims in order to build upon the existing empirical knowledgebase. Questions this research raises, such as, "What are some of the specific qualities of resilience that can be enhanced to improve a clinician's personal resilience?" (research that breaks down and identifies the various qualities of resilience active in resilient clinicians will help give insight as to what qualities can be nurtured to enhance resilience), and, "What activities can be utilized to enhance resilience in mental health providers?" (research that measures activities designed to enhance resilience in mental

providers) is needed in order to better identify strategies for developing resilience-enhancing programs.

Conclusion

Clinicians experiencing CF, burnout, and/or secondary trauma from working with trauma survivors can experience disabilities and loss of livelihoods. It is imperative that education and training programs incorporate resilience-enhancing programs that protect current clinicians and future mental health graduates.

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Appendix A: Participant Recruitment E-mail Cover Letter

Dear Colleague:

My name is Daniel David, LMSW. I am currently a social worker and doctoral student in clinical social work at Walden University's Department of Human Services. I am inviting you to participate in research that examines factors that contribute to a clinician's resilience and/or the risks associated with working with victims of trauma. The title of this study is *Resilience as a Protective Factor against Compassion Fatigue in Trauma Therapists: A Proposed Study*

Your knowledge and/or experience related to the topic of trauma and your current work as a clinician were the reasons for you being selected as a potential participant of this study.

I am sure that you are familiar with the challenges that working with trauma victims pose. While many clinicians report positive impacts on their lives both personally and professionally as an outcome of their trauma work, beyond the challenges and rewards there are also risks involved. Research has pointed to serious occupational hazards that clinicians working with trauma have experienced and reported, such as vicarious traumatization, burnout, and compassion fatigue (Figley, 2002). These risks have been reported as being detrimental to even the most able and experienced of clinicians. Therefore, more research into what protects some clinicians from these risks and what causes some to be vulnerable is the reason for my research.

Therefore, it is my pleasure to invite you to take part in this study. Your professional experiences working with trauma survivors may help to inform both the social work and mental health professions about these risks associated with treating trauma clients as well as the possible measures to prevent compassion fatigue and other risks by increasing the traits and characteristics associated with resilience.

Finally, it would be most helpful if you would kindly forward this email and hyperlink to any of your colleagues whom you know are working with PTSD or trauma survivors.

Your time and consideration is greatly appreciated.

Sincerely,
Daniel P. David, LMSW

Appendix B: Consent Form

You have been asked to participate in research that will contribute to our knowledge of what factors contribute to resilience and/or vulnerabilities related to clinicians working with victims of trauma or diagnosed posttraumatic stress disorder. You were selected to be a potential participant because of your knowledge and experience treating survivors of traumatic experiences. Please carefully read this form and do not hesitate to ask any questions that you may have prior to your participation in this research.

This study is being conducted by Daniel P. David, LMSW, a doctoral candidate of Clinical Social Work within the Walden University Department of Human Services. The title of this study is *Resilience as a Protective Factor against Compassion Fatigue in Trauma Therapists: A Proposed Study.*

Research Background:

The purpose of this study is to explore the role that resilience may have in mitigating the risks associated with mental health clinicians developing compassion fatigue. Compassion fatigue has been identified in the research literature as an occupational hazard for mental health providers in the course of their work with trauma survivors (Bride, Radey, & Figley, 2007). This study examines resilience, a construct indicating an aggregate of positive traits and behavioral adaptations despite facing adverse situations such as traumatic events, in relationship to mental health providers and the risks associated with compassion fatigue (Luthar, Cicchetti, & Becker, 2000). Although the phenomenon of compassion fatigue has been acknowledged as a potential risk, the research literature has acknowledged that many individuals experience traumatic events with minimal to no significant impact on their ability to function (Mancini & Bonanno, 2006). Furthermore, the research indicates that some clinicians manifest positive strengths while working with trauma and violence (Bell, 2003; Hernandez, Gangsei, & Engstrom, 2007).

Investigating the questions of why and how some clinicians cope better than others with traumatized clients is important for understanding resilience among mental health professionals. It is important to identify what protects clinicians from compassion fatigue in order to inform the mental health profession about possible strategies for enhancing and strengthening resilience among clinicians in this field (Walsh, 2002). Likewise, understanding resilience in relationship to compassion fatigue may help to raise awareness among mental health professionals so that approaches that foster a greater capacity for resilience may become conceptualized and presented in graduate education and continuing education programs for social workers, psychologists, and professional counselors (Kaminsky, McCabe, Langlieb & Everly, 2006). This study surveys several types of trauma-related scenarios (e.g., disasters, war, terrorism, rape,

physical violence, etc.) that clinicians find themselves dealing with, which create stress and potential for compassion fatigue, and examines what variables may actually act as protective factors.

The premise of this study is that resilience is just as common, if not more common, an outcome for clinicians working with trauma victims as compassion fatigue, and that resilience has not yet been sufficiently evaluated as a potential protective alternative outcome that can be enhanced (Mancini & Bonanno, 2006

However, few studies have evaluated the role of resilience in relationship to compassion fatigue within the context of the clinician treating trauma victims (Lawson & Venart, 2005, p. 245).

In conclusion, this study hopes to: (a) expand the knowledgebase about resilient and invulnerable mental health professionals; (b) promote the study of resilience among mental health providers; and (c) identify factors that promote resilience and help protect against compassion fatigue.

Procedures:

As you participate in this study, you will be requested to complete three survey questionnaires. The questionnaires consist of a demographic questionnaire. The survey also includes the Connor-Davidson Resilience Scale and the Professional Quality of life Questionnaire Revised 4th Edition. Your completion of the questionnaire acts as a consent to participate in this study.

Voluntary Nature of this Study:

Please be advised that participation in this study is strictly voluntary. If you elect to participate in this study, you are free to withdraw at any time. The results of this study will be forwarded by email to all individuals who were initially contacted.

Risk and Benefits of Participation:

There are not overt risks or harms associated with participating in this study. In some cases, reflecting upon past personal relationships and professional experiences as a clinician with clients struggling with trauma may invoke some limited psychological experiences. In contrast, there are possible benefits from participating in this study, such as knowing that the participant has made a contribution to the knowledgebase of her/his profession thus helping to enhance our ability to work safely and effectively with survivors of traumatic experiences.

In the unlikely event of experiencing stress or discomfort during your participation, please be advised that you may terminate your involvement in this study

without consequence. Additionally, any question that you deem personally uncomfortable, please feel free to not answer the question.

Compensation:

No compensation for your participation in this study is provided. However, the participants of this study shall receive a copy of the results and conclusions of this study.

Confidentiality:

All records of this study will be kept strictly confidential. All identifying information pertaining to the respondent will be documented in an anonymous manner making identification of participants impossible. All research data and records shall be maintained in a secure fashion accessible only to the researcher.

Questions and Contacts:

Should the participant have any questions, please feel free to contact the researcher and/or his researcher advisor at anytime. Contact information:

Researcher: Daniel P. David, LMSW

Research Advisor: Dr. Christine Racanelli, Ph.D.

Statement of Consent:

I have read all of the above information and my questions have been sufficiently answered. I, hereby, understand that my completion of the research questionnaire serves as my consent to participate in this research study without personal hesitation or reservation.

Appendix C: Demographic Questionnaire

Please carefully read the following questions carefully and mark your response to the best of your ability by placing a check mark (√) next to your selection:

1. **What is your gender?**

   __Male __Female __Transgender

2. **What is your age?**

   __21–25 __26–35 __36–45 __46–55 __Over 55

3. **What is your professional affiliation?**
   __Social Work __Psychiatry __Nursing __Clinical Psychology __Counseling Psychology __Family Therapy __Other (please specify)_____

4. **What is the highest level of education you have achieved?**

   __MD __PhD __PsyD __DSW __MS __MSW __EdD

   __Other (please specify) _____

5. **During the past 3 months of your clinical practice, approximately how many clients have you treated that have suffered from diagnosable trauma or traumatic events that have caused psychological disturbances for which the client(s) is/are seeking treatment?**

   __1 __2 __3 __4 __5 __6 __7 __8 __9 __10

6. **How many years have you been in professional practice as a clinician?**

   __Less than 1 __1–5 __6–10 __11–15 __Over 15

7. **How many years have you worked with victims of trauma?**

__Less than 1 __1–5 __6–10 __11–15 __Over 15

8. **Have you ever experienced a traumatic event?**
   __Yes __No

9. **Do know of any friends or relatives who have been a victim of a traumatic event or diagnosed with posttraumatic stress disorder?**

   __Yes __No

10. **What type of clinical supervision do you receive?**

    __Group supervision __Individual supervision __Informal supervision __None

11. **If you would like to receive the results of this study, please check "yes" and include your e-mail address:**

    __Yes __No

Appendix D: The Professional Quality of Life Version V (ProQOL-V)

Professional Quality of Life Scale (ProQOL)

Compassion Satisfaction and Compassion Fatigue
(ProQOL) Version 5 (2009)

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

1=Never 2=Rarely 3=Sometimes 4=Often 5=Very Often

1. I am happy.
2. I am preoccupied with more than one person I *[help]*.
3. I get satisfaction from being able to *[help]* people.
4. I feel connected to others.
5. I jump or am startled by unexpected sounds.
6. I feel invigorated after working with those I *[help]*.
7. I find it difficult to separate my personal life from my life as a *[helper]*.
8. I am not as productive at work because I am losing sleep over traumatic experiences of
a person I *[help]*.
9. I think that I might have been affected by the traumatic stress of those I *[help]*.
10. I feel trapped by my job as a *[helper]*.
11. Because of my *[helping]*, I have felt "on edge" about various things.
12. I like my work as a *[helper]*.
13. I feel depressed because of the traumatic experiences of the people I *[help].*
14. I feel as though I am experiencing the trauma of someone I have *[helped]*.
15. I have beliefs that sustain me.
16. I am pleased with how I am able to keep up with *[helping]* techniques and protocols.
17. I am the person I always wanted to be.
18. My work makes me feel satisfied.
19. I feel worn out because of my work as a *[helper].*
20. I have happy thoughts and feelings about those I *[help]* and how I could help them.
21. I feel overwhelmed because my case [work] load seems endless.
22. I believe I can make a difference through my work.
23. I avoid certain activities or situations because they remind me of frightening experiences
of the people I *[help]*.
24. I am proud of what I can do to *[help]*.

25. As a result of my *[helping]*, I have intrusive, frightening thoughts.
26. I feel "bogged down" by the system.
27. I have thoughts that I am a "success" as a *[helper]*.
28. I can't recall important parts of my work with trauma victims.
29. I am a very caring person.

30. I am happy that I chose to do this work.

Curriculum Vitae

DANIEL P. DAVID, PGCPsych, LMSW

PROFESSIONAL EXPERIENCE

Atlanta Psychiatry & Psychotherapy Associates, LLP.

Partner/Executive Director

Achievements

- Manage business development of LLP psychiatric group practice with 4-physicians and 6-professionally licensed clinicians
- Market to local hospitals, primary care physicians, and residential treatment programs in Metro Atlanta
- Oversee patient care and services

Private Practice/Owner: Atlanta Psychotherapy Solutions, LLC 10/2006—Present

Therapist

Achievements

- Provide individual psychotherapy for psychiatric patients
- Conduct psycho-educational classes and seminars (e.g., depression, anxiety, family concerns, addiction, etc.)
- Facilitate group psychotherapy and addiction groups
- Fulfilled Supervision Requirements with Denise Draper, LCSW & Steve Simon, L.C.S.W.

Office of Dr. Michael Hilton, M.D. Psychiatry 3975 Roswell Road, Atlanta, GA 30342 10/2004—2005

Therapist

Achievements

- Therapy provided for severe work-related accident & trauma victims covered by Workmen's Compensation.

- Conduct psychosocial patient assessments, treatment planning, and medication management education.
- Inform and instruct patients concerning pain management and coping strategies; utilizing short-term cognitive behavioral and psychodynamic interventions.

Peachford Hospital (Psychiatric) Partial Hospitalization Program, Atlanta, GA, 11/2004—08/2006

Dual Diagnosis Group Therapist

Achievements

- Provided therapy for dual diagnosis patients treating addiction and psychiatric illnesses.
- Managed patient care, treatment planning, medical records, and discharge planning.
- Educational Instructor for cognitive behavioral & psycho-ed patients dealing with drug or alcohol addictions coupled with psychiatric problems, depression, anxiety disorders, personality disorders, trauma, schizophrenia, and bipolar disorder.
- Participated in a multidisciplinary treatment team under M.D. psychiatric and Ph.D. clinical supervision.

Social Work PRN Consultancy / Rainham Consultant Ltd. Company, United Kingdom 06/2002—06/2003

Gained invaluable international perspective, insights, skills, and experiences working as a locum qualified social worker in the following short-term positions while studying at Oxford University, England:

PRN Positions and Employment Sites

- Assessment Team Social worker: Oxfordshire Social and Health Care Directorate: Oxford, England
- Refugee Minors Team Social worker: London Borough of Brent Local Authority, London, England
- Child Protection Team Social worker: London Borough of Brent Local Authority: London, England

Benjamin Cardozo High School, Bayside, New York
09/1996 – 05/2002

Outreach Youth Counselor & School Social Work

Achievements

- Outreach Bilingual Counselor (09/1996-08/2000) specializing in Korean/Asian immigrant student issues.
- Served as a Gang Specialist under a cooperative school outreach program with New Vision Youth Services.
- Completed social work field experience (09/2001-05/02) counseling students in conjunction with guidance counselors, teachers, and parents regarding issues such as: drug, alcohol, gang, physical abuse, depression, cultural adjustment, and HIV prevention.
- Trained staff, teachers, counselors, and administration regarding cross-cultural sensitivity and awareness.

CW Post College of Long Island University, Student Health & Counseling Center, Brookville, NY

University Counselor /Social Work
09/2000—05/2001

Achievements

- Counseled university students under supervision of a clinical social worker and Ph.D. psychologist.
- Created linguistically/culturally sensitive counseling and health resources and referral information.
- Established first International Student Focus Group geared to address students' quality of life and adjustment.
- Managed counseling caseload, conducted psychosocial assessments, worked in multidisciplinary team, etc.
- Established and facilitated a therapeutic group for international multicultural students.

New Vision Youth Services, Inc., Flushing, NY

Executive Director
12/1992—08/2000

Achievements

- Founded and developed this non-profit counseling & social services agency to service at-risk juvenile delinquents, gang members and their families.
- Supervised other staff counselors (5) and the entire agency counseling caseload (400) under *NY State Office of Children and Family Services* contracts for inner-city immigrant at-risk adolescents.
- Provided individual and family counseling: specialized in families & juvenile delinquency.

- Served as community gang specialist addressing gang delinquency & drug issues and facilitated related prevention programs.
- Trained school officials, courts, counselors, and local leaders in cultural diversity & sensitivity.
- Designed and executed various crisis intervention program for inner-city youths and families.
- Built resource network through collaboration with various local community and organizational leaders leading to effective consortiums between agency and schools, courts, probation department, media and local leaders.
- Successfully wrote and received funding grants for the agency's programs.
- Managed budgets and contracts with government and private funders.

EDUCATION & TRAINING

Ph.D. student: Human Services with Specialization in Clinical Social Work; Walden University, 2005-Present

Research Concerns: Clinician compassion fatigue and resilience

DBT Training - Behavioral Tech, LLC 2012
Intensive Dialectical Behavioral Therapy training completion

McLean Hospital at Harvard Medical School, Boston, MA 2010
Intensively Trained Mentalization-Based Therapy for Borderline Personality Disorder

***Postgraduate Certificate in Psychodynamic Counselling*, Oxford University, Oxford, England 2003**
Interests: psychodynamic psychotherapy approaches

Master of Social Work, **Stony Brook University, Stony Brook, NY 2002**
Interests: Mental Health & Addiction

Bachelor of Arts*, Social Sciences, College of New Rochelle, New York, NY 1999*

Interests: Social Science; Sociology; Cross-Cultural Diversity; Social Work in the Immigrant Community

***Bachelor of Arts*, Sacred Literature, Logos College, FL 1987**
Interests: Sacred Literature, Comparative World Faith Community Studies, Counseling Principles

PUBLICATIONS

- Author of *Surely, Not My Child: Counseling Guide for Parents*, Korea Times Publishers, New York, 1989.
- Contributing Columnist for International & Family Issues, Korea Times Newspaper, New York.

PROFESSIONAL DEVELOPMENT & MEMBERSHIPS

Professional Memberships & Licensure:

- ❖ National Association of Social Workers, USA: 886362182
- ❖ Licensed Master Social Work, Georgia License Number: MSW003644
- ❖ Red Cross Mental Health Disaster Action Team Volunteer 2005
- ❖ Red Cross CPR Training 11-16-04