2013

An invitation to pay attention : a quantitative study of vicarious trauma and secondary traumatic stress in child advocacy employees, volunteers and interns

Isabelle C. Thurmer

Isabelle Claire Thurmer
An Invitation to Pay Attention: A
Quantitative Study of Vicarious
Trauma and Secondary Traumatic
Stress in Child Advocacy
Employees, Volunteers and Interns

ABSTRACT

Vicarious trauma (VT) and secondary traumatic stress (STS) are two concepts that are recognized in the professional helping fields as potential risks of working with trauma survivors. This study examined VT and STS among staff members of Children's Advocacy Centers across the United States. Variables that were hypothesized to impact STS and VT were identified and their correlations were analyzed statistically. Two scales, the *Secondary Traumatic Stress Scale* and the *World Assumptions Scale*, were used to measure rates of STS and VT among participants. This study also examined the relationship between education, additional training, age, gender, responsibilities, time working at the agency, caseload, hours worked and personal trauma and VT and STS. Statistical Results indicated that there was a positive correlation between level of education and STS as well as the age of the helper and The lack of relationship between personal trauma history and rates of VT and STS was notable. This and other findings are addressed. Implications for future research, training, program practice, and policy are also discussed.

AN INVITATION TO PAY ATTENTION: A QUANTITATIVE STUDY OF VICARIOUS

TRAUMA AND SECONDARY TRAUMATIC STRESS IN CHILD ADVOCACY

EMPLOYEES, VOLUNTEERS AND INTERNS

A project based upon an independent investigation
submitted in partial fulfillment of the requirements
for the degree of Master of Social Work.

Isabelle Claire Thurmer

Smith College School for Social Work
Northampton, Massachusetts 01063

2013

ACKNOWLEDGEMENTS

First and foremost, I would like to thank my thesis advisor, Beth Kita for countless phone calls, emails and edits. Without her, the completion of this work would not have been possible.

Next, I wish to thank my family. Not only have they supported me emotionally and financially through this program, they have always encouraged the completion of this work. I want to thank my brother Dominic for aiding in the construction of my tables, his wife Eva for formatting, and my brother Patrick and parents for their constant inquiry and support. I love you all so much!

I also wish to thank my personal mentor and my initial inspiration for this topic, Amber McDonald. Beginning with my first day at the Child Advocacy Center in Boulder to the completion of my MSW degree, she has continued to support and encourage me, and most importantly inspire me for what the world of social work has to offer. I love you, and can't wait to conquer the world with you!

My gratitude also extends to all of my friends here at Smith and far away. I am so grateful for all of your support via conversations, hugs, laughs, dancing, yoga, running, playing and most importantly sticking with me through all the ups and downs. Without all of you this thesis would not have been finished. I love you all!

Finally, I would like to thank the community of researchers and students who have tirelessly written books and articles, conducted research, peaked my interests and pushed me to think harder and deeper about things than I ever thought possible. I love to learn and without all of you this would not be possible. I am honored to be a part of this wonderful community called social work and look forward to my ensuing career in this field.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER I

INTRODUCTION

Emotional, sexual and physical abuse against children is an epidemic that has devastating

effects, and in turn creates a population who may need help from others. Children who survive

abuse are left to contend with complex effects that can impact the way that they see themselves,

others, and the world around them. The people who seek to help this group of survivors are often

trained to work through these events, and to support those affected by creating a new way of

relating to the world. To work with psychological and physical trauma is to acknowledge not

only the vulnerability of human kind but also the capacity for evil in human nature (Herman,

1997). Thus, although there is a great deal of joy acquired from the work of a professional

helper, we would be foolish to believe there aren't potential negative effects that accompany this

joy. As stated by Pearlman and Saakvitne (1995),

> One significant reward of doing trauma therapy has been our increased sense of
> connection with people who suffer everywhere, across time and across cultures. People
> who are able to complete graduate training and become therapists in this country are
> relatively privileged. We give back something meaningful from this place of privilege
> when we choose to enter the world of pain and to acknowledge our deep human
> connection with those who suffer (p. 405).

Similar to the belief that a construction worker will not succumb to injuries and basic

wear-and-tear throughout his career, it is reckless to believe a professional helper will not

encounter similar wear-and-tear of the psyche. As a student on a quest to attain a Masters degree

in social work, I am keenly aware of this risk: as much as I love the work that I am setting out to

do, I may experience some negative effects. As a result, I have set out to deepen the field's

understanding of this inevitable truth by conducting the present study.

Professional helpers who engage in trauma work are consistently faced with existential

issues of life and death, as well as moral and ethical issues (Berzoff & Kita, 2010). When left

unprocessed these issues can lead to a variety of outcomes, such as compassion fatigue, burnout, vicarious trauma, countertransferential trauma, and secondary traumatic stress. In other words, professional helpers can end up feeling much like the people that they are trying to help: disempowered, overwhelmed, anxious and hopeless (Dunkley & Whelan, 2006; Herman, 1997)

In the present study, I focus specifically on vicarious trauma (VT) and secondary traumatic stress (STS), which address both the immediate and existential effects that trauma work can have on professional helpers. My own experience as a volunteer at a CAC brought me into contact with these dynamics. As a volunteer, I experienced the effects of bearing witness to the trauma of children, and became curious as to how widespread my own experience was. While attending a presentation on vicarious trauma at another clinic, the presenter stated that she was not trying push these idea on us, but rather extending an invitation for us to pay attention. I came to understand my own experience of vicarious trauma as "an invitation to pay attention" to the impact that this work could have on me as a professional helper and began my quest to learn more. I hope that this study will deepen my understanding of vicarious trauma and secondary traumatic stress, as well as help others to do the same.

This study will thus focus on helpers who either work or volunteer at the national agencies, Children's Advocacy Centers (CAC). This particular population was chosen due to the nature of the agency and the clients that are served. The children that come to CACs are potential victims of abuse and are coming to the agency to report the event(s)-such as sexual molestation by an adult, severe neglect, and witnessing domestic violence-and begin the process of healing.

According to Herman (1997), "the fundamental stages of recovery are establishing safety, reconstructing the trauma story and restoring the connection between survivors and their community" (p. 3). CACs provide safety to clients by organizing a safe place for children to tell

their story, and to help them to engage in the criminal justice process without further trauma. Professional helpers who are willing to serve these children sustain this safe place, but this relationship can only survive if the helper does. As I discuss in this study, the trauma survived by child victims can also impact the workers who seek to help them heal from it.

In this study, I set out to explore if and how CAC workers are impacted by the trauma to which they are exposed in their work with survivors by measuring the degree to which they experience VT and/or STS. In the next chapter, I will review the literature on the general theory of trauma, followed by an in-depth explanation of VT and STS according to their theoretical foundations, as well as a presentation of the empirical findings. In the third chapter, I will present the design and methodology that I employed. In the fourth chapter, I will present my findings. In the final chapter, I will discuss the findings in relation to existing literature as well as their implications for social work practice and future research.

CHAPTER II

LITERATURE REVIEW

In this chapter, the literature on vicarious trauma (VT) and secondary traumatic stress (STS) will be reviewed. Since the topic under study is a complex one, I will begin this chapter with a summary of past and present definitions of trauma. Having provided a context for the reader, the phenomena of VT and STS will be explored in hopes of building a foundation on which to understand the implications for this research and the justifications for previous studies. Finally, previous empirical findings are reviewed. Overall, the purpose of this literature review is to outline the importance and clinical significance of this study and to contextualize it within previous research.

What is trauma?

Understanding trauma has been at the forefront of the human services field since its conception. The first and most well known publication is Breuer and Freud's, *Studies of Hysteria* originally written in 1895. Breuer and Freud observed the psychosomatic symptoms of trauma, and the connection between past events and current symptoms. In the early 1900's, this observation was most well known as "hysteria", and primarily diagnosed in woman (Herman, 1997). According to Freud and Breuer (2000),

> The fading of a memory or the losing of its affect depends on various factors. The most important of these is *whether there has been an energetic reaction to the event that provokes an affect.* By 'reaction' we here understand the whole class to voluntary and involuntary reflexes -from tears to acts of revenge-in which, as experience shows us, the affects are discharged. If this reaction takes place to a sufficient amount a large part of the affect disappears as a result…If the reaction is suppressed, the affect remains attached to the memory (p. 30).

Freud and Breuer were profoundly aware of the detrimental affects of trauma, but were frequently hindered from investigating their theories due to bureaucratic threats and political

sabotage (Herman, 1997). If society was to accept the idea that child abuse and sexual molestation of a child would lead to symptoms of hysteria, then these behaviors would need to stop. This was a commitment that society was not willing to make, especially because the abuse was occurring in all socioeconomic classes-and continues to this day. Freud and Breuer were forced to withdraw their findings or battle the consequences. Unfortunately, this pattern has repeated itself numerous times throughout history and continues to deter the evolution of trauma research (Herman, 1997).

Decades after the acceptance and rejection of the *Studies of Hysteria* psychological responses to trauma were further explored in soldiers during WWI. Psychologists began to notice that many soldiers were presenting with symptoms similar to that of hysteria, resulting in the diagnosis of a nervous disorder known as *shell shock* (Herman, 1997). As the field of trauma research evolved as did the various definitions and speculations on how to treat and address responses to trauma.

In the early 1970s-during the conception of the feminist movement- nurses and social workers noticed that woman who had been raped or beaten presented with similar symptoms as those explained in *Studies of Hysteria* and by physicians working with veterans (Herman, 1997). The first rape crisis center was opened and a new diagnosis was born: "rape trauma syndrome" (Herman, 1997). In 1980, the diagnosis of post-traumatic stress disorder (PTSD) was added to the *Diagnostic and Statistical Manual III*, and has been used since as the overarching diagnosis for those who are symptomatic after experiencing a traumatic event (Friedman, 2007).

According to the Diagnostic and Statistical Manual IV (APA, 2000), a diagnosis of PTSD is made when an individual "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] the person's response involved intense fear, helplessness and horror" (p. 427-28). Although, the DSM-IV diagnosis is used broadly, its narrow parameters do not capture the extent of trauma in human experience.

Rather then confining the definition of trauma to that found in the DSM-IV, many authors have expanded this definition to include non-life threatening events as traumatic. As described by Basham (2008), the definition from the DSM-IV focuses too closely on the threat of death, when many of the clients professional helpers work with have been traumatized by a plethora of events. Allen (2001) distinguishes between a potentially traumatic *event* and the trauma *response,* in that a person may experience a traumatic event with or without a trauma response. Furthermore, the controllability and predictability play a fundamental role in regards to a traumatic event (Allen, 2001) so that even if an event will not result in injury or death, the experience of helplessness in and of itself can be traumatic. This is an important distinction, because frequently professional helpers are dealing with traumatic events that are not necessarily life threatening. As the variety of diagnoses' have multiplied, the plethora of theories used to understand the complexity of experiencing a traumatic event have as well.

Horrowitz (1975) proposed that until the traumatic event is integrated into existing schemas, the psychological representation of the event is stored in active memory, which allows for repeated representations of the traumatic event. Cason, Resick and Weaver (2001) define schemas as "cognitive-affective memory structures" (p. 132). In other words, schemas are established views of the world that are in constant ebb-and-flow with external and internal experiences. When those experiences are overwhelming – traumatic – our schemas are forced to change to accommodate them. All human beings develop schemas related to the five psychological "need-areas". These psychological "need- areas" include: safety, trust, control,

esteem and intimacy. When an individual has a new experience the event is filtered through existing schemas through the process of either assimilation or accommodation (Pearlman & Saakvitne, 1995).

At the core of our assumptions (schemas) is the belief that the world 'makes sense' (Janoff-Bulman & Frantz, 1997, p. 93). When working with potentially abused children, this belief of the world may be altered due to the idea that most people cannot make sense of those who abuse children, physically or sexually. This leaves most in a position, where the abuse of children must be accommodated or assimilated with existing schemas of a child and parent or relative, or whom ever the perpetrator might be. Jind (2001) wondered if traumatic events influence cognitive schema and associates traumatic events with an informational overload of the individual's cognitive system. As a result, the individuals system may be so overwhelmed that the information is not processed correctly, or at all.

Denial and avoidance may follow re-experiencing the traumatic event, which prevents the memory to be processed and thus the active memory to be terminated (Horrowitz, 1975). In conjunction with Horrowitz (1975) and Freud and Breuer (1895), contemporary researchers (Sakheim & Devine, 1992) believe trauma is an expected part of human nature, but the reaction of each individual is where the difference lies. Sakheim & Devine (1992) state the following:

> The prevailing thinking is that adaptation to trauma results from a complex interplay between the person (including personal history and personality) and the situation (the traumatic event, the social and cultural context and others' responses to the traumatized individual) (p. 188).

Some theorists have further delineated trauma in terms of types: Type I, Type II, Type III trauma. Type I (Terr, 1991) trauma refers to a single event, such as a natural disaster, violence, witnessing death or injury, accidents, and loss (Berzoff, Flanagan & Hertz, 2008) that

occur suddenly and are time-limited. In contrast, Type II (Terr, 1991) trauma refers to repetitive,

continuous trauma that occurs over a period of time (Berzoff, Flanagan & Hertz, 2008; Jordan,

2010). Other theorists have also added a Type III trauma in order to distinguish the effects of

violent torture (Berzoff, Flanagan, & Hertz, 2008). Further more, Allen(1998) and Pouissant and

Alexander (2000), have proposed a distinction for "cultural trauma" or "racial trauma" (as seen

in Berzoff, Flanagan, & Hertz, 2008, p. 417). This form of trauma is similar to Type II trauma

due to the repetitive and continuous nature of racist attacks and microaggressions that happen to

certain individuals and groups on a regular basis.

Evidently, the scholarly community is cognizant of the multiple dimensions of trauma

and the effects that such an event or events may have on an individual. Distinguishing between

types of trauma helps to map their differing effects. For instance, in Type I trauma the event is

often remembered in great detail and a matter of fact, whereas Type II trauma is often stored in

fragmented pieces in conscious and unconscious memory (Terr, 1991).[1] Regardless of the type,

Terr (1991), believes a trauma most often occurs in the external world, but leads to fundamental

internal changes in the body and mind, in various ways. In other words, trauma causes more

than just the behavioral changes noted by the DSM-IV-TR definition of PTSD. It can change

how people see the world, understand themselves and believe in basic goodness or badness

(Herman, 1997). This concept of "schema change" will be further explained when discussing the

theoretical framework for VT and STS.

In summary of this section, I would like to highlight the accomplishments the field of

trauma work has made, but also the large pieces of information that are still missing. Due to the

horrific nature of trauma and the tendency to ignore the hardships of this world, trauma survivors

---

[1] The distinction between Type I and Type II trauma, is very important for CACs because the protocol used to

have been silenced throughout time and continue to struggle to find their voices. From the first clients diagnosed with "hysteria" and convinced that their real memories were just sexual fantasies, to soldiers who continue to struggle with the stigma of PTSD and receiving the services they deserve, to the countless number of woman and children who are abused everyday and held against their will, trauma is a constant threat to the stability of our mental health. Professional helpers are here to witness this silent struggle and give a voice to those who have been trying to make sense of a shattered picture of the world. (Herman,1997). This field can only continue to thrive if this act of witnessing is acknowledged and the phenomena of VT and STS are accepted and processed. Otherwise, all we can do is ignore the risks and hope VT and STS doesn't happen to us. This field of study will continue to advance only if VT and STS are acknowledged and the phenomena is accepted as a real issue to solve, rather than a problem to ignore and wish away.

Secondary Traumatic Stress and Vicarious Trauma: An Overview

In addition to the theories and typology of trauma previously discussed, researchers have identified additional types of traumatic stress that specifically impact professional helpers. The general idea is that by engaging with people who are suffering from trauma, the helper can be similarly affected despite not being exposed to the primary trauma itself.

In the last decade, this phenomena has been widely explored, and captured by a variety of concepts. Vicarious trauma (VT) and secondary traumatic stress (STS) are used interchangeably with other terms such as: compassion fatigue, burn out and countertransference (Adams, Matto & Harrington, 2001; Baird & Kracen, 2006; Beck, 2011; Bride, 2007; Collins & Long, 2003; Figley, 2011; Jordan, 2010; Newell & MacNeil, 2010; Perron & Hiltz, 2006; Trippany, Kress & Wilcoxon, 2004). Although, these concepts are overlapping, they each have important features

that distinguish each one from the other. Since this study focuses on VT and STS, it is important to clarify how they are different from other similar concepts.

Countertransference. Countertransference is the process in which an individual is unconsciously emotionally affected by another individual's experience. The field of psychotherapy has focused on this concept since its conception but it is still unclear how the issue should be addressed. For example, Freud believed we present to our clients as a "blank slate", and should strive to be completely unaffected by a client's narrative and behaviors. The "blank slate" theory has since evolved to encompass a greater understanding of human relationships, one in which individuals in any relationship mutually influence each other. A professional helper may have to confront similar experiences as the client, such as disruptions in relationships, helplessness, rage, profound grief and rapid fluctuations in emotions and mood (Herman, 1997), while still providing space for the client's work to occur.

Pearlman and Saakvitne (1995) definition of countertransference includes two components: "(1) the affective, ideational and physical responses a therapist has to her client, his clinical material, transference and reenactments, and (2) the therapists conscious and unconscious defenses against the affects, intrapsychic conflicts and associations aroused by the former" (p. 23). Similar to the conceptual confusion surrounding VT and STS, countertransference is recognized in the field of psychotherapy but there is little consensus of the extent of how countertransference affects a client and ultimately the clinician (Dunkley & Whelan, 2006; Collins & Long, 2003; Hesse, 2002; Pearlman & Saakvitne, 1995).

A critique of comparing VT and STS to the construct of countertransference is that VT and STS may arise without the helper being triggered by any pre-existing personal characteristics or an un-resolved traumatic past (Hesse, 2002). Although countertransference is a useful lens

from which to view the phenomena it does not give a full explanation of this complex issue. In some aspects countertransference may muddle the understanding of VT and STS because an individual must determine if the triggered event is in fact part of their experience or merely a symptom of VT and STS. For example, a forensic interviewer may be unable to determine if stories of sexual abuse are causing nightmares due to STS or if the individual is re-experiencing a repressed traumatic memory of their own. Due to this possible confusion, professional helpers working with trauma must be keenly aware of their own history and which symptoms are due their own reality or that of others (Collins & Long, 2003). Furthermore, VT and STS have the potential to affect a helper's professional work, personal relationships and social networks, where countertransference most often stays within the therapeutic container (Collins & Long, 2003).

Countertransference may be an important aspect of VT and STS because it involves the clinicians' personality and history, which may affect the therapeutic relationship (Pearlman and Saakvitne, 1995). This study will attempt to determine if there are certain personality and/or histories that increase the risk of VT and STS in professional helpers. First, I would like to explore the theory of VT and STS in further detail.

Compassion Fatigue and Burnout. Compassion fatigue is defined as a caregiver's reduced capacity or ability to provide empathy to a traumatized individual as a result of hearing about the individual's traumatic experience (Adams, Boscarino & Figley, 2006). According to Berzoff and Kita (2010),

> Different from a secondary stress response or vicarious traumatization—in which the therapist experiences the same post-traumatic stress symptoms of the client—compassion fatigue can have a more global and diffuse impact on one's professional identity, personal self and existential stance (p. 344).

Burn out, like compassion fatigue, occurs over a period of time and can have a compounding effect. Newell and MacNeil (2011) conceptualized burn out using three basic domains: emotional exhaustion, depersonalization, and reduced sense of personal accomplishment. As a professional helper begins to burn out, the individual may begin to detach from clients and coworkers, appear depleted of emotional resources and exude feelings of inadequacy with clients. Compassion fatigue is used more generally to describe the overarching experience of a professional helper who is chronically empathic, while also juggling administrative responsibilities (Newell & MacNeil, 2011). Unlike burnout and compassion fatigue, VT and STS can occur after a single event or compounding events and are more focused on the existential transformation that transpires rather than the experience described above.

Vicarious trauma. Vicarious trauma (VT) as described by Pearlman and McCann (1995) is a cognitive process that occurs through direct contact with survivors of trauma. These cognitive shifts can include: changes in worldviews, alterations in beliefs about oneself and safety, and modifications of an individual's schemas of the world. According to Allen (2001): "Vicarious traumatization is not a matter of becoming acutely symptomatic; rather the therapist's worldview is fundamentally altered" (p. 377). Constructivist Self Development theory (CSDT)-a co-construction of schema theory-focuses on the importance of individual differences and the way an individual experiences an event and how the event is processed (Pearlman & Saakvitne, 1995, p. 58) CSDT is further explored in the following section.

Constructivist Self Development Theory. Schema theory, particularly Constructivist Self-development theory (CSDT) (Pearlman and Saakvitne, 1995), is the theoretical foundation for vicarious trauma (VT) (Williams, Helms & Clemen, 2012). According to Pearlman and Saakvitne (1995), "cognitive schema refer to the conscious and unconscious beliefs and

expectations individuals have about self and others that are organized according to central psychological need areas (safety, trust, power, esteem and intimacy)" (p. 68). Conscious or not, schemas are developed from the time of birth till death, and continue to evolve through experience. A simple example of a schema is the idea of a chair. As a baby, the schema may encompass any object that can be sat on, but as the child experiences various forms of chairs, the definition begins to expand to desk chair, sofa, stool, etc. As the child ages the "chair schema" becomes more solidified and assimilates or accommodates to future experiences with chairs. Although a simple example, this highlights the importance of developing schemas and how a traumatic event has the power to alter schemas related to the event.

According to Pearlman and MacIan (1995), "CSDT views 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" (p. 558). The theory highlights the developmental component of the self and the ways that a traumatic event may affect an individual differently depending on the developmental stage the individual is in (Pearlman & Saakvitne, 1995). A traumatic memory has the potential to disturb core schemas about the self, which may result in negative, over-generalized schemas that have the ability to alter a persons' sense of identity, emotions and relationship to their environment, leading to not fulfilling basic psychological needs (Sakheim & Devine, 1992).

Pearlman and MacIan (1995) propose three areas of an individual's mind are impacted by a traumatic event. These aspects include: frame of reference, self-capacities, and ego resources (Pearlman and MacIan, 1995). These three areas of the mind contribute to an individuals' identity and how this "self" relates to the world. Trauma may severely impact these areas

13

resulting in a decomposition of competency in a persons' sense of safety, trust, independence, power, esteem and intimacy (Sakheim & Devine, 1992) or basic "need-areas".

In relation to VT, a professional helper who is experiencing symptoms may notice a shift in previous beliefs about the world in order to accommodate for the narratives heard from survivors. For example, prior to working at a CAC, a professional helper might believe that letting a child play at a friend's house is a normal and important part of child development. After working at the CAC and hearing stories of abuse occurring in such situations, this helper may begin to limit the amount of time that her child spends at other people's houses, and may disallow it all together. This helper's basic need areas are being affected and her worldview has changed. The helper no longer believes in the benevolence of others enough to feel safe to leave her child with others. In turn, this can lead to a global sense of distrust of others and a personal sense of disempowerment, lowered self esteem and decreased intimacy with others. If unnoticed, the helper's worldview may begin to reflect trauma even more, leaving the helper and her child isolated in their traumatic worldviews.

Secondary Traumatic Stress. Although similar to vicarious trauma, secondary traumatic stress (STS) is a slightly different manifestation of symptoms. Similar to those of Post Traumatic Stress Disorder (PTSD), a helper can end up with symptoms as a result of being exposed to their client's experience of being in a life-threatening situation. According to the DSM-IV (2000), PTSD includes five symptom criterion, three of which are included in the description of STS. The three symptom clusters include: intrusion, avoidance and hyperarousal.

Intrusion is the process in which an individual persistently re-experiences a traumatic event. This can occur in the form of nightmares, flashbacks, intrusive thoughts, and feelings, or

reliving the traumatic event (Horrowitz, 1975). Avoidance occurs due to the individuals attempt to avoid or emotionally numb oneself from the traumatic event. Avoidance behaviors can include: isolation, lose of interest in social events and gatherings, feelings of detachment from others, an inability to remember details of the traumatic event, and decreased level of affect. Hyperarousal can cause difficulty falling asleep and staying asleep, problems concentrating, irritability, emotional outbursts, hyper vigilance and an increased startle response.

While the symptoms of PTSD are problematic for everyday living, this response is actually a learned reaction to a traumatic event. Much like a child will learn not to touch a hot stove after the first time they burn their hand, individuals who have experienced a traumatic event may learn to approach certain situations differently. Though this cautious response is an adaptive way of approaching previously dangerous situations, after a bit of time this may hinder an individual's daily functioning, leading to further discomfort, isolation and intensifying symptoms. For instance, a person who was molested by their father may appropriately avoid contact with him, but a person whose experience led to PTSD may also isolate from all men thereby precluding the potential for an important and meaningful relationship to be met.

In relation to STS, a professional helper who is experiencing symptoms may come to fear certain people or places due to hearing about the traumatic events endured by their clients. After a few sleepless nights due to nightmares about client narratives, the helper may feel emotionally exhausted and irritable. The helper may find it difficult to leave the house due to an intensified startle response and intrusive memories, resulting in the helper missing work and avoiding contact with others. This leaves the helper feeling isolated and helpless and potentially vulnerable to further psychopathology, such as depression or anxiety.

In summary, VT and STS emerged from theories about how the psyche adapts to a traumatic event. Although, VT and STS may present similarly, their foundational differences are what makes this phenomena so complex. VT focuses more on the existential effect that positive and negative experiences have on the mind and how an individual learns to digest these experiences. In comparison, STS focuses more on immediate and measurable symptoms such as losing sleep, withdrawing from friends and an increase in startle response (Dunkley & Whelan, 2006).

Empirical Findings

There have been several studies conducted on the effects and prevalence of vicarious traumatization (VT) or secondary traumatic stress (STS) on individuals working directly with victims of physical, emotional and sexual abuse (Adams, Matto, & Harrington, 2001). According to Baird and Kracen (2006), research into VT and STS as a field of inquiry is only 10 years old. Although more studies are being conducted, researchers are unable to determine how much trauma work the clinicians are involved in and what affect this may have on VT and STS. Researchers have studied a plethora of variables in relation to VT and STS, such as: level of empathy (Lilly & Pierce, 2012, MacRitchie& Leibowitz, 2010), case load (Dunkley & Whelan, 2006), years of experience with trauma work (Adams, Matto & Harrington, 2001; Pearlman and MacIan, 1995;), organizational satisfaction (Bonach & Heckert, 2012) and personal trauma history (Follette, Polusny & Milbeck, 1994; Pearlman and MacIan, 1995), but no variables have been determined to be conclusively causative.

Bride (2007) studied the prevalence of secondary trauma among social workers in the Southern part of the United States. According to the research findings, approximately 70% of the participants experienced one symptom of STS per week, and approximately 15% met

diagnosis criteria for PTSD (Bride, 2007, p. 67). Similar to Bride (2007), Choi (2011) researched the prevalence and severity of STS among social workers who have direct contact with survivors of domestic abuse and sexual violence. The researcher found approximately 65% of the participants experienced at least one symptom of STS (Choi, 2011). Although this information is useful statistical data it gives little insight to the variables that may increase or decrease an individual's risk of STS and VT. The researchers did not analyze specific variables, but rather Bride (2007) and Choi (2011) highlighted the prevalence and severity of STS in social workers.

In contrast to these general findings, two studies have found a relationship between different variables and the worker's susceptibility to VT and STS (Follette, Polusny & Milbeck, 1994; Pearlman and MacIan, 1995). Pearlman and MacIan (1995) explored the prevalence of vicarious trauma in a sample of social workers, but included the exploration of "aspects of trauma therapy, aspects of the therapist, and the therapist's current psychological functioning" (p. 559). The research findings showed a significant positive correlation between the psychological well being of trauma therapists and their personal experiences with trauma. According to Pearlman and MacIan (1995), "those therapists with a personal trauma history showed more disruption than those *without* a personal trauma history" (p. 561).

Similarly, MacRitchie and Leibowitz (2010) found that previous exposure to a traumatic event significantly heightened the probability of developing STS. In addition, MacRitchie and Leibowitz (2010) found those workers with reported higher levels of empathy, were at a higher risk of STS. According to Allen (2001), "the concept of compassion stress implies that empathy, albeit our most valuable resource for helping, also puts us at risk" (p. 376). Both research groups determined it is necessary to define what a trauma therapist is before further research can occur, due to the varying ways that researchers operationalize this term (Pearlman & MacIan, 1995).

Although this study found a correlation between previous exposure to trauma and an increased risk of emerging STS, other researchers have found contrasting results, identifying personal experience to traumatic events as insignificant (Allen, 2001; Follette, Polusny & Milbeck, 1994; Schauben & Frazier, 1995). Follette, Polusny and Milbeck (1994) investigated the prevalence of secondary trauma in mental health professionals and law enforcement. It was determined that the prevalence of secondary trauma was higher in the law enforcement participants but there was little evidence that a history of childhood abuse was a correlate. "Law enforcement professionals, however, were significantly more distressed than mental health professionals on all measures of psychological symptoms" (Follette, Polusny & Milbeck, 1994, p. 279). Again, this study highlights the phenomena of VT and STS in clinical and non-clinical populations, but gives little insight into what increases an individual's risk of VT and STS.

Another variable researchers have focused on is a worker's caseload and the effect this may have on VT and STS (Arvay & Uhlemann, 1996; Figley, 2011; Schauben & Frazier, 1995). Schauben and Frazier (1995) found that " counselors who had a higher percentage of sexual violence survivors as clients reported more disruptions in their basic schemas about themselves and others, more symptoms of PTSD, and more self- reported vicarious trauma" (p. 57). Similarly, Arvay and Uhlemann (1996) surveyed 161 British Columbian counselors and found those with a larger caseload struggled to feel successful in their role as clinicians. This study also found that counselors with the least amount of experience, those working in community agencies, and counselors with less than a Master's degree were most vulnerable to developing high levels of traumatic stress (Arvay and Uhlemann, 1996).

An additional variable that has been mentioned in the literature is a clinicians' amount of experience (Adams, Matto, & Harrington, 2001; Figley, 2011; Schauben & Frazier, 1995).

Adams, Matto and Harrington (2001) found a moderate influence on VT if the counselor lacked experience, defined by both maturity level and years of experience as a clinical social worker. Furthermore the researchers found that clinicians who feel calm, effective and energized have a positive association with maturity, length of experience and feelings of accomplishment (Adams, Matto, & Harrington, 2001). Similarly, Schauben and Frazier (1995) suggested that more experienced clinicians may have developed effective coping strategies to combat VT and STS. Continuing the trend of mixed findings, Allen (2001), found those therapists who have been in the field for a longer period but did not report a trauma history were at a greater risk of VT.

Lastly, Baird and Kracen (2006) completed a meta-analysis of the research on vicarious trauma and secondary traumatic stress. In their analysis, the data was synthesized based on previous research hypotheses and levels of corresponding evidence. The hypotheses that Baird and Kracen (2006) analyzed included: the effects of having a personal history with trauma, amount of exposure to trauma, perceived coping ability and having supervision. The researchers found most hypotheses to have some level of evidence to support them (Baird & Kracen, 2006). For example, the hypothesis that having a personal trauma history is linked to the development of STS is "reasonably" supported by the literature (Baird & Kracen, 2006). The researchers were able to find some conclusive information but mainly found that there is a significant lack of information on VT and STS. This meta-analysis illustrates the lack of clarification in the field and that further research is necessary.

Summary

Evidenced by the theoretical foundation of VT and STS, these phenomena have been explored since the conception of psychotherapy. Established in the roots of trauma theory, VT and STS define a human experience that can manifest in professional helpers. Based on the

literature, STS and VT are prevalent in individuals working with those who have been traumatized (Bride, 2007; Porat & Itzhaky, 2009; Lilly & Pierce, 2012; Mac Ritchie & Leibowtiz, 2010; Choi, 201; Pearlman & MacIan, 1995). Although the research supports the potential risk of VT and STS, there is little consensus about what factors may increase the risks to helpers. Some of the confusion is conceptual (i.e. the definition of trauma), and some is operational (i.e finding a representative sample). Regardless, the empirical literature on STS and VT suggests that exposure to the trauma of clients does indeed have an impact on helpers, but the causes of that impact have yet to be determined. With conflicting findings about specific variables and contradicting research findings this study will attempt to clarify some of these discrepancies.

CHAPTER III

METHODOLOGY

Introduction

In this chapter I will present the methodology used to conduct this research. First, Children Advocacy Centers (CAC) are illustrated in order to provide readers with an idea of the purpose and structure of these agencies and the sample population being studied. Next, the procedure used to sample the population of respondents and administer the survey is presented. Following the sampling and procedure section, the scales used for this study are reviewed, including their reliability and validity scores, and a brief description of the subscales, which make up the *Secondary Traumatic Stress scale* (Bride, 1999) and The *World Assumptions Scale* (Janoff-Bulman, 1989). In addition, scales not chosen for this study are briefly discussed. Next, the participants are presented via descriptive statistics of the demographic data. The tests used to analyze the data presented in the findings sections are also reviewed. Lastly, the strengths and limitations are explored, as well as potential researcher bias.

Sampling

Participants were recruited from Children Advocacy Centers across the nation. The purpose of CACs is to provide survivors of abuse a safe space to disclose their experience as few times as possible, in order to decrease re-traumatization and variability in the facts of the event (Perron & Hiltz, 2006). According to Ferman (Dec. 27, 2012), District Attorney of Montgomery County Pennsylvania:

> CACs create a child-friendly setting, which puts victims at ease and allows professionals to do their work. A child forensic interviewer is trained to elicit all information in an unbiased and sensitive manner. Prosecutors, police, child protective service workers, medical personnel, mental health counselors, and others all coordinate to ensure that all necessary information is elicited from the child at one time. That kind of team approach results in better decisions regarding the conduct of the investigation and its outcome.

Before CACs were developed, survivors of abuse would often have to retell their experiences to numerous people. For example, a child may have told a teacher, who as a mandated reporter called Child Protective Services, who then contacted the police department to start a criminal investigation, who might then request an exam by a nurse or a doctor. Lastly, the child might need to appear in court. Every time a child must retell their experience there is potential for re-traumatization, distortion of the event and possible recanting of vital information. CACs provide children the opportunity to report an incident of child abuse in *one* appointment leaving the professionals to complete their investigation, make a potential arrest and bring justice to the child and their family.

Procedure

The study was conducted using a quantitative method. Data collection began upon approval by the Human Subjects Review Committee (Appendix A). With approval from the committee, a recruitment email was sent to the Executive Director (ED) at a CAC in Colorado. This ED then forwarded the email to a national listserv, containing CAC email addresses from across the country. The listserv members were then asked to forward this email to any additional staff or volunteers that met inclusion criteria. This method is known as snowball sampling.

The email included a brief description of the study and a link to the survey (via Survey Monkey). Through this link, participants were directed to a further description of the study and a brief introduction to the researcher. If the participant did not consent, the individual was directed to another page with a brief thank you and links to counseling resources in their communities. If the participant was willing to complete the survey, the individual was directed to a consent form prior to proceeding. Once informed consent (Appendix B) was given, the participant was directed to the survey (Appendix C), which began with a demographic questionnaire and

proceeded with the *Secondary Traumatic Stress Scale (STSS)* (Bride, 1999) and the *World Assumptions Belief Scale (WAS)* (Janoff-Bulman, 1989). Following the survey, participants were given additional resources, which they could access in their community if they were in need of support, and thanked for their time and interest in this study.

Measures

When determining which measures to use for this research, numerous scales were considered: *Secondary Traumatic Stress scale* (STSS) (Bride, 1999), *World Assumptions Scale* (WAS) (Janoff-Bulman, 1989), *Oldenburg Burnout Inventory* (OLBI) (Demerouti, Bakker, Vardakou & Kantas, 2003) and the *Trauma and Attachment Belief scale* (TABS) (Pearlman, 2003). To determine which scale would be the best fit for this study, I consulted with Brian Bride, one of the creators of the *Secondary Traumatic Stress scale* (STSS) (Bride, 1999). He recommended not using the TABS. He stated: "It is possible that the problems with the TABS has more to do with the difficulty of measuring VT than with any deficiencies with the construction of the scale, but the subscales seem to vary a great deal in terms of reliability and construct (factorial) validity" (personal communication October 29, 2012). He suggested that a better measure of VT would be the *World Assumptions Scale* (WAS), created by Janoff-Bulman (1989). After careful consideration, I thus decided to use the WAS to measure VT. The Secondary Traumatic Stress scale (STSS) scale was chosen due to the availability of the test and the prevalence of this scale in previous research to measure STS (Bride, Robinson, Yegidis & Figley, 2004; Bride, 2007; Ben-Porat & Itzhaky, 2009, Devilly, Wright, & Vraker, 2009; Choi, 2012).

Demographic questionnaire. A demographic questionnaire (Appendix C) was administered to the participants to gather information about each participant's age, gender, level of education, hours at the CAC per week, how long the participant has been working at the CAC, on average how many clients a participant sees per week and the participant's responsibilities at the CAC on a daily basis (i.e. interviewing, advocacy, event planning, family support, research, grant writing/fundraising, office work, supervising, training, external education, collaboration, indirect exposure). Lastly, a question was included to assess for the participant's personal trauma history.

Secondary Traumatic Stress Scale. The *Secondary Traumatic Stress Scale* (STSS) (Bride, 1999) is a widely used (Bride, Robinson, Yegidis & Figley, 2004; Bride, 2007; Ben-Porat & Itzhaky, 2009, Devilly, Wright, & Vraker, 2009; Choi, 2012) self-report scale consisting of 17 items. The scale assesses an individual's degree of STS symptoms determined by a 5-point Likert-scale. The questions consider three subscales: a) intrusion (questions 2, 3, 6, 10, 13), b) avoidance (questions 1, 5, 7, 9, 12, 14, 17) and c) arousal (questions 4, 8, 11, 15, 16) that, as previously discussed, correlate with the DSM-IV's PTSD criteria. [2]According to Bride, Robinson, Yegidis and Figley (2004), "the STSS…provides a useful tool to assess the frequency of secondary traumatic stress symptoms experienced by clinicians" (p. 33). Other researchers have found the STSS to be useful with various populations, for example, medical caregivers (Bride & Figley, 2009) nurses (Beck, 2011), and clinical social workers (Adams, Matto & Harrington, 2001). Reliability alphas for the STSS are as follows: .93 for the intrusion scale, .80 for the avoidance scale and .83 for the arousal scale, with an alpha of .80 indicating sufficient reliability and an alpha of .80-.90 signifying a very good reliability (Bride, Robinson, Yegidis &

---

[2] These subscales are based on the B, C, and D criterion of the DMS-IV (2000).

Figley, 2004). Lastly, Bride, Robinson, Yegidis & Figley (2004) designed the STSS to be easy to administer, score and interpret.

For the purpose of this study, I will interpret the STSS data using the clinical cutoff score, determined via an algorithm created by Bride (2007). The cut-off score for the STSS is 39, meaning participants who score above 39 on the STSS, also meet core criteria for PTSD, and those participants with a score of 38 or below do not (Bride, 2007). Normative scores will also be used to analyze the data, but will only be utilized for discussion purposes not statistical implications. These normative scores include: little or no STS (>28), mild STS (28-37), moderate STS (38-43), high STS (44-48) and severe STS (<49) (Bride, 2007). The importance of this analysis will be further explored in the discussion section.

World Assumptions Scale. The *World Assumptions Scale* (WAS) (Janoff-Bulman, 1989), is a scale used frequently in VT research to study participants' world beliefs and how individuals' beliefs may shift through working with traumatized individuals (Calhoun, Cann, McMillan & Tedeschi, 1998; Feldman & Kaal, 2007; Janoff-Bulman ,1989). The scale consists of 32-items, based on a 6-point Likert-scale (strongly disagree, moderately disagree, slightly disagree, slightly agree, moderately agree, strongly agree). From the 32 questions the scale generates 3 subscales. These subscales are: benevolence, self-worth and meaningfulness. Each question represents a specific assumption - the benevolence of the world, the benevolence of people, justice, controllability, randomness, self-worth, self-controllability, and luck - which can be observed in the language used in the scale (Janoff-Bulman, 1989, Appendix C). The three subscale scores range from 6 to 24; higher scores indicate a stronger belief in the assumption. However, the WAS does not have a clinical cut-off score therefore the data will be interpreted using the mean scores of each of the subscales.

The WAS has been accepted as a reliable and valid scale to measure VT (Bride, 2012; Cason, Resick and Weaver, 2002; Janoff-Bulman, 1989). Cason, Resick and Weaver (2002), administered the WAS to 2,254 subjects and found the subscale reliabilities ranged from .67 to .78 (p. 139). According to Janoff-Bulman (1989), "given the face validity of the items, the independent factor structure, and the reliabilities of the subscales, there seemed sufficient grounds to begin to use the scale as a heuristic tool" (p. 125). As discussed in the previous chapter, the foundation of VT is in CSDT. It is important to note the relationship between the core elements of CSDT and the questions asked in the questionnaire, because it gives a foundation for how the questions were developed (Janoff-Bulman, 1989).

Participants

One hundred and eleven individuals (N=111) responded to the email and completed the survey. Although the exact number of potential participants is unknown, there are currently 850 existing or developing CACs in the United States, with approximately 10-50 employees at each facility (C. Hereford, personal communication, May 30,2013). Only 107 responses were used for the analysis due to one respondent not consenting to the survey and another three exiting the survey before completion. Of the 107 participants, 90.7% were female and 2.8% were male. The participants ranged in ages from 18 to 66 years old, with the majority reporting ages between 25-38 years old (42.1%). The amount of time working at the CAC ranged from 0-3 months to more than 4 years, with the majority (42.1%) of participants reporting working at a CAC for more than four years. The majority of participants reported having a Masters degree (51.4%) followed by 27.1% having a Bachelors degree, 6.5% having attained a Doctorate and 4.7% having an Associates degree. These frequencies can also be found in Table 1.

Table 1

Descriptive Statistics of the Demographic Data 1

Demographic	Percentage	N (N=107)
Age Range		
18-24	2.8%	3
25-31	21.5%	23
32-38	20.6%	22
39-45	19.6%	21
46-52	15.0%	16
53-59	9.3%	10
60-66	4.7%	5
Missing	6.5%	7
Gender		
Female	90.7%	97
Male	2.8%	3
Other	0%	0
Missing	6.5%	7
Education Level to Date		
High School Diploma	3.7%	4
Associates Degree	4.7%	5
Bachelors Degree	27.1%	29
Masters Degree	51.4%	55
Doctoral Degree	6.5%	7
Missing	6.5%	7
Additional Training	67.3%	72

The mean number of hours participants spent at the CAC per week ranged between 3 and 46 hours, with the bulk (74.8%) reporting working between 34-46 hours. The majority (21.5%) of participants served 12-15 clients a week, while 20.6% served 9-12 clients per week, 18.7% served 6-9 or 3-6 clients a week. A full list of the demographic frequencies can be found in Table 2.

Data Analysis

After the data was gathered, I consulted with a statistician at Smith College School for Social Work to determine which statistics tests to use to analyze the survey data. In addition to collecting descriptive statistics on the mean scores on the WAS and STSS, the Spearman's rho, Oneway ANOVA, t-test, chi-square and crosstab tests were conducted. A Spearman's rho test was used to determine if there were any significant correlations between participants' scores on

Table 2

Descriptive Statistics of the Demographic Data

Average Hours/Week at CAC		
0-6	1.9%	2
13-19	0.9%	1
20-26	9.3%	10
27-33	6.5%	7
34-40	34.6%	37
40-46	40.2%	43
Missing	6.5%	7
Number of Months/Years at CAC		
0-3 months	0.9%	1
3-6 months	3.7%	4
6-12 months	10.3%	11
1-2 years	11.2%	12
2-4 years	25.2%	27
<4 years	42.1%	45
Missing	6.5%	7
Average Clients per Week		
0-3	14.0%	15
3-6	18.7%	20
6-9	18.7%	20
9-12	20.6%	22
12-15	21.5%	23
Missing	6.5%	7
Responsibilities at CAC		
Interviewing	46.7%	50
Advocacy	47.7%	51
Event Planning	34.6%	37
Family Support	43.0%	46
Research	16.8%	18
Grant Writing/Fundraising	43.9%	47
Office Work	49.5%	53
Supervising	49.5%	53
Training	46.7%	50
Outreach Education	50.5%	54
Multidisciplinary Team	68.2%	73
Medical Assessments	1.9%	2
Indirect Exposure	43.9%	47
Other	86.9%	93
Personal Trauma History		
Yes	20.6%	22
No	72.9%	78
Missing	6.5%	7

the STSS and the WAS. In addition, a Spearman's rho was used to determine if there was a

correlation between the STSS and WAS scales and each of the following independent variables:

level of education, case load, hours worked, age, and months/years at CAC). A t-test (similar to

the Spearman's rho) was run to determine if there were any significant relationships between the

mean scores of the scales and each of the following independent variables: personal trauma

history, additional training, and gender. In addition, t-tests were run using the cut-off scores of

the STSS, which was a score higher than 38, and several independent variables: case load, hours

worked, months/years at CAC and age. Lastly, chi-square and crosstab tests were conducted to

determine if there was a significant difference between the cut-off score of the STSS and the

variables: level of education, personal trauma history, and gender. These tests could not be used

with the WAS due to the absence of a cut-off score. The statistical test used to test each variable

are illustrated in Table 3.

Table 3

Statistical Tests			
	Dependent Variable		
Independent Variable	WAS scale	STSS scale	STSS cutoff scores
Scales	Spearman's rho	Spearman's rho	
Education	Spearman's rho	Spearman's rho/Oneway ANOVA	Chi-square/ Crosstabs
Caseload	Spearman's rho		T-test
Hours/week	Spearman's rho		T-test
Age	Spearman's rho		T-test
Time	Spearman's rho		T-test
Trauma Hx		T-test	Chi-square/ Crosstabs
Training		T-test	
Gender		T-test	Chi-square/ Crosstabs

Strengths and Limitations

It is important to identify the strengths and weaknesses of this study, in order to identify the scope of the generalizability of the findings. In addition, it is important to recognize certain biases so that the reader is aware of my previous experience with the sample population, and VT and STS.

A strength of this study is the variability of the sample. Previous research has focused mainly on social workers and other mental health workers, whereas this study focuses on a larger sample of CAC employees and volunteers. This variance may allow for a broader understanding of VT and STS and how it may affect professional helpers in addition to those working in administrative or volunteer positions at CAC's. In order to collect this information while maintaining confidentiality, participants were asked to report their responsibilities at the CAC rather then disclosing their personal title (i.e. forensic interviewer, executive director).

A limitation of this study is the amount of time given to complete the research. With only nine short months to complete an HSR application, collect permission to use the scales, create a survey and administer the questionnaire there was little time to contemplate and organize certain aspects of the study. For example, by the time my HSR application was accepted and my survey was complete I was only able to provide the link to participants for two weeks. Due to this time constraint I may have missed participants who did not have time to complete the survey in this time frame, due to vacation or other factors.

Another limitation of this study is the inability to ask for specific information about the participants' personal trauma histories. Although I think this it is an important variable to investigate I was also keenly aware of not wanting to re-traumatize participants by asking for any detailed disclosure of the event. This led to the decision to use a very broad question -with a

'yes' or 'no' answer-to determine trauma history, rather than asking for more qualitative information. Although this may have mitigated the potential of re-traumatizing participants it also limits the depth of this research.

Lastly, a certain amount of researcher bias exists in this study due to my previous experience working at a CAC. This bias has influenced my choice of demographic questions, in particular the responsibilities section and other variables that had a compounding affect on my own experience with VT and STS. Due to this bias, some questions may have been omitted, while other questions were emphasized. In addition, this research was biased by my experience at *one* CAC, therefore I may have made assumptions about other CAC's that are not generalizable. In the following chapter the findings of the study are presented.

CHAPTER IV

FINDINGS

Introduction

In this chapter, the results of the data analysis are presented. First, I present the results of the Spearman rho correlations and Oneway ANOVA. Next, I present the t-test data beginning with the mean scores followed by the cut-off score of the STSS. Lastly, the data from the Chi-square and crosstab tests are presented. In accordance with each section mentioned above, tables are used to supplement the presentation of the data.

Spearman's rho Correlation and Oneway ANOVA

A Spearman's rho was run to determine the relationship between the scales: the three subscales of the WAS (self-worth, benevolence, meaningfulness) and the STS scale. A significant positive association was determined between the WAS self worth scale and the WAS benevolence scale (P=.400, ρ=.000, two-tailed) and the WAS self worth scale and the WAS meaningfulness scale (P=.210, ρ=.046, two-tailed). A significant negative relationship was found between the WAS benevolence scale and the STS scale (P=-.242, ρ=.021, two-tailed). The positive relationship suggests that as mean scores on the WAS self-worth scale increase, mean scores on the WAS benevolence and WAS meaningfulness scales increase as well. In comparison, the negative relationship suggests that as the mean scores on the STS scale increase the mean scores on the WAS benevolence scale decrease. The results of this test are illustrated in Table 4, below.

A Spearman's rho correlation was also run to determine if there is a correlation between the scales and each of the independent variables. The test determined that there were no

Table 4

Correlation of Secondary Traumatic Stress scale and World Assumption Subscales				
	Cronbach's Alphas			
Scale	Benevolence	Meaningfulness	Self-worth	Secondary Traumatic Stress
Benevolence				
Meaningfulness	.089			
Self-worth	.400***	.210*		
Secondary Traumatic Stress	-.242**	.095	-.146	

Shaded areas highlight significant *p* values; * = $\rho < .05$, ** = $\rho < .01$, *** = $\rho < .001$

significant associations found between the scales and caseload and hours worked each week at the CAC. When a test was run in correlation to age, a weak significant positive correlation was found between age and the WAS benevolence scale (P=.262, ρ=0.12, two-tailed). In addition, a test was run using the variable months or years working at the CAC, and a weak positive correlation was found between STS and years. (P=.211, ρ=.045, two-tailed). This suggests as the amount of time a participant has worked at a CAC increases, the mean scores on the STS scale increase. Lastly, a Spearman's rho was run to determine if there was a correlation between the scales and level of education. The test found a weak positive correlation between STS and education (P=.260, ρ=.013, two-tailed). These findings can be found in Table 5.

Table 5

Correlation of Mean scores on Scales and Variables				
	Correlation Coefficient			
	VT-Benevolence	VT-Meaningfulness	VT-Self-worth	Secondary Traumatic Stress
Variables				
Level of Education	-.181	.021	-.051	.260*
Caseload	-.191	-.011	-.017	-.057
Hours/Week	-.119	-.088	-.120	-.112
Age	.262*	-.021	.123	.199
Time at CAC	.040	-.020	.030	.211*

Shaded areas highlight significant *p* values; * = $\rho < .05$, ** = $\rho < .01$, *** = $\rho < .001$

To further explore the correlation between the level of education and scores on the scales a Oneway Anova was conducted. This determined if there was a difference between mean scale scores by educational group. A significant difference was found in STS ($F(4.86)=2.610$, $\rho=.041$) between participants who reported having a Master's degree in relationship to participants with an Associate's or Bachelor's degree. An LSD post hoc test (Appendix D) showed a significant difference between the means of those with a Master's (m=39.55) and those with a Bachelor's degree (m=34.88) and those with an Associate's degree (m=27.5). This finding suggests as education level increases, the mean score on the STS scale also increases.

T-Tests Run With Mean Scores

A number of t-tests were run to determine if there was a relationship between the mean scores of the scales and the remaining independent variables. When the test was run using personal trauma history and gender no significant differences were found. However, between the WAS meaningfulness scale and gender, the difference was approaching significance ($t(89)=1.932$, $\rho=.056$) between males and females, with males reporting a higher mean score (m=46.67) than females (m=38.42). Due to the small male group (N=3), further tests could not be conducted

In regards to additional training, a t-test was run to determine if there was a relationship between the scores of participants who reported additional training and those who did not. There was a significant differences on the WAS benevolence scale ($t(89)=2.637$, $\rho=.01$, two tailed). Participants with additional training had a lower mean score (m=35.29) than those who did not have additional training (m=38.91). This finding suggests that participants who did not report any additional training reported lower mean scores on the STSS. Furthermore, there was a significant difference in self-worth ($t(89)=2.167$, $\rho=.033$, two-tailed). Participants with training

had a lower mean (m=48.88) than those without (m=51.61). The results of these t-tests are illustrated in Table 6, below.

Table 6

T-test Values				
	t *(p=value)*			
	Benevolence	Meaningfulness	Self-worth	Secondary Traumatic Stress
Variables				
Additional Training	-2.637 (*p*=.010)	-1.831 (*p*=.070)	-2.167 (*p*=.033)	1.365 (*p*=.176)
Trauma History	-.522 (*p*=.603)	-1.829 (*p*=.071)	-.562 (*p*=.576)	-.170 (*p*=.865)
Gender	-1.849 (*p*= .068)	-1.932 (*p*= .056)	-.712 (*p*= .478)	-.905 (*p*= .368)

Shaded areas highlight significant ρ values.

T-Tests Run With the Cut-off Score of STS Scale

In this section I will present the final tests, which were conducted using the cut-off score of the STS scale and the independent variables: caseload, hours worked per week, months or years at CAC, age, level of education, trauma history and gender. The mean scores of each participant were also compared to normative scores, categorized by: little to no STS, mild STS, moderate STS, high STS, severe STS (Bride, 2007). The majority of participants' mean scores met the normative scores for mild STS (m=31). In comparison the WAS does not have a cut-off score, therefore this analysis was not possible for VT. These frequencies are presented (Table 7) to illustrate a detailed report of the data, but only the cutoff-score frequencies will be used as a variable (below cut-off score and above cut-off score) for further analysis.

A t-test was run to determine if there was a difference between participants who fell below or above the cut-off score and caseload, hours worked at the CAC each week, and age. No significant differences were found. However, when a t-test was run to determine if there was a significant difference between the length of time a participant has been at the CAC and their score above or below the cut-off score of the scale, a significant difference was found (t(88.75)=2.212, ρ=.03, two-tailed). This finding suggests that participants who scored above the

35

STS cut-off score had been at the CAC for a longer time. More specific statistics could not be determined due to the variance between the options in ranges (i.e. one option was 0-3 months while another option was <4 years). The results of this test are illustrated in Table 8.

Table 7

Frequencies of STS Categorized by Cut-off Score and Normative Scores		
	Percentage %	N
Variables		
Cut-off Score		
>38	57.1%	52
≤38	42.9%	39
Normative Score		
Little or no (>28)	18.7%	17
Mild (28-37)	34.1%	31
Moderate (38-43)	22.0%	20
High (44-48)	12.1%	11
Severe (≤49)	13.2%	12

Table 8

T-test using Mean Scores and STS cut-off Score	
Variables	t(ρ=value, two tailed)
Caseload	.711(ρ=.479)
Hours Worked	-.394 (ρ=.694)
Time at CAC	-2.139 (ρ=.035)
Age	-1.949 (ρ=.054)

Shaded areas highlight significant ρ values.

Chi-square/crosstab Tests Run With the Cut-off Score of STS Scale

A chi-square and crosstab analysis was conducted to determine if there was a relationship between the STS cut-off score and a participant's personal trauma history and gender. No significant differences were found.

Lastly, a chi-square analysis was conducted to determine if there was a relationship between the reported level of education and the STS cutoff score. A significant difference was found (chi square(1.89)=4.409, ρ=.036, continuity corrected). After a crosstab analysis, it was determined this difference was between the mean scores of participants with an Associate's or Bachelor's degree (m=26.7%) compared to the mean STS cutoff scores of participants with a Master or Doctorate degree (m=52.5%). This finding indicates that the participants with an Associate's or Bachelor's degree were less likely to have scored above the STS cut-off score than those with a Master's or Doctoral degree. A full list of frequencies can be found in Table 9 below.

Table 9

Chi-Square and Crosstab Test Frequencies			
	Crosstab Percentage %		Chi-Square Value (ρ=N)
Variables	Below cutoff score ($\leq$38)	Above cutoff score (39>)	
Gender			x
Male	66.7%	33.3%	
Female	56.8%	43.2%	
Level Of Education			4.409 (ρ=.036)
Associates or Bachelors	73.3%	26.7%	
Masters or Doctoral	47.5%	52.5%	
Trauma History			.063 (ρ=.802)
Yes	52.4%	47.6%	
No	58.6%	41.4%	

Shaded areas highlight significant ρ values.

CHAPTER V

DISCUSSION

Introduction

In this section, I will integrate my findings with the existing literature that I reviewed in Chapter II. My hope is to connect the two in a vibrant discussion, while also offering a few clinical implications and limitations. First, I will discuss the prevalence rates of STS and VT in CAC employees and volunteers. Next, I will discuss the statistically significant findings and statistically non-significant findings of this study. Following that, I will explore the findings I found to be the most salient to this study and to social work practice. Lastly, I will discuss a few of the major limitations of this study, not to highlight its shortcomings but rather to inspire the direction of future research on STS and VT. Overall, I hope this section can close all loose ends and stimulate an invigorating discussion and thoughts about the future of professional helpers.

Prevalence Rates of STS and VT

STS Prevalence. In this study, it was found that of the total 91 participants, 52 fell below the cutoff score (≤ 38), while 39 scored above the score for Secondary Traumatic Stress (STS). According to Bride (2007), "individuals who obtain a score above or at the cutoff value are considered to have PTSD due to STS" (p. 68). These scores were further categorized to determine how many participants reported little or no STS (scores>28), mild STS (scores between 28-37), moderate STS (scores between 38-43), high STS (scores between 44-48) and severe STS (scores <49) (Bride, 2007). This analysis found 56 participants reported mild to moderate levels of STS, while 22 participants reported high to severe STS, out of the total 91 participants. Regardless of severity it is important to note that 39 out of 91 participants meet

PTSD criteria due to STS. In other words, nearly half (42.8%) of the sample met criteria for PTSD.

Dealing with the symptoms of PTSD may have a great effect on the professional helper and their ability to provide their clients with the services they need. For example, if a professional helper cannot fall asleep due to hyper-vigilance or is tortured by nightmares, they may wake up feeling unrested leading to increased irritability, decreased concentration and poor emotional regulation. This helper may also feel too exhausted to engage with friends and family, increasing feelings of isolation and avoiding finding support for difficult cases. These symptoms may make it difficult for the professional helper to effectively do their job and feel satisfied with their work (Adams, Matto & Harrington, 2001).

Furthermore it was found that as scores on the STS increased the scores on the WAS benevolence scale decreased. This relationship between one's lowered belief in benevolence and PTSD was also found by other researchers (Lilly & Pierce, 2012). Lilly and Pierce (2012), studied 911-telecommunicators and found that "more diminished assumptions about the benevolence of the world accentuated the effect of peritraumatic distress on both depression and PTSD symptoms" (p. 138). This decrease in one's belief about the benevolence of the impersonal world and the benevolence of people (i.e. people are naturally friendly and kind) (Janoff-Bulman, 1989) may lead the helper to spiral deeper into a negative emotional and psychological place and possibly increase their PTSD symptoms. Interference with this cycle of symptoms is vital in order to stop the progression of symptoms and return the helper to homeostasis, while also keeping in mind each individual's experience with this process.

When the two interpretations (cut-of scores and normative scores of STS) are looked at in unison there is an important merit to be made. Although the cut-off score for STS is 39,

according to the normative scores, a score between 28-43 signifies only a mild or moderate level of STS. Therefore, although a participant may be above or below the cut-off score there is still a further distinction of how much this individual is experiencing symptoms. This highlights the importance of gathering statistical data while always keeping the individual characteristics of the helper in mind. For example, a participant may have endorsed being "less active than usual", which may be due to an injury or something other than a symptom of STS. In comparison, a participant may not have endorsed "feeling less active" because they had not noticed. As with all research, it is difficult to account for all the factors that may interfere with collecting definitive data.

Regardless of the severity of symptoms or external reasons for STS, it is important to acknowledge that 42.8% of the sample qualified for a diagnosis of PTSD related to STS. This is a large number of helpers that are being negatively affected by their work and needs to be addressed with sincerity and conviction. How to address this issue will be further explored in the implications section of this chapter.

VT Prevalence. The WAS does not have a cutoff score in comparison to the STSS, therefore the prevalence rates for VT cannot be determined. I contacted the developer of the WAS scale and was unable to obtain any number by which to interpret the mean scores, such as the "normative scores" used for the STSS means. As a result the suggestions presented below are based on my own interpretation, based on a basic knowledge of percentages. Therefore, this section may be biased and I encourage the reader to draw his or her own conclusions about the information. However, the mean scores of the three subscales (benevolence, self-worth and meaningfulness) are an important piece of information to explore in relation to the least and highest possible score.

Participants reported a mean score of 37.5 on the benevolence scale, with a range of 20 to 48, with a possible score of 8 to 48. This suggests that participants reported on the higher end of the benevolence scale, indicating that the sample had a relatively high belief in the world as a fair and just place. The mean score on the meaningfulness scale was 38.7, with a range of 17 to 56 and a possible score of 12 to 72. This finding suggests that participants reported feelings of meaningfulness in the world at the lower end of the scale. In other words, participants did not endorse high feelings of the world as meaningful. Lastly, the mean score on the self-worth scale was 50.6, with a range of scores between 31 and 63, with a possible score of 12 to72. This finding suggests that participants reported relatively high scores on the self-worth scale. In summary, the mean scores of the WAS subscales indicate that participants reported high beliefs in the world as benevolent, that they had feelings of self worth, and only a moderate belief in the world as meaningful.

Due to the subjectivity of these three subscales (benevolence, self-worth and meaningfulness) no causal assumptions can be made, but it is still interesting to note the overall atmosphere these scales depict of CACs. From this information one might assume that the employees and volunteers view the world as just and kind, feel a sense of self-worth due to their work (or other factors) yet have varying beliefs in the meaningfulness and controllability of the world (Janoff-Bulman, 1989). Again this is not to say that all professional helpers have high feelings of benevolence and self-worth with mild beliefs of the world as meaningful, but rather that from the sample this study captured it appears that the trauma narratives reported at CACs are not greatly affecting the workers world view in a negative way. VT is after all based on our assumptions of the world and how our experiences accommodate or assimilate existing schemas.

Lastly, a positive correlation was found between the self-worth scale and the benevolence and meaningfulness scales. This finding suggests as an individuals' feelings of self-worth increase as do beliefs of the world as benevolent and meaningful. Self-worth is determined with questions such as: *I am basically a lucky person and I am very satisfied with the kind of person I am* (Appendix E). This correlation may seem intuitive but there is a further suggestion to be made. If feelings of self-worth increase the belief that the world is benevolent and meaningful, and it was also found that decreased benevolence increases symptoms of STS, then it is imperative for CACs to foster a sense of self-worth in all those who embark on the difficult task of trauma work. Increased feelings of self-worth may have a plethora of outcomes such as: increased work satisfaction (Bonach & Heckert, 2012) and feelings of accomplishment (Adams, Matto & Harrington, 2001). This in turn may decrease burnout rates and increase a community of expert helpers.

In summary, STS was found to be relatively prevalent in the CAC community. Although the prevalence of VT cannot be reported in statistical form one might assume that CAC employees and workers are not experiencing high rates of VT, from the data explored above. These findings are further explored in the following sections in relation to the dependent variables.

Statistically Significant Findings

Education and Additional Training and VT/STS. The most statistically significant finding of this study was the positive correlation between STS and education and additional training. This finding suggests that as education increases so do the mean scores of STS. In addition, it was found that participants with additional training reported lower mean scores on the benevolence and self-worth subscales of the WAS. This finding suggests that participants

with additional training have lower self-worth and a lower belief in the world as benevolent. At first glance, these finding may appear counterintuitive due to previous studies conflicting results (Avery & Uhlemann, 1996), but after further evaluation I realized that there may be a variety of factors leading to these findings.

Due to the organization of a CAC the helpers who are in clinical roles (i.e. interviewers, family advocates, therapists) also have the most direct exposure to the client. This proximity may lead to increased STS. Therefore, one could suggest it is not the level of education that puts a helper at risk but rather the proximity to the trauma narrative. The other helpers at the agency may have exposure to the narrative but in a diluted form. For example, a social work intern may hear the entire trauma narrative but this is done from a recording of the interview in a different room. This distance may allow the helper to process the information in the moment rather then needing to store the information and make sense of it later.

Participants who are in more clinical roles at the CAC may also have had additional training. For example, to be a forensic interviewer the professional helper must be certified via a forensic interviewing certification. Therefore, the same conclusion can be made about the proximity to the trauma narrative in relation to those without additional training.

In summary, if a participant has a Master's or Doctorate degree and has also gained additional training in forensic interviewing or trauma-specific training, this individual is qualified to work directly with the clients at the CAC. This proximity may increase the helpers' level of STS leading to difficulty sleeping, isolating from friends and family and a heightened sense of alert. The loss of sleep and connection to others may begin to diminish the participants' beliefs in the world as benevolent and thus strengthening the symptoms of STS. This progression may also lead the helper to experience diminished feelings of self-worth and meaningfulness.

This example is not a generalizable progression but rather an illustration of the detrimental affects STS and VT can have, if not paid attention to.

Months or years at CAC and VT/STS. Although it is important to note that there was a significant relationship found between number of months or years at the CAC and STS, this finding cannot be interpreted as causal. For example, if a participant reported working at the CAC for a year there is no way of knowing if this is the persons first experience as a professional helper or if this individual worked at a different agency for 20 years. This distinction may be important for future researchers to keep in mind when developing a demographic questionnaire.

Age and VT/STS. A weak positive correlation was found between age and rates of the WAS benevolence subscale. This finding suggests as a persons age increases as does their belief in the world as benevolent. Similarly, Calhoun, Cann, Tedeschi and McMillian (1998), found that "the youngest group (in their study) tended to view the world as less just and less benevolent, and the oldest group tended to view the world as luckier and more controllable" (p. 790). Through examining these findings one could assume that the older helpers have a different outlook on the benevolence of the world and could provide this wisdom to the younger helpers, thus fostering a community of support rather then one stigmatized by burn out. In addition, aging might also give helpers time to adapt to their exposure to trauma stories, and develop adequate coping responses **(**Pearlman and MacIan, 1995; Schauben & Frazier, 1995).

Lastly, it is important to note that there were no significant differences found between age and STS, therefore one cannot assume that age is a protective or risk factor. However, it was found that participants with lower beliefs of benevolence also reported higher rates of STS, therefore the combination of age and a view of the world as benevolent may decrease the risk of developing STS. Again, this is merely a suggestion not a generalizable finding.

In summary, the statistically significant findings yield a variety of interpretations and suggestions for employees and volunteers at CACs. Due to the subjective nature of this work these findings should be used as a point of inquiry rather than a prediction for developing STS and/or VT. I caution readers to make any causal assumptions about the variables and STS/VT. Again, the purpose of this study is an invitation to pay attention to each individual's personal experience with bearing witness to the trauma of others.

Statistically Non-significant Findings

Although the majority of the variables were found to have statistically non-significant correlations with the scales, this does not mean that this information is not valuable. In fact, these findings may be the most significant of all because they support the theory that an individual's response to trauma is a personal experience dependent on the individual's personality, social and cultural variables and history (Pearlman and MacIan, 1995).

As evidenced by the literature review STS and VT research has been focused on identifying predictive and risk factors in order to establish a definitive prognosis for who will or will not experience STS and/or VT. Previous researchers have found caseload (Arvay & Uhlemann, 1996, Dunkley & Whelan, 2006,; Figley, 2011; Schauben & Frazier, 1995), level of experience (Adams, Matto, & Harrington, 2001; Figley, 2011; Schauben & Frazier, 1995) and personal trauma history (Follette, Polusny & Milbeck, 1994; Pearlman and MacIan, 1995) to have a significant relationship with STS and VT, yet this study found none.

Caseload and VT/STS. Although, no significant relationships were found between caseload and VT and/or STS this does not mean that this finding is not significant to the field of professional helpers. Previous researchers (Arvay & Uhlemann, 1996, Dunkley & Whelan, 2006; Figley, 2011; Schauben & Frazier, 1995) found caseload to have a significant relationship with

VT and/or STS but they also sampled different populations. For example, Schauben and Frazier (1995) and Arvay and Uhleman (1996) both used samples of counselors, whereas this study focused on all employees and volunteers at the CAC. Therefore, a person in an administrative role may not have a caseload at all, whereas a forensic interviewer may have a caseload of 15 per week. This discrepancy in reporting should be taken into consideration for future research interested in this specific population.

Hours worked at the CAC and VT/STS. Similar to caseload, there were no significant relationship found between how many hours a person spent at the CAC each week and STS/VT. Although this may seem counterintuitive due to the assumption that more hours worked may lead to an increase in stress, this finding is related to a variety of factors. First, as mentioned previously, a person in an administrative role may work 60 + hours a week fundraising, planning events and meeting with the interdisciplinary team but have no direct contact with the trauma narratives. In comparison, a forensic interviewer may spend only 20 hours a week at the CAC but conduct seven interviews, thus making the exposure to traumatic material much greater. In addition, some employees or volunteers may only spend a few hours at the CAC and then work at another agency that may increase or decrease their exposure to traumatic material. Evidently, there are various factors at play with this variable therefore one cannot assume that less or more hours means less or more VT/STS.

Personal Trauma History and VT/STS. Participants were asked to report if they had experienced a personal trauma in the past year, but there was no significant relationship found with STS or VT. In comparison to previous research (MacRitchie & Leibowitz, 2010; Pearlman &MacIan, 1995) this finding may seem counterintuitive as well. One may assume that a personal exposure to trauma would diminish the capacity to digest others, but this is not necessarily the

case. In accordance with trauma theory and schema theory, the importance of individuality must be emphasized when interpreting this finding.

First, previous researchers used a longer time frame for a previous trauma experience. For example, MacRitchie and Leibowitz (2010), asked participants if they had experienced a trauma *ever,* where as this study only asked for personal traumas experienced in the past year. In addition, the word "trauma" can be interpreted to encompass a variety of experiences and may not mean the same thing to two people. For future research it may be helpful to allow participants to answer this question qualitatively in order to have a better understanding of the experiences the participants are reporting. Schauben and Frazier (1995) attempted to gather more specific information and asked participants to indicate which kind of sexual trauma they had experienced (i.e. rape, attempted rape, incest/child sexual abuse, sexual harassment, and other sexual assault). Still, Schauben and Frazier (1995) did not find a significant association between a personal trauma history and STS.

Interestingly Pearlman and MacIan (1995) also found that clinicians with a previous trauma history and had been in the field *longer*, experienced less disrupted schemas. The researchers suggested these findings could be associated with the professional helpers ability to assimilate their own traumatic experience into their existing schemas. According to Pearlman and MacIan (1995), "perhaps those survivor therapists who enter this field in order to find meaning in their own trauma actually accomplish this goal through their work, and then they demonstrate a resolution of previously disrupted schemas" (p. 563). Assimilation or accommodation is not a conscious decision that one can make therefore we cannot determine how each individual will digest a traumatic experience.

Evidently, this research was not able to capture the extent that a personal trauma history may or may not have on VT and/or STS. For future research it may be helpful to assess other factors surrounding a personal trauma such as: time passed, treatment received, and if the trauma was interpersonal (i.e. incest) or more external (i.e. a natural disaster). Due to the varying definitions of trauma it is important to always keep the individual nature of the experience of the event in mind when creating a questionnaire to capture this information.

Gender and VT/STS. Lastly, tests conducted for gender and STS/VT did not yield any statistically significant relationships. Due to the lack of male participants (N=3) it was in violation of assumption (M. Postal, personal communication, April 23, 2013) to run numerous of the tests used to analyze other variables. However, the relationship between gender and WAS meaningfulness was approaching significance, suggesting that males have higher belief in the meaningfulness of the world. For future research it would be important to collect a larger male sample in order to further explore this relationship and determine if there are any other differences between males and females and STS/VT.

In summary, although something is not found to be statistically significant does not mean there are not implications to be made about the information. In the following section, I would like to highlight the findings I found most salient to the field of professional helpers and the practical implications of this information.

Practical and Clinical Significance

I believe it is most important to note the relationship between education and additional training and STS, as well as the relationship (or lack there of) between personal trauma history and VT and STS. This may be a personal bias or a deeper understanding of the concepts but, I believe these two findings debunk two factors I believed to be protective and hazardous

respectively. Prior to entering my MSW program, I believed a higher education and my lack of personal trauma would ensure my ability to become a resilient and competent professional helper. This is not to say that I no longer believe in my ability as a professional helper but rather that I am pleasantly surprised by my findings, and that I am now realizing what previous researchers were telling me all along: there simply is no way of knowing at this time who will experience vicarious trauma or secondary traumatic stress, and therefore no one should be deterred from doing this rewarding work. Similarly, no one should feel immune to its risks either.

The field of professional helpers is clearly aware of the risk of VT and STS, but further research may help educators, supervisors, directors, clinicians and students to better understand the phenomena, and foster an environment of prevention. Education on the harmful effects of VT was found to be valuable knowledge to clinicians, validating their experiences and motivating individuals to take preventative measures (Steed & Downing, 1998). The field of professional helpers would benefit from this shift because there would be potential for less burnout, a sense of greater purpose and a public perception of our field as powerful rather than corrupt and overworked. As stated by Figley (2011):

> Life is short. The world will always need caring and passionate counselors. But to be really effective, compassionate psychologists must always abide by the motto of Hippocrates: First, do no harm. However, it is imperative that we first do no self-harm. We cannot rely on anyone else to do it for us. It is our responsibility" (p. 430).

It is imperative for the field of professional helpers to find a safe way to help others while also taking care of themselves.

In addition, the finding that there is a relationship between education and STS is an important implication for the field of social workers and social workers in training. There is so

much to be learned in an MSW program that it is often forgotten that we must take care of our own needs as much as those of our clients. Unfortunately, due to the competitive nature of MSW programs there is little time for "self-care". The responsibility may lie on the organizations and colleagues that will guide MSW graduates from student to clinician to help to mitigate the risk for VT and STS. It is only through a mutual awareness of our colleagues that we can extend the invitation to pay attention and in return pledge to pay attention to each other. We can do so not in a reprimanding way, but rather as a supportive community aware of the collective experience of social work, similar to the environment of mutuality and brotherhood described by soldiers "in the trenches" (Herman, 1997).

Limitations

One of the underlying assumptions of this study was that participants would have only a few responsibilities at their agency. After the results were collected it was evident that various participants related to numerous of the responsibilities, making it difficult to determine the role of the individual at their agency. Due to this discrepancy I was unable to determine if a participant had a strictly clinical or administrative role. For future research it my be useful to allow participants to report their professional title rather then listing responsibilities.

Another limitation of this study is the potential bias of participants to complete the survey due to the recruitment letter, which introduced the sample to the topic of the survey (Adams, Matto & Harrington, 2001). This information may have led to a biased sample because those with a personal experience with VT or STS may have felt more inclined to complete the survey. In comparison, other participants who do not have experience with VT or STS may have felt compelled to complete the survey in order to dispel beliefs that all those in a helping profession struggle with VT or STS. Or, participants with VT or STS might have felt compelled to avoid

engaging in the subject matter all together and self-selected out of the study. Either way this information is not available through the data this study collected. Developers of future research on VT and STS may want to identify certain ways to minimize this potential bias.

Lastly, distributing the survey via the Internet may have deterred some individuals from participating. Younger participants may feel more comfortable using a computer leading to a higher percentage of younger participants. Furthermore, some participants may have less frequent access to a computer or their email, which may have also affected response rates.

Conclusion

In conclusion of this study, I hope the findings and discussion have highlighted the complexities of the phenomena of VT and STS. It is only through awareness and support that professional helpers can overcome the potential for VT and STS, and continue to help those in need. It is only through this process that the human race can continue to grow and unfold into a nurturing population. For those readers who are professional helpers or in pursuit of a career as a professional helper, I hope this study did not stifle your passion but rather empower you to pay attention to the risk of VT and STS. To those readers, who are not professional helpers, I hope this study emphasized the importance of supporting those around you and to understand that no one is immune to STS and VT.

I would like to finish this study with the end of the quote from the introduction by Pearlman and Saakvitne (1995):

> While it is a dark path, it is a spiritual journey, into the darkest recesses of people's private experience, and one which deepens our humanity in increasing our awareness of all aspects of life. In this way, it is indeed a gift, a reward of doing this work (p. 406).

After completing this research, I have learned many interesting things about VT and STS and

about how it may later affect my career. I have a greater awareness of how VT and STS affects

professional helpers and the importance of seeking help when needed. But most of all, I have

learned that despite the potential risks of being a professional helper, my passion has not faltered

and I am prepared to embark on the spiritual journey and gift of being a social worker.

REFERENCES

Adams, R. E., Boscarino, J. A., & Figley, C. R. (2006). Compassion fatigue and

psychological distress among social workers: A validation study. American Journal of

Orthopsychiatry, 76(1), pp. 103-108.

Adams, K. B., Matto, H. C., & Harrington, D. (2001). The traumatic institute belief

scale as a measure of vicarious trauma in a national sample of clinical social workers.

Families in Society: The Journal of Contemporary Human Services, 82(4), pp. 363-371.

Allen, J. G. (2001). Traumatic relationships and serious mental disorders. West

Sussex, England: John Wiley & Sons, Ltd.

American Psychiatric Association. (2000). Diagnositc and statistical manual of

mental disorers (4th ed., text rev.) Washington, DC: Author.

Arvay, M.J. & Uhlemann, M.R. (1996). Counsellor stress in the field of trauma: a

preliminary study. *Canadian Journal of Counselling, 30*, 193-210.

Baird, K. & Kracen, A.C. (2006). Vicarious traumatization and secondary traumatic

stress: A research synthesis. *Counseling Psychology Quarterly*, 19(2), pp. 181- 188.

Baldwin, M. K. (1995). Relational schemas and cognition in close relationships.

Journal of Social and Personal Relationships, 12(4), pp. 547-552.

Berzoff, J. & Kita, E. Compassion fatigue and countertransference: Two different concepts.

Clinical Social Work Journal, 38, pp. 341-349.

Bonach, K. & Heckert A. (2012). Predictors of secondary traumatic stress among

children advocacy centers forensic interviewers. *Journal of Child Sexual Abuse, 21*, pp.

295-314.

Breuer, J. & Freud, S, (2000). Studies of hysteria. (J. Strachey Trans. and Ed.) USA:

Basics Book, Inc. (Original work published in 1895).

Bride, B. E. (2007). Prevalence of secondary traumatic stress amongst social

    workers. *Social Work, 52*(1), pp. 63-70.

Bride B.E., Robinson, M. R., Yegidis, B. & Figley, C. R. (2004) Development and

    validation of the Secondary Traumatic Stress Scale. *Research on Social Work Practice,*

    14, 27-35.

Calhoun, L. G., Cann, A., McMillan, J & Tedeschi, R. G. (1998). Traumatic events and

    generational differences in assumptions about a just world. The Journal of Social

    Psychology, 138(6), p. 789.

Cason, D. R., Resick, P. A. & Weaver, T. L. (2001). Schematic integration of traumatic

    events. *Clinical Psychology Review, 22*, pp. 131-153.

Choi, G. (2011). Secondary traumatic stress of service providers who participate

    with survivors of family or sexual violence: A national survey of social

    workers. *Smith College studies in Social Work 81*(1), pp.101-119.

Collins, S. & Long, A. (2003). Working with the psychological effects of trauma:

    Consequences of mental health-care workers – a literature review. *Journal of Psychiatric*

    and Mental Health Nursing, 10, pp.417-424.

Ferman, R. (2012, Dec. 27) Why child advocacy centers work. (Web log comment).

    Retrieved from http://www.huffingotnpost.com/risa-ferman/why-child-advocacy-

    center_b_2372266.html

Figley, C. (1995). Systemic traumatization : Secondary traumatic stress disorder in

    family therapists. Mikesell, Richard H. (Ed.); Lusterman, Don-David (Ed.);

    McDaniel, Susan H. (Ed.), *Integrating Family Therapy : Handbook of Family*

Psychology and Systems Theory. pp. 571-581. Washington, DC, US: American

Psychological Association.

Figley, C. (Eds.) (2006). Mapping trauma in its wake: Autobiographical essays by

pioneer trauma scholars. New York, NY: Taylor & Francis Group, LLC.

Follette, V. M., Polusny, M. M. & Milbeck, K. (1994). Mental health and law

enforcement professionals: Trauma history, psychological symptoms, and

impact of providing services to child sexual abuse survivors. *Professional Psychology:*

Research in Practice, 25(3), pp.275-282.

Friedman, M. J. (Jan. 31, 2007). PTSD history and overview. Retrieved from

http://www.ptsd.va.gov/professional/pages/ptsd-overview.asp

Herman, J (1997). Trauma and recovery: The aftermath of violence-from domestic abuse to

political terror. United States: Basic Books.

Hesse, A. (2002). Secondary trauma: How working with trauma survivors affects

therapists. *Clinical Social Work Journal, 30*(3), pp. 293-309.

Janoff-Bulman, R. (1989). Assumptive worlds and the stress of traumatic events:

Applications of the schema construct. *Journal of Social Cognition, 7*(2), pp. 113-136.

Janoff-Bulman, R. & Frantz, C. M. (1997). The impact of trauma on meaning: From

meaningless world to meaningful life. In M. Power & C. R. Brewin (Eds.), *The*

Transformation of Meaning in Psychological Therapies: Integrating theory and practice

(pp. 91-106). Chichester, England: John Wiley and Sons Ltd.

Jind, L. (2001). Do traumatic events influence cognitive schemata? *Scandinavian*

Journal Of Psychology, 42, pp. 113-120.

Jordan, K. (2010). Vicarious trauma: Proposed factors that impact clinicians. *Journal*

of Family Psychotherapy, 21(4), pp. 225-237.

Lilly, M. & Pierce, H. (2012). PTSD and depressive symptoms in 911 telecommunicators: The

role of peritraumatic distress and world assumptions in predicting risk. *Psychological*

trauma: Theory, research, practice and policy, 5(2), pp.135-141.

MacRitchie, V. & Leibowitz, S. (2010). Secondary traumatic stress, level of exposure,

empathy and social support in trauma workers. *South African Journal of*

Psychology 40(2), pp. 149-158.

Newell, J. & MacNeill, G. (2010). Professional burnout, vicarious trauma, secondary

traumatic stress and compassion fatigue: A review of theoretical terms, risk

factors and preventative methods for clinicians and researchers. *Best Practices in Mental*

Health: An International Journal 6(2), pp. 57-68.

Pearlman, L.A. & Mac Ian, P. S. (1995). Vicarious traumatization: An empirical

studies of the effects of trauma work on trauma therapists. *Professional*

Psychology: Research and Practice, 28(6), pp. 558-565.

Pearlman, L. A. & Saakvitne, K. W. (1995). Trauma and the therapist:

Countertransference and vicarious traumatization in psychotherapy with incest survivors.

United States of America: Haddon Craftsmen, Inc.

Perron, B. E. & Hiltz, B. S. (2006). Burnout and secondary trauma among forensic

interviewers of abused children. *Child and Adolescent Social Work Journal, 23*(2), pp.

216-234.

Sakheim, D.K. & Devine, S. E. (1992). Out of darkness: Exploring Satanism and

ritual abuse. New York, NY: Lexington Books.

Schauben, L.J. & Frazier, P.A. (1995). Vicarious trauma: the effects on female

counselors of working with sexual violence survivors. *Psychology of Women Quarterly, 19*, pp. 49-64.

Terr, L. (1991). Childhood trauma: An outline and overview. *American Journal of Psychiatry, 481*(1), pp. 10-20.

Trippany, R. L., Kress, V. E. W. & Wilcoxon, S. A. (2004). Preventing Vicarious

Trauma: What counselors should know when working with trauma survivors. *Journal of Counseling and Development, 82*, pp. 31-37.

United Stated Census Bureau. (Sep. 18 2012). State and county quick facts. Retrieved

On November 30, 2012 from

http://quickfacts.census.gov/qfd/states/08000.html

Wicks, R. J. (2006). Overcoming secondary stress in medical and nursing practice; A

guide to professional resilience and personal well-being. New York, NY: Oxford

University Press, Inc.

Williams, A. M., Helm, H. M., & Clemens, E. V. (2012). The effect of childhood trauma,

personal wellness, supervisory working alliance and, organizational factors on vicarious

traumatization. *Journal of Mental Health Counseling, 34*(2), 133-153.

van der Kolk, B. A., MacFarlane, A. C., & Weisaeth, L. (Eds.) (2007). Traumatic stress:

The effects of overwhelming experience on mind, body and society. New York, NY: The

Guilford Press.

Appendix A: HSR Approval Letter
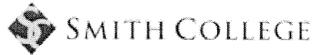
SMITH COLLEGE

School for Social Work
Smith College
Northampton, Massachusetts 01063
T (413) 585-7950   F (413) 585-7994

March 1, 2013

Isabelle Thurmer

Dear Isabelle,

Thank you for making all the requested changes to your Human Subjects Review application. Your project is now approved by the Human Subjects Review Committee.

Please note the following requirements:

Consent Forms: All subjects should be given a copy of the consent form.

Maintaining Data: You must retain all data and other documents for at least three (3) years past completion of the research activity.

In addition, these requirements may also be applicable:

Amendments: If you wish to change any aspect of the study (such as design, procedures, consent forms or subject population), please submit these changes to the Committee.

Renewal: You are required to apply for renewal of approval every year for as long as the study is active.

Completion: You are required to notify the Chair of the Human Subjects Review Committee when your study is completed (data collection finished). This requirement is met by completion of the thesis project during the Third Summer.

Good luck with your project.

Sincerely,

Marsha Kline Pruett, M.S., Ph.D., M.S.L.
Acting Chair, Human Subjects Review Committee

CC: Elizabeth Kita, Research Advisor

Appendix B: Informed Consent

Dear Participant,

My name is Isabelle Thurmer and I am a Masters candidate at Smith College School for Social Work. I am currently conducting a research project as part of my MSW degree requirements.   The focus of my study is secondary traumatic stress (STS) and vicarious trauma (VT) among individuals working or volunteering at Children's Advocacy Centers in Colorado. VT and STS refer to the ways working with traumatized clients can impact you.

To participate in this study you must be a current employee, volunteer or intern at a Children's Advocacy Center. Forensic interviewers, program directors, family support advocates, office staff, volunteers, and student interns (bachelors and graduate level) are all eligible to participate. The study will be conducted using two questionnaires and a 9-question demographic survey. The measures will be administered via an email link to a secure website. Participation in the survey should take no longer than 30 minutes.

The risks associated with participating in this study are minimal, but may involve the experience of distressing emotions or memories in response to the questions on the surveys. In contrast, some potential benefits of participating may include increased insight into VT and STS as well as your experience of your work.
Furthermore, your participation will advance research on this topic, possibly leading to more effective practices. A list of resources will be provided to you in case you need support or counseling after completing the survey.

I will take careful measures to protect your anonymity. The study will not require you to include your name or other identifying information other than your title within the agency context. Because there is only one individual for each position at each agency, (i.e. executive director, forensic interviewer, etc.), your work email addresses and agency affiliation will also not be requested. My research advisor and statistician, both of whom will review my findings, will not have access to the data until all identifying information (i.e. email) has been removed. The data will be presented in group format, therefore the audience will not have any identifiable information other then the study was conducted in the state of Colorado. The data will be stored on SurveyMonkey.com, which is an encrypted, firewalled and password protected site. The data will be saved for three years, wherein after the data will be destroyed or securely saved for further data analysis. The consent forms will also be saved for three years in a password-protected folder, with all identifying information removed (i.e. email).

Participation in this study is completely voluntary. At any time, you may decline to answer any questions, and you may end your participation at any time prior to the completion of the survey as well. If you decide to terminate your involvement in the study the data will be excluded from the final data analysis.

If you have any additional questions or need to contact me for any other reason, feel free to email me at xxx-xxx-xxxx. If you have any questions or concerns about confidentiality or any aspects about the research please contact me or the Chair of the Smith School for Social Work Human Subjects Review Committee at (413) 585-7974.

BY CHECKING "IAGREE" BELOW YOU ARE INDICATING THAT YOU HAVE READ AND UNDERSTAND THE INFORMATION ABOVE AND THAT YOU HAVE HAD AN OPPORTUNITY TO ASK QUESTIONS ABOUT THE STUDY, YOUR PARTICIPATION,

AND YOUR RIGHTS AND THAT YOU AGREE TO PARTICIPATE IN THE STUDY. Please print of copy of this form for your records.

_____ Yes, I Agree

_____ No, I Do Not Agree

Appendix C: Survey
Demographic Questionnaire

What is your age? (Please mark one)
- A. 18-24 ___
- B. 25-31 ___
- C. 32-38 ___
- D. 39-45 ___
- E. 46-52 ___
- F. 53-59 ___
- G. 60-66 ___

Select the gender you most identify with.
- A. Female ___
- B. Male ___
- C. Transgender ___
- D. Other _____

Education Level to Date
- A. High school diploma __
- B. GED ___
- C. Associates degree (How many_____) In process ___ or completed ___?
- D. Bachelors degree (How many_____) In process___ or completed___?
- E. Masters degree (How many_____) In process___ or completed___?
- F. Doctorate degree (_____) In process ___ or completed ___?

Pleas list any additional trainings you have completed (i.e. CPT certification, forensic interviewing training, etc.)
_____

How many hours on average are you at the CAC each week?
- A. 0-6 hours ____
- B. 6-12 hours ____
- C. 12-18 hours ____
- D. 18-24 hours ____
- E. 24-30 hours ____
- F. 30-36 hours ____
- G. 36-40 hours ____

How long have you been working at the CAC?
- A. 0-3 months ____
- B. 3-6 months ____
- C. 6-12 months ____
- D. 1 -2 years ____
- E. 2-4 years ____
- F. <4 years ____

How many clients do you serve on average, per week (i.e. case load)?
- A. 0-3 ___
- B. 3-6 ___
- C. 6-9 ___
- D. 9-12 ___
- E. 12-15 ___

What are your responsibilities at the CAC? (please choose all that apply)
- A. Interviewing ___
- B. Advocacy ___
- C. Event planning ___
- D. Family support ___
- E. Research ___
- F. Grant writing/fundraising ___
- G. Office work ___
- H. Supervising ___
- I. Training ___
- J. Outreach Education (i.e police departments, schools, etc.) ___
- K. Multidisciplinary team___
- L. Medical assessments____
- M. Indirect exposure (i.e. reading reports, scheduling appointments, welcoming clients, etc.)

Have you experienced a personal trauma in the past year?
- A. Yes ____
- B. No ____

Secondary Traumatic Stress Scale

The following is a list of statements made by persons who have been impacted by their work with traumatized clients. Read each statement then indicate how frequently the statement was true for you in the past **seven (7) days** by circling the corresponding number next to the statement.

NOTE: *"Client" is used to indicate persons with whom you have been engaged in a helping relationship. You may substitute another noun that better represents your work such as consumer, patient, recipient, etc.*

	Never	Rarely	Occasionally	Often	Very Often
1. I felt emotionally numb…………………………………..	1	2	3	4	5
2. My heart started pounding when I thought about my work with clients……………………………………..	1	2	3	4	5
3. It seemed as if I was reliving the trauma(s) experienced by my client(s)……………………………………..	1	2	3	4	5

4. I had trouble sleeping………………………………....	1	2	3	4	5
5. I felt discouraged about the future…………………….	1	2	3	4	5
6. Reminders of my work with clients upset me…………….	1	2	3	4	5
7. I had little interest in being around others……………….	1	2	3	4	5
8. I felt jumpy………………………………………………	1	2	3	4	5
9. I was less active than usual……………………………….	1	2	3	4	5
10. I thought about my work with clients when I didn't intend to…………………………………………….	1	2	3	4	5
11. I had trouble concentrating……………………………….	1	2	3	4	5
12. I avoided people, places, or things that reminded me of my work with clients……………………………….	1	2	3	4	5
13. I had disturbing dreams about my work with clients……...	1	2	3	4	5
14. I wanted to avoid working with some clients…………….	1	2	3	4	5
15. I was easily annoyed………………………………..........	1	2	3	4	5
16. I expected something bad to happen……………………....	1	2	3	4	5
17. I noticed gaps in my memory about client sessions……….	1	2	3	4	5

World Assumptions Scale

Using the scale below, please select the number that indicates how much you agree or disagree with each statement. Please answer honestly. Thanks.

1 = strongly disagree
2 = moderately disagree
3 = slightly disagree
4 = slightly agree
5 = moderately agree
6 = strongly agree

1. Misfortune is least likely to strike worthy, decent people.
2. People are naturally unfriendly and unkind.
3. Bad events are distributed to people at random.
4. Human nature is basically good.
5. The good things that happen in this world far outnumber the bad.
6. The course of our lives is largely determined by chance.
7. Generally, people deserve what they get in this world.
8. I often think I am no good at all.
9. There is more good than evil in the world.
10. I am basically a lucky person.
11. People's misfortunes result from mistakes they have made.

12. People don't really care what happens to the next person.
13. I usually behave in ways that are likely to maximize good results for me.
14. People will experience good fortune if they themselves are good.
15. Life is too full of uncertainties that are determined by chance.
16. When I think about it, I consider myself very lucky.
17. I almost always make an effort to prevent bad things from happening to me.
18. I have a low opinion of myself.
19. By and large, good people get what they deserve in this world.
20. Through our actions we can prevent bad things from happening to us.
21. Looking at my life, I realize that chance events have worked out well for me.
22. If people took preventive actions, most misfortune could be avoided.
23. I take the actions necessary to protect myself against misfortune.

24. In general, life is mostly a gamble.
25. The world is a good place.
26. People are basically kind and helpful.
27. I usually behave so as to bring about the greatest good for me.
28. I am very satisfied with the kind of person I am.
29. When bad things happen, it is typically because people have not taken the necessary actions to protect themselves.
30. If you look closely enough, you will see that the world is full of goodness.
31. I have reason to be ashamed of my personal character.
32. I am luckier than most people.

Appendix D: Post Hoc Test of Educational Level

Dependent Variable			Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
Benevolence	HS Diploma	Associates Degree	-2.75000	5.69485	.630	-14.0710	8.5710
		Bachelors Degree	-.88462	4.82535	.855	-10.4771	8.7079
		Masters Degree	1.33962	4.73675	.778	-8.0767	10.7560
		Doctoral Degree	.50000	5.36916	.926	-10.1735	11.1735
	Associates Degree	HS Diploma	2.75000	5.69485	.630	-8.5710	14.0710
		Bachelors Degree	1.86538	3.53180	.599	-5.1556	8.8864
		Masters Degree	4.08962	3.40974	.234	-2.6887	10.8680
		Doctoral Degree	3.25000	4.24469	.446	-5.1882	11.6882
	Bachelors Degree	HS Diploma	.88462	4.82535	.855	-8.7079	10.4771
		Associates Degree	-1.86538	3.53180	.599	-8.8864	5.1556
		Masters Degree	2.22424	1.57449	.161	-.9057	5.3542
		Doctoral Degree	1.38462	2.97827	.643	-4.5360	7.3052
	Masters Degree	HS Diploma	-1.33962	4.73675	.778	-10.7560	8.0767
		Associates Degree	-4.08962	3.40974	.234	-10.8680	2.6887
		Bachelors Degree	-2.22424	1.57449	.161	-5.3542	.9057
		Doctoral Degree	-.83962	2.83246	.768	-6.4704	4.7911
	Doctoral Degree	HS Diploma	-.50000	5.36916	.926	-11.1735	10.1735
		Associates Degree	-3.25000	4.24469	.446	-11.6882	5.1882
		Bachelors Degree	-1.38462	2.97827	.643	-7.3052	4.5360
		Masters Degree	.83962	2.83246	.768	-4.7911	6.4704
Meaningfulness	HS Diploma	Associates Degree	2.75000	6.52155	.674	-10.2144	15.7144
		Bachelors Degree	.61538	5.52583	.912	-10.3696	11.6004
		Masters Degree	.68868	5.42436	.899	-10.0946	11.4720
		Doctoral Degree	1.66667	6.14858	.787	-10.5563	13.8896

			Mean Difference	Std. Error	Sig.	Lower Bound	Upper Bound
	Associates Degree	HS Diploma	-2.75000	6.52155	.674	-15.7144	10.2144
		Bachelors Degree	-2.13462	4.04450	.599	-10.1748	5.9056
		Masters Degree	-2.06132	3.90472	.599	-9.8236	5.7010
		Doctoral Degree	-1.08333	4.86088	.824	-10.7464	8.5798
	Bachelors Degree	HS Diploma	-.61538	5.52583	.912	-11.6004	10.3696
		Associates Degree	2.13462	4.04450	.599	-5.9056	10.1748
		Masters Degree	.07329	1.80306	.968	-3.5111	3.6577
		Doctoral Degree	1.05128	3.41062	.759	-5.7288	7.8314
	Masters Degree	HS Diploma	-.68868	5.42436	.899	-11.4720	10.0946
		Associates Degree	2.06132	3.90472	.599	-5.7010	9.8236
		Bachelors Degree	-.07329	1.80306	.968	-3.6577	3.5111
		Doctoral Degree	.97799	3.24364	.764	-5.4702	7.4261
	Doctoral Degree	HS Diploma	-1.66667	6.14858	.787	-13.8896	10.5563
		Associates Degree	1.08333	4.86088	.824	-8.5798	10.7464
		Bachelors Degree	-1.05128	3.41062	.759	-7.8314	5.7288
		Masters Degree	-.97799	3.24364	.764	-7.4261	5.4702
Self-worth	HS Diploma	Associates Degree	-1.00000	5.17921	.847	-11.2959	9.2959
		Bachelors Degree	.30769	4.38844	.944	-8.4162	9.0316
		Masters Degree	1.66981	4.30786	.699	-6.8939	10.2335
		Doctoral Degree	-1.66667	4.88301	.734	-11.3738	8.0404
	Associates Degree	HS Diploma	1.00000	5.17921	.847	-9.2959	11.2959
		Bachelors Degree	1.30769	3.21201	.685	-5.0776	7.6930
		Masters Degree	2.66981	3.10100	.392	-3.4948	8.8344
		Doctoral Degree	-.66667	3.86036	.863	-8.3408	7.0075
	Bachelors Degree	HS Diploma	-.30769	4.38844	.944	-9.0316	8.4162
		Associates Degree	-1.30769	3.21201	.685	-7.6930	5.0776
		Masters Degree	1.36212	1.43193	.344	-1.4845	4.2087
		Doctoral Degree	-1.97436	2.70860	.468	-7.3589	3.4102
	Masters Degree	HS Diploma	-1.66981	4.30786	.699	-10.2335	6.8939

Dependent Variable	(I)	(J)	Mean Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
		Associates Degree	-2.66981	3.10100	.392	-8.8344	3.4948
		Bachelors Degree	-1.36212	1.43193	.344	-4.2087	1.4845
		Doctoral Degree	-3.33648	2.57600	.199	-8.4574	1.7844
	Doctoral Degree	HS Diploma	1.66667	4.88301	.734	-8.0404	11.3738
		Associates Degree	.66667	3.86036	.863	-7.0075	8.3408
		Bachelors Degree	1.97436	2.70860	.468	-3.4102	7.3589
		Masters Degree	3.33648	2.57600	.199	-1.7844	8.4574
Secondary Trauma Total	HS Diploma	Associates Degree	1.50000	8.22836	.856	-14.8574	17.8574
		Bachelors Degree	-5.88462	6.97205	.401	-19.7446	7.9754
		Masters Degree	-10.54717	6.84402	.127	-24.1526	3.0583
		Doctoral Degree	-7.83333	7.75778	.315	-23.2553	7.5886
	Associates Degree	HS Diploma	-1.50000	8.22836	.856	-17.8574	14.8574
		Bachelors Degree	-7.38462	5.10302	.152	-17.5291	2.7598
		Masters Degree	-12.04717*	4.92666	.017	-21.8410	-2.2533
		Doctoral Degree	-9.33333	6.13306	.132	-21.5255	2.8588
	Bachelors Degree	HS Diploma	5.88462	6.97205	.401	-7.9754	19.7446
		Associates Degree	7.38462	5.10302	.152	-2.7598	17.5291
		Masters Degree	-4.66255*	2.27495	.043	-9.1850	-.1401
		Doctoral Degree	-1.94872	4.30324	.652	-10.5033	6.6058
	Masters Degree	HS Diploma	10.54717	6.84402	.127	-3.0583	24.1526
		Associates Degree	12.04717*	4.92666	.017	2.2533	21.8410
		Bachelors Degree	4.66255*	2.27495	.043	.1401	9.1850
		Doctoral Degree	2.71384	4.09256	.509	-5.4219	10.8496
	Doctoral Degree	HS Diploma	7.83333	7.75778	.315	-7.5886	23.2553
		Associates Degree	9.33333	6.13306	.132	-2.8588	21.5255
		Bachelors Degree	1.94872	4.30324	.652	-6.6058	10.5033

		Masters Degree	-2.71384	4.09256	.509	- 10.8496	5.4219

Appendix E: STS and WAS Frequencies

Secondary Traumatic Stress Scale

STSS Subscales	Questions	Percentage (N) (N=107)					
		Never	Rarely	Occasionally	Often	Very Often	Missing
Avoidance	I felt emotionally numb	13.1% (14)	30.8% (33)	29.9% (32)	11.2% (12)	5.6% (6)	9.3% (10)
	I felt discouraged about the future	20.6% (22)	25.2% (27)	30.8% (33)	11.2% (12)	1.9% (2)	10.3% (11)
	I had little interest in being around others	22.4% (24)	32.7% (35)	27.1% (29)	7.5% (8)	0.9% (1)	9.3% (10)
	I was less active than usual	23.4% (25)	30.8% (33)	25.2% (27)	6.5% (7)	4.7% (5)	9.3% (10)
	I noticed gaps in my memory about client sessions	29.9% (32)	20.6% (22)	23.4% (25)	11.2% (12)	3.7% (4)	11.2% (12)
	I wanted to avoid working with some clients	31.8% (34)	30.8% (33)	22.4% (24)	4.7% (5)	0.9% (1)	9.3% (10)
	I avoided people, places and things that reminded my of my work with clients	39.3% (42)	23.4% (25)	22.4% (24)	4.7% (5)	0.9% (1)	9.3% (10)
Intrusion	My heart started pounding when I thought about my work with clients	45.8% (49)	27.1% (29)	16.8% (18)	0.9% (1)	x	9.3% (10)
	It seemed as if I was reliving the trauma(s) experienced by my clients	52.3% (56)	28.0% (30)	9.3% (10)	x	x	10.3% (11)
	Reminders of my work with clients upsets me	19.6% (21)	38.3% (41)	27.1% (29)	5.6% (6)	x	9.3% (10)
	I had disturbing dreams about my work with clients	53.3% (57)	27.1% (29)	8.4% (9)	1.9% (2)	x	9.3% (10)
	I thought about my work with clients when I didn't intend to	12.1% (13)	24.3% (26)	35.5% (38)	14.0% (15)	4.7% (5)	9.3% (10)
Arousal	I had trouble concentrating	14.0% (15)	29.0% (31)	32.7% (35)	13.1% (14)	1.9% (2)	9.3% (10)
	I had trouble sleeping	18.7% (20)	28.0% (30)	30.8% (33)	10.3% (11)	2.8% (3)	9.3% (10)
	I felt jumpy	41.1% (44)	24.3% (26)	21.5% (23)	1.9% (2)	0.9% (1)	10.3% (11)

	I was easily annoyed	6.5% (7)	25.2% (27)	46.7% (50)	5.6% (6)	5.6% (6)	10.3% (11)
	I expected something bad to happen	29.0% (31)	31.8% (34)	18.7% (20)	9.3% (10)	1.9% (2)	9.3% (10)

World Assumptions Scale

		Percentage (N) (N=107)						
WAS Subscales	Question	Strongly disagree	Moderately disagree	Slightly disagree	Slightly agree	Moderately agree	Strongly agree	Missing
Meaningfulness	Misfortune is least likely to strike worthy, decent people	48.6% (52)	19.6% (21)	10.3% (11)	6.5% (7)	2.8% (3)	0.9% (1)	11.2% (12)
	The course of our lives is largely determined by chance	5.6% (6)	29.9% (32)	19.6% (21)	21.5% (23)	10.3% (11)	1.9% (2)	11.2% (12)
	Bad events are distributed to people at random	1.9% (2)	9.3% (10)	12.1% (13)	27.1% (29)	29.9% (32)	8.4% (9)	11.2% (12)
	People's misfortune result from mistakes they have made	6.5% (7)	23.4% (25)	16.8% (18)	30.8% (33)	11.2% (12)	x	11.2% (12)
	Generally, people get what they deserve in the world	15.0% (16)	28.0% (30)	24.3% (26)	15.9% (17)	5.6% (6)	x	11.2% (12)
	People will experience good fortune if they themselves are good	9.3% (10)	17.8% (19)	18.7% (20)	28.0% (30)	12.1% (13)	1.9% (2)	12.1% (13)
	Life is to full of uncertainties that are determined by chance	x	15.9% (17)	29.9% (32)	32.7% (35)	5.6% (6)	1.9% (2)	14.0% (15)
	By and large, good people get what they deserve in this world	7.5% (8)	15.0% (16)	25.2% (27)	25.2% (27)	14.0% (15)	x	13.1%

	If people took preventive actions, most misfortunes could be avoided	3.7% (4)	14.0% (15)	14.0% (15)	32.7% (35)	19.6% (21)	0.9% (1)	15.0% (16)
	Through our actions we can prevent bad things from happening to us	2.8% (3)	15.0% (16)	11.2% (12)	34.6% (37)	23.4% (25)	x	13.1% (14)
	In general, life is mostly a gamble	7.5% (8)	22.4% (24)	27.1% (29)	17.8% (19)	10.3% (11)	0.9% (1)	14.0% (15)
	When bad things happen, it is typically because people have not taken the necessary actions to protect themselves	10.3% (11)	20.6% (22)	21.5% (23)	29.0% (31)	3.7% (4)	x	15.0% (16)
Benevolence	People are naturally unfriendly and unkind	47.7% (51)	24.3% (26)	12.1% (13)	3.7% (4)	0.9% (1)	x	11.2% (12)
	Human nature is basically good	1.9% (2)	x	6.5% (7)	21.5% (23)	41.4% (44)	17.8% (19)	11.2% (12)
	The good things that happen in the world far outnumber the bad	3.7% (4)	6.5% (7)	8.4% (9)	16.8% (18)	31.8% (34)	21.5% (23)	11.2% (12)
	There is more good than evil in the world	2.8% (3)	3.7% (4)	7.5% (8)	21.5% (23)	31.8% (34)	21.5% (23)	11.2% (12)
	People don't really care what happens to the next person	14.0% (15)	43.9% (47)	20.6% (22)	7.5% (8)	2.8% (3)	x	11.2% (12)
	If you look	x	3.7% (4)	9.3%	25.2%	27.1% (29)	20.6%	14.0%

71

	closely enough, you will see the world is full of goodness			(10)	(27)		(22)	(15)
	People are basically kind and helpful	x	1.9% (2)	7.5% (8)	22.4% (24)	34.6% (37)	19.6% (21)	14.0% (15)
	This world is a good place	0.9% (1)	3.7% (4)	6.5% (7)	20.6% (22)	38.3% (41)	15.9% (17)	14.0% (15)
Self-worth	I often think I am no good at all	48.6% (52)	26.2% (28)	1.9% (2)	8.4% (9)	1.9% (2)	1.9% (2)	11.2% (12)
	When I think about it, I consider myself very lucky	1.9% (2)	9.3% (10)	10.3% (11)	21.5% (23)	24.3% (26)	18.7% (20)	14.0% (15)
	I am basically a lucky person	6.5% (7)	9.3% (10)	19.6% (21)	22.4% (24)	22.4% (24)	8.4% (9)	11.2% (12)
	I almost always make an effort to prevent bad things from happening to me	0.9% (1)	0.9% (1)	4.7% (5)	20.6% (22)	37.4% (40)	22.4% (24)	13.1% (14)
	I have a low opinion of myself	37.4% (40)	26.2% (28)	13.1% (14)	7.5% (8)	1.9% (2)	0.9% (1)	13.1% (14)
	Looking at my life, I realize that chance events have worked out well for me	1.9% (2)	5.6% (6)	2.8% (3)	41.1% (44)	30.8% (33)	3.7% (4)	14.0% (15)
	I take the actions necessary to protect myself against misfortune	x	0.9% (1)	3.7% (4)	37.4% (40)	34.6% (37)	9.3% (10)	14.0% (15)
	I usually behave so as to bring about the greatest good for me	0.9% (1)	1.9% (2)	5.6% (6)	21.5% (23)	41.1% (44)	15.0% (16)	14.0% (15)
	I am very satisfied with the kind of person I am	x	2.8% (3)	0.9% (1)	11.2% (12)	50.5% (54)	19.6% (21)	15.0% (16)

	I have reasons to be ashamed of my personal character	48.6% (52)	26.2% (28)	2.8% (3)	6.5% (7)	0.9% (1)	0.9% (1)	14.0% (15)
	I am luckier than most people	4.7% (5)	7.5% (8)	15.9% (17)	33.6% (36)	15.9% (17)	9.3% (10)	13.1% (14)