

A Mixed Methods Study of the Impact of Providing Therapy to Traumatized  
Clients:  
Vicarious Trauma, Compassion Fatigue, and Vicarious Posttraumatic Growth in  
Mental Health Therapists

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## **Dedication**

This thesis is dedicated to my two children, Stella and Miles. Stella, I am so glad that we get to spend more time together, baking, taking walks, and painting nails. Miles, it is so fun playing peek-a-boo and reading stories. Thank you both for being patient during this time.

## Abstract

The purpose of this research was to examine the impact of trauma therapy work on mental health professionals who work with traumatized clients. ANOVA's were used to compare participants by experience and exposure level on measures of vicarious trauma (VT) compassion satisfaction (CS), and vicarious posttraumatic growth (VPTG).

MANOVA was used to compare participants by experience and exposure level on the two components of compassion fatigue (CF), burnout (BO) and secondary traumatic stress (STS). A hierarchical regression equation was used to explore whether STS and VT predicted VPTG. In addition, a qualitative component examined negative and positive effects of the therapy work. The results of the study were: There were no differences on mental health professionals' scores of VT, STS and BO, or CS based on differences of mental health professionals' exposure to traumatized clients. There were significant differences between high and low exposure caseload groups on scores of VPTG; participants in the high exposure group had significantly higher scores of VPTG than participants in the low exposure group. There were no differences on amount of VT, STS and BO, or CS and VPTG as a result of differences among mental health professionals' experience level. A hierarchical regression analysis showed that the predictor variables of STS and VT did not increase the percentage of variance accounted for by the dependent variable, VPTG, which was already accounted for by the covariate variable of exposure. Main qualitative themes included: experiencing symptoms of VT, and the components of CF (STS and BO), as well as experiencing aspects of VR, VPTG, and CS.

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**A Mixed Methods Study of the Impact of Providing Therapy to Traumatized  
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Growth in Mental Health Therapists**

Therapists who work with trauma survivors may be exposed to large amounts of traumatic material, so it is important to consider the impact for the therapists who work with this population. Possible detrimental side effects of the continual exposure of therapists to clients' traumatic material are the development of vicarious trauma (Pearlman & Mac Ian, 1995; Schauben & Frazier, 1995), and compassion fatigue (Figley, 2002; Stamm, 2010). Compassion fatigue includes two components: secondary traumatic stress and burnout (Stamm, 2010). Vicarious trauma and secondary traumatic stress are thought to arise as a result of mental health workers bearing witness to their client's traumatic stories, but they vary in effect on clinicians (Baird & Kracen, 2006; Craig & Sprang, 2010; Jenkins & Baird, 2002). In contrast, burnout is the result of an overwhelming work environment and does not require interaction with a traumatized population (Stamm, 2010).

While much research has focused on the negative consequences of working with a traumatized client population (Baird & Kracen, 2006; Craig & Sprang, 2010; Figley, 2002; Jenkins & Baird, 2002; Killian, 2008; Pearlman & Mac Ian, 1995), few have considered the possibility of positive impacts on the therapist as a result of working with these clients. Recent studies have also begun to examine the impact of vicarious posttraumatic growth (Arnold, Calhoun, Tedeschi, & Cann, 2005; Barrington & Shakespeare-Finch, 2013; Ben-Porat & Itzhaky, 2009; Brockhouse, Msetfi, Cohen, &



Joseph, 2011; Lambert & Lawson, 2011; Lev Wiesel, Goldblatt, Eiskovits & Admi, 2009) and vicarious resilience (Engstrom, Hernandez & Gangsei, 2008; Hernandez, Gangsei, & Engstrom, 2007). Like vicarious trauma and compassion fatigue, vicarious resilience and vicarious posttraumatic growth are thought to occur as a result of an empathic connection with a client (Arnold et al., 2005; Engstrom et al., 2008; Figley, 1995; Hernandez et al., 2007; McCann & Pearlman, 1990; Pearlman & Saakvitne, 1995a; Pearlman & Saakvitne, 1995b). More recent research has begun to examine the relationship that vicarious trauma and secondary traumatic stress have to the transmission of vicarious posttraumatic growth to mental health professionals (Barrington & Shakespeare-Finch, 2013; Cohen & Collens, 2012; Linley & Joseph, 2007; O'Sullivan & Wheelan, 2011). Finally, compassion satisfaction is another important variable related to the potential benefits of therapy work for the therapist (Stamm, 2010). However, it differs from vicarious posttraumatic growth and vicarious resilience because it does not require therapist interaction with a traumatized population.

### **Purpose of the Study**

The purpose of this research is to examine the impact of trauma therapy work on therapists who work with trauma victims: clients in therapy with a presenting problem related to a traumatic experience, such as sexual assault, domestic violence, violent crime, or experiences during war or natural disaster. This study will examine both positive and negative impacts of therapy work, including vicarious trauma, the two components of compassion fatigue (burnout and secondary traumatic stress), vicarious resilience, vicarious posttraumatic growth, and compassion satisfaction. This study will

also examine the relationship of vicarious trauma and secondary traumatic stress to vicarious posttraumatic growth.

Firstly, these constructs will be examined through the lens of caseload: 70% and above (high exposure group), between 40% and 70% (moderate exposure group) and below 40% (low exposure group). These groups will be compared on measures of vicarious trauma, compassion fatigue (burnout and secondary traumatic stress) and posttraumatic growth. The percentages of client caseload were selected because Cunningham (2003) found that vicarious trauma was only detected in her sample when trauma therapists had a caseload of trauma clients of 40% or more. The moderate and high groups would illuminate possible distinctions between clinicians who treat a moderate versus a higher level of trauma-affected clients.

Secondly, therapist experience level will be examined with regard to vicarious trauma, the two variables of compassion fatigue (secondary traumatic stress and burnout), and the variables of posttraumatic growth and compassion satisfaction. Therapists will be grouped into senior clinicians (20 or more years of experience), mid-career clinicians (more than 5 years to fewer than 20 years of experience) and novice clinicians (5 or fewer years of professional experience).

Less commonly studied side effects of working with a traumatized population are vicarious posttraumatic growth (Arnold et al., 2005; Barrington & Shakespeare-Finch, 2013; Ben-Porat & Itzhaky, 2009; Brockhouse et al., 2011; Lambert & Lawson, 2011; Lev-Wiesel et al., 2009) and vicarious resilience (Engstrom et al., 2008; Hernandez et al., 2007). While the posttraumatic growth construct (Tedeschi & Calhoun, 1996, 2004) has

generally been applied to those who experience trauma firsthand, only a few studies (Arnold et al., 2005; Barrington & Shakespeare-Finch, 2013; Ben-Porat & Itzhaky, 2009; Brockhouse et al., 2011; Lev-Wiesel et al., 2009; Lambert & Lawson, 2011) have examined whether posttraumatic growth can occur vicariously to therapists who work with victims of trauma. In addition, vicarious resilience has only been explored through a few qualitative studies (Engstrom et al., 2008; Hernandez et al., 2007). Since vicarious posttraumatic growth and the closely related construct of vicarious resilience are new areas of research, the qualitative section of this study will examine additional aspects of the positive impact of therapy work on therapists. Using quantitative as well as qualitative methods, this research hopes to clarify the potential for both positive and negative consequences for therapists who conduct therapy with traumatized populations.

Recent studies have examined the relationship between vicarious trauma and posttraumatic growth (Barrington & Shakespeare-Finch, 2013) and secondary traumatic stress and posttraumatic growth (Linley & Joseph, 2007; O'Sullivan & Wheelan, 2011). Posttraumatic growth is thought to occur as a result of a disruption in world view, and conversely vicarious posttraumatic growth is thought to occur as a result of the clinician's worldview being disrupted as the result of indirect exposure to clients' trauma (Calhoun & Tedeschi, 2012). Therefore, it seems likely that vicarious posttraumatic growth should be related to vicarious trauma and secondary traumatic stress as well as the level of exposure to clients' trauma. This research will further examine the relationship between vicarious posttraumatic growth, therapists' exposure to trauma victims, vicarious trauma, and secondary traumatic stress.

## Research Questions

**Several research questions provide a framework for this study. They are:**

1. Are there differences between groups of therapists who have high (70% and more), medium (between 40% and 70%) and low (under 40%) caseloads of trauma victims on reports of amount of vicarious trauma?
2. Are there differences between groups of therapists who have high (70% and more), medium (between 40% and 70%) and low (under 40%) caseloads of trauma victims on reports of amount of compassion fatigue (secondary traumatic stress and burnout)?
3. Are there differences between groups of therapists who have high (70% and more), medium (between 40% and 70%) and low (under 40%) caseloads of trauma victims on reports of amount of compassion satisfaction?
4. Are there differences between groups of therapists who have high (70% and more), medium (between 40% and 70%) and low (under 40%) caseloads of trauma victims on reports of amount of vicarious post-traumatic growth?
5. Are there differences among therapists who are senior in their careers (20 or more years of experience), in the middle of their careers (more than 5 to fewer than 20 years of experience) or early in their careers (5 or fewer years of experience) on reports of amount of vicarious trauma?
6. Are there differences among therapists who are senior in their careers (20 or more years of experience), in the middle of their careers (more than 5 to fewer than 20 years of experience) or early in their careers (5 or fewer years of experience) on reports

of amount of compassion fatigue (secondary traumatic stress and burnout)?

7. Are there differences among therapists who are senior in their careers (20 or more years of experience), in the middle of their careers (more than 5 to fewer than 20 years of experience) or early in their careers (5 or fewer years of experience) on reports of amount of compassion satisfaction?

8. Are there differences among therapists who are senior in their careers (20 or more years of experience), in the middle of their careers (more than 5 to fewer than 20 years of experience) or early in their careers (5 or fewer years of experience) on reports of amount of vicarious posttraumatic growth?

9. Do vicarious trauma and secondary traumatic stress predict vicarious posttraumatic growth in mental health professionals above and beyond the effects of exposure to trauma victim clients?

10. What negative changes do mental health professionals report that are attributable to their work with trauma victims?

11. What positive changes do mental health professionals report that are attributable to their work with trauma victims?

### **Definition of Terms**

**The following major terms in this study are defined below.**

**Compassion Fatigue (CF):** Compassion fatigue is an expansion upon Figley's (1995) original construct of secondary traumatic stress, a reaction that occurs as a result of vicarious exposure to trauma through a close personal relationship with a trauma victim. In this study, compassion fatigue is defined as negative aspects of work in two

components: Burnout (BO) and Secondary Traumatic Stress (STS). BO is related to an overwhelming and demanding work environment. STS is traumatic stress that can be transmitted secondarily through work exposure (Larsen & Stamm, 2008; Stamm, 2010). The symptoms of secondary traumatic stress are nearly identical to PTSD, except that exposure to a traumatizing event occurs to a significant other such as the victim's friend, relative, or therapist, rather than to the person who experienced the trauma directly (Figley, 1995).

**Compassion Satisfaction (CS):** CS is defined as the pleasure one gets from the work one does. For example, a person's work may make her happy, increase her self-efficacy, or make her feel as though she is contributing to the greater good of her community. It is considered one way to measure the positive aspects of a helping relationship (Larsen & Stamm, 2008; Stamm, 2010). It relates to an emotionally engaged and compassionate helping relationship in which the provider derives satisfaction from the outcome (Larsen & Stamm, 2008).

**Posttraumatic Growth (PTG):** PTG is defined as improvements in personal development that occur as a result of the experience of trauma and that have surpassed the levels that were present in the person prior to the traumatic event (Tedeschi & Calhoun, 2004). Traumatic events disrupt cognitive schemas that can lead to a re-evaluation of previously held assumptions and a subsequent rebuilding of a worldview, which then leads to growth in the individual. Distress and growth are often simultaneously present during this process (Calhoun & Tedeschi, 1998). Improvements in personal development can occur in multiple domains such as new opportunities,

relationships, spirituality, personal resilience, and a renewed appreciation for life (Calhoun & Tedeschi, 1998; Tedeschi & Calhoun, 2004).

**Post-Traumatic Stress Disorder (PTSD):** The Diagnostic and Statistical Manual of Mental Disorders edition IV Text Revision (*DSM IV-TR*; American Psychiatric Association, 2000) defines PTSD as an anxiety disorder brought on by a traumatic event that was perceived as life-threatening. Symptoms include flashbacks of the traumatic event, recurrent distressing dreams (nightmares), intrusive thoughts and memories, avoidance of memories of the trauma, hyper-arousal to everyday stimuli, intense emotional reactions, and difficulty sleeping. The Diagnostic and Statistical Manual of Mental Disorders (*DSM V*; American Psychiatric Association, 2013) defines PTSD in a very similar way, except that in the DSM V, PTSD is a trauma- or stressor-related disorder, and there is a clearer link between conditions of the etiology of the disorder. In this study, I used the *DSM IV-TR* definition and criteria because of the more extensive body of research undergirding symptomatic expression as identified in the *DSM IV-TR*.

**Vicarious Posttraumatic Growth (VPTG):** VPTG is defined by Calhoun and Tedeschi (2012) as a process of a disruption to a worldview that occurs through hearing about clients' trauma. Growth may be seen in the following domains: learning that humans have the capacity to persevere in very difficult circumstances, confrontation of existential issues and spirituality, increased appreciation for their own lives, heightened focus on interpersonal relationships, and a deepened compassion for others.

**Vicarious Resilience (VR):** VR is defined as a unique process that occurs as a result of a therapist's close contact with a trauma survivor's resiliency. Resilience is

defined as an individual's competent response or positive adaption in the context of significant challenges or traumas (Masten & Coatsworth, 1998) and the ability of adults to respond to a disruptive or traumatic event by maintaining healthy levels of physical and psychological functioning with only minor and transient effects to normal functioning (Bonnano, 2004). Like vicarious trauma and compassion fatigue, it also occurs as the result of an empathic connection. Components include recognizing the human capacity to heal from trauma, putting one's problems into perspective, incorporating spirituality into treatment, developing hope and commitment, and tolerance to frustration (Hernandez et al., 2007).

**Vicarious Trauma (VT):** Vicarious trauma is thought to occur as a result of a therapist's empathic engagement with trauma victim clients (McCann & Pearlman, 1990; Pearlman & Saakvitne, 1995a; Pearlman & Saakvitne, 1995b). In this study, VT is defined as changes to caretakers' inner experiences that occur as a result of empathic engagement with clients' traumatic material that involves graphic accounts of human cruelty. These changes may manifest as specific cognitive disruptions in the areas of dependency, trust, safety, power, esteem, and intimacy that occur as a result of a combination of the traumatic experiences and the individual's personality, developmental history, and vulnerabilities (McCann & Pearlman, 1990, Pearlman & Saakvitne, 1995a, 1995b).

**Secondary Traumatic Stress (STS):** STS is defined as a reaction that occurs as a result of vicarious exposure to trauma through a close personal relationship with a trauma victim. The symptoms of STS are nearly identical to PTSD, except that exposure to the



traumatizing event occurs to a significant other such as a friend, relative, or therapist, rather than to the person who experienced the trauma firsthand (Figley, 1995). It is one of the components of compassion fatigue (Stamm, 2010).

**Therapist:** Licensed or license-eligible mental health professional.

**Trauma Victim Clients** (also referred to as traumatized clients): Clients in therapy with a presenting problem related to a traumatic experience, such as clients receiving counseling for sexual assault, domestic violence, violent crime, or experiences during war or natural disaster and who currently exhibit Post-Traumatic Stress Disorder symptoms such as flashbacks of the traumatic event, nightmares, intrusive thoughts, avoidance of memories of the trauma, hyper-arousal to everyday stimuli, intense emotional reactions, and difficulty sleeping (Craig & Sprang, 2010).

### **Limitations**

The sample for this study was limited to self-reports of mental health professionals in the state of Oregon. Therefore, it is unclear how well the results of this study may generalize to the population of mental health professionals in other states and nationally. Using self-report data may introduce responder bias into the data. This study utilized a cross-sectional design, preventing knowledge of causality of the examined variables. Additionally, this study used the Posttraumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996) in order to measure VPTG; PTGI was originally designed to measure PTG in traumatized populations and not populations who experience secondary trauma.

### **Organization of the Study**

Chapter 1 has presented the introduction, purpose, research questions, definition of terms, and limitations of the study. Chapter 2 presents a review of the literature on the relationships between vicarious trauma and compassion fatigue and mental health professionals' experience level and exposure variables. In addition, chapter 2 provides a critical review of the literature on vicarious resilience and vicarious posttraumatic growth. Chapter 2 also states the hypotheses and qualitative research questions used to guide the study. Chapter 3 reports on the methodology and procedures used to gather data for the study. In addition, measures used and statistical analyses used are reported. Chapter 4 reports the results of the analyses. Chapter 5 is a summary of the study, findings, discussion of the results, conclusions, limitations, and future directions for research.

## **Chapter II**

### **Review of the Literature**

The following section provides a background regarding the origins of the vicarious trauma and compassion fatigue constructs. The relationships among therapist exposure to traumatized clients, vicarious trauma, and the two components of compassion fatigue (secondary traumatic stress and burnout) will be reviewed. Additionally, the relationships among therapist experience level and vicarious trauma, secondary traumatic stress, and burnout will be reviewed. Finally, this chapter will conclude with a critical review of the literature about vicarious resilience and vicarious posttraumatic growth for mental health professionals.

#### **Vicarious Trauma and Constructivist Self-Development Theory**

Vicarious trauma (VT) as conceptualized by McCann and Pearlman (1990) and expanded upon by Pearlman and Saakvitne (1995a, 1995b) is defined as changes to therapists' inner experience that occur as a result of empathic engagement with clients' traumatic material that involves graphic accounts of human cruelty. These changes manifest as specific cognitive disruptions in the areas of dependency, trust, safety, power, esteem, and intimacy that occur as a result of a combination of the traumatic experiences and the individual's personality, developmental history, and vulnerabilities (McCann & Pearlman, 1990; Pearlman & Saakvitne, 1995a, 1995b).

The construct of VT is related to Constructivist Self-Development Theory (CSDT; Pearlman & Saakvitne, 1995a, 1995b). CSDT is an integration of psychoanalytic and cognitive theories that have been utilized to elucidate the effects of trauma on clients

who have been victimized (Pearlman & Saakvitne, 1995a). CSDT identifies five psychological need areas most likely to be impacted by trauma: safety, trust, dependency, esteem, intimacy, and control. According to the theory, individuals hold cognitive schemas about these needs and expectations with regard to themselves and to others. CSDT also posits that the effect of trauma on the individual and the specific cognitive disruptions that occur are a unique product of the traumatic experiences and the individual's personality and history (McCann & Pearlman, 1990; Pearlman & Saakvitne, 1995b).

Pearlman and Saakvitne (1995a, 1995b) elucidated further how each of the five needs, in both the "self" and "other" areas, might be impacted by trauma. For example, a person with disrupted schema in the area of self-safety may lose the ability to feel safe, whereas those with disrupted schema in other-safety may continuously fear that others around them will not be safe. Examples of disruptions to the trust schema include: those with problems of self-trust may not be able to trust their own perceptions and judgments, and those with problems of other-trust may lose the ability to count on or depend on others' abilities to meet their physical, psychological, or emotional needs. Examples of disruptions to the esteem schema include: disruptions to self-esteem might challenge a person's ability to hold the self in positive regard or feel valued by others, while those with disruptions to other-esteem might not be able to value others. Examples of disruptions in intimacy include: those with disruptions in self-intimacy could be unable to care for or treat themselves well, and disruptions in other-intimacy could lead to difficulty in forming relationships. Finally, examples of disruptions in control include:

disruptions in self-control could lead to the need to feel in control of one's thoughts, feelings and behaviors, and disruptions in other-control could cause a strong need to control others or a sense of helplessness in interpersonal relationships (Pearlman & Saakvitne, 1995a). Like clients impacted by trauma, therapists affected by vicarious trauma will also experience disruptions in schemas that are central to their personal histories (McCann & Pearlman, 1990; Pearlman & Saakvitne, 1995a, 1995b).

In order to more critically address the literature on vicarious trauma, it is essential to understand how vicarious trauma is measured. The majority of studies on vicarious trauma measure cognitive disruptions through qualitative methodology or a version of the Trauma Attachment and Belief Scale (TABS; Pearlman, 2003). This scale was developed by one of the originators of the vicarious trauma construct, and it addresses possible cognitive disruptions in both the self and other category: self-safety, self-esteem, self-intimacy, self-control, self-trust, other-safety other-esteem, other-intimacy, other-control, and other-trust. There are ten subscales and each measures one of the ten possible cognitive disruptions. In addition to the ten subscales, the TABS also includes a total score for vicarious trauma. There are three earlier versions of the scale: Traumatic Stress Institute Belief Scale Revision M (TSI-BSM; Pearlman, 1996), the Traumatic Stress Institute Belief Scale Revision L (TSI-BSL; Pearlman 1996), and the earliest version of the scale, the Traumatic Stress Institute Belief Scale (TSI-BS; Pearlman 1993). Pearlman (2003) revised the earlier scales due to validity concerns.

### **Secondary Traumatic Stress (Secondary Trauma)**

Figley (1995, 1999, 2002) describes a competing construct to vicarious trauma

that also explains the potential impact of exposure of therapists to clients' traumatic material, secondary traumatic stress (STS). STS is defined as a reaction that occurs as a result of vicarious exposure to trauma through a close personal relationship with a trauma victim. Figley (1999) conceptualized STS as a natural consequence that originated from knowledge about a traumatizing event that occurred to a significant other and helping or wanting to help this person. The symptoms of STS are nearly identical to post-traumatic stress disorder (PTSD), except that exposure to a traumatizing event occurs to a significant other such as a friend, relative, or therapist, rather than to the person who experienced the trauma first hand (Figley, 1995, 1999). Figley later re-named STS "compassion fatigue" (1999) because he believed the transmission of secondary traumatic stress occurred as a result of an empathic connection with a traumatized person. Therapists who work with many trauma victims are considered to be at particular risk for STS because they regularly use empathy in their therapy work with traumatized clients (Figley, 1995, 1999).

### **Secondary Traumatic Stress (STS) versus Vicarious Trauma (VT)**

Both (VT) and STS are thought to arise as a result of mental health workers' empathic connection to clients' traumatic suffering (Figley, 1995; Pearlman & Saakvitne, 1995b), but these constructs vary from each other in theoretical underpinning. While therapists who experience VT may experience PTSD symptoms such as nightmares, intrusive thoughts, avoidance of memories of the trauma, hyper-arousal to everyday stimuli, intense emotional reactions, and difficulty sleeping, symptoms are regarded as a direct result of long-lasting cognitive perceptual changes and disruptions of how a

therapist views self, others, and community (McCann & Pearlman 1990; Pearlman & Mac Ian, 1995; Pearlman & Saakvitne, 1995b). In contrast, STS places more emphasis on the vicarious symptoms of PTSD (Figley, 1995, 2002).

### **Compassion Fatigue**

Compassion fatigue (CF) was originally conceptualized as a more positive synonym for secondary traumatic stress (Figley, 1995). It was later expanded to include both secondary traumatic stress and burnout (Adams, Boscarino, & Figley, 2006; Larsen & Stamm, 2008; Stamm, 2010). Burnout can occur as the result of being overloaded by work demands, a lack of control in the work environment, insufficient rewards, breakdown in community, absence of fairness, and conflicting values (Maslach, 1997). Emotional exhaustion caused by burnout can lead to cynicism, depersonalization and a sense of inefficacy (Maslach, Schaufeli, & Leiter, 2001; Stamm, 2010). STS can be caused by trauma transmitted through primary experiences with trauma through the work environment as well as through secondary trauma, or secondary exposure to clients' traumatic experiences. Secondary trauma can lead to symptoms such as sleep difficulties, intrusive images, or avoiding things that remind oneself of the trauma (Larsen & Stamm, 2008; Stamm, 2010).

Compassion Fatigue is most frequently measured using two different instruments: the Compassion Fatigue Self Test for Helpers (CFST; Figley, 1995), and the Professional Quality of Life Scale (ProQOL; Stamm, 2010). Both of these instruments contain subscales that measure the two components of compassion fatigue, secondary traumatic stress and burnout, as well as a subscale that measures compassion satisfaction. The

ProQOL was a later revision of the CFST, and there are three additional revisions of the ProQOL. Stamm (2010) recommends the use of the latest measure, ProQOL-V, due to improved psychometric properties.

### **Therapist Exposure to Client Trauma and Vicarious Trauma**

One way to consider the potential impact of VT on therapists who work with trauma clients has been through the examination of therapist exposure to the traumatized client population. Currently the literature appears to be mixed on the potential relationship between higher exposure to clients' trauma and VT. A few studies found a negative correlation between exposure variables and VT (Baird & Jenkins 2003; Pearlman & Mac Ian, 1995), while others found no correlation between exposure variables and vicarious trauma (Brady et al., 1999; Bober & Regehr, 2006). A few others found that an increased caseload of traumatized clients was linked to increased vicarious trauma (Cunningham, 2003; Schauben & Frazier, 1995).

It appears that education may be a potential confounding variable in research that found a negative correlation between exposure variables and VT (Baird & Jenkins, 2003; Pearlman & Mac Ian, 1995), as samples for these studies included therapist participants with only a high school or college degree, therapist participants with graduate level education, graduate students in training for mental health, and licensed mental health professionals. For example, Pearlman and Mac Ian conducted a study on trauma therapists with different levels of education. They reported their data collection procedure for their sample as follows: surveys were distributed to therapists at an all-day trauma seminar as well as to graduate students in a New England clinical training program. The



overall return rate was 32%. The earliest version of the Trauma Attachment and Belief Scale, the Traumatic Stress Institute Belief Scale (TSI-BS; Pearlman, 1993) was used to assess VT in the psychological need areas of safety, trust, intimacy, and esteem. For the entire sample ( $n = 136$ ), self-trust scores correlated negatively ( $r = -.22$ ) with percentage of survivors in caseload, indicating that the greater number of trauma victims on caseload, the fewer disruptions in self-trust schemas. The mix of populations (licensed mental health professionals attending a trauma conference and mental health graduate students in training) might partially explain the negative correlation between percentage of traumatized clients on caseload and the cognitive disruption of self-trust. It is likely that mental health professionals attending a conference on trauma would have both increased training and much higher exposure to trauma victims than graduate students who might be in a variety of diverse placements.

In their study of therapists who worked with both sexual abuse and domestic violence victims, Baird and Jenkins (2003) also found a significant negative correlation between number of clients and vicarious trauma as counselors experienced less VT with increased number of trauma clients. The measure used to assess VT was the Traumatic Stress Institute Belief Scale Revision L (TSI-BSL; Pearlman, 1996). Traumatized client caseload, including sexual violence and domestic violence clients, was negatively correlated with lower TSI-BSL scores [ $r(94) = -.21, p < .05$ ]. However, paid staff and volunteer staff differed on variables including education, paid counseling experience, and levels of client exposure in hours and number of clients per week. In addition, the sample included education levels from high school to doctoral levels. There was a negative

correlation between education and TSI-BSL total scores, [ $r(99) = -.33$ ,  $p < .002$ ], and there was a significant negative correlation between number of clients and TSI-BSL total score [ $r(94) = -.21$ ,  $p < .05$ ]. In a follow up multiple regression analysis, education level was the strongest predictor of TSI-BSL scores. Therefore, differences in education among the staff participants may be confounding the relationship between higher caseload and lower VT scores.

Other research found no correlation between exposure variables and VT (Brady et al., 1999; Bober & Regehr, 2006). Brady et al. broadened the concept of exposure variables when they explored caseload over a career as well as therapists' exposure to graphic details of sexual abuse in their study of sexual abuse counselors. They reported their data collection procedure as follows: a national random sample of over 1000 female psychotherapists was surveyed; 505 were from the American Professional Society on the Abuse of Women, and 505 were from the American Psychological Association (APA) who reported a specialty in psychotherapy. The response rate was 47%, and the samples were combined for the analysis. While 76% of the sample reported having a doctoral degree in psychology (Ph.D and PsyD), other degrees included Master's degree (18%), a doctoral degree in education (3%) and other (3%). The Traumatic Stress Institute Belief Scale Revision L (TSI-BSL; Pearlman, 1996) was used to measure VT. They found no significant differences on high and low exposure groups of therapists, indicating that exposure of therapists to sexual abuse clients was not related to vicarious trauma. It would have been beneficial for them to assess for typical presenting problems among all clients, especially since one portion of the sample specialized in the abuse of women

while the other portion appeared to come from a more general pool of therapists. As such, it is possible that other types of traumatized clients present in the sample might not have been detected and could have confounded the results.

Bober and Regehr (2006) studied a diverse sample that consisted of trauma caregivers who worked with victims of violence. Their sample consisted of 47.7% who self-identified as social workers, 15.5% as nurses, 13.6% in psychology, 10% as physicians, and 13% as a mixture of disciplines such as child and youth worker, occupational therapist, and chaplain. The TSI-BSL (Pearlman, 1996) was used to measure VT. They found that hours per week spent in counseling traumatized clients were not associated with higher rates of VT. However, it is unclear how the sample make-up in terms of profession influenced the results. It is likely that medical practitioners such as nurses and doctors have a different experience of trauma counseling compared to mental health professionals, and it is also possible that medical professionals and mental health professionals might regularly have higher or lower caseload levels of traumatized clients. Furthermore, there were likely differences in education and training among the groups.

Other research found a link between increased exposure to client trauma and VT for mental health professionals (Cunningham, 2003; Schauben & Frazier, 1995). Schauben and Frazier examined VT in a more homogeneous population of trauma therapists, female sexual violence counselors and female psychologists who work with sexual trauma victims. The two groups differed in that sexual violence counselors had significantly higher percentages of victims in their caseloads than psychologists [ $t$

(101.80) = -2.46,  $p < .02$ ], and sexual violence counselors had less formal education: 50% had bachelor's degrees versus 66% with master's degrees [ $X^2(2) = 65.95, p < .001$ ]. The earliest version of the Traumatic Stress Institute Belief Scale (TSI-BS; Pearlman, 1993) was used to assess VT. Researchers found that percentage of sexual abuse victims on caseload was positively correlated with VT, and specifically with cognitive disruptions related to safety ( $r = .16, p < .05$ ). Participants were also asked open-ended questions (e.g. list the 5 most difficult aspects of working with sexual violence survivors). Qualitative data was coded by both authors who developed a 7-category coding scheme for the difficult aspects. Next, two doctoral level counseling psychology graduate students read each statement and placed it into the appropriate category for an inter-rater agreement of 78%. The two raters then met to establish consensus regarding placing the remaining items into categories. For example, one of the reported difficult aspects of working with sexual violence clients was changes in the therapists' beliefs in the world (e.g. becoming more distrustful of men, loss of innocence). The qualitative finding of cognitive changes in worldview appears to support the quantitative finding of increased VT for therapists with a larger trauma caseload. However, putting sexual violence counselors and psychologists with general caseloads in the same data pool for analysis is a concern. While 118 of the completed survey packets came from psychologists, only 30 of the questionnaires came from sexual violence counselors. Sexual violence counselors were reported to have a much higher caseload of sexual trauma victims than more generalist psychologists. They also had less education. Since this study only assessed for sexual trauma victims in the caseload of therapists, it is possible that the psychologists

may have worked with trauma victims who had not experienced sexual trauma but were traumatized in other ways. This lack of assessment for other types of traumatized clients in the caseloads of the therapists may have biased the results by introducing uncontrolled-for error variance.

Cunningham (2003) not only looked at exposure variables regarding VT but also examined the differences in VT between social workers who work with sexual trauma victims and social workers who work with cancer patients. Participants were selected by surveying all of the members listed as master's level social workers in the Society for Traumatic Stress directory who resided in the United States ( $n = 151$ ). Another sample of master's level social workers was randomly selected from the Association of Oncology Social Workers ( $n = 153$ ). The researchers reported a total of 182 participants from both groups and a response rate of 59.9%. Participants were asked to estimate the percentage and number of clients in their caseload in the past 6 months who had the presenting problem of cancer or sexual abuse. There was a negative correlation between therapists who reported working with cancer patients and counselors who reported working with sexual abuse clients ( $r = -.47$ ), indicating that the more counselors worked with cancer patients, the less likely they were to work with sexual abuse victims. The measure used to assess for VT was the Traumatic Stress Institute Belief Scale Revision L (TSI-BSL; Pearlman, 1996). Subscales of this measure were used to assess specific cognitive disruptions such as self- and other-safety, other-trust, and other-esteem related to VT. In clinician caseloads, it was found that there were no significant correlations between the percentage of clients who were sexually abused in clinicians' caseloads and the cognitive

disruptions of self-safety and other-safety, other-trust, and other-esteem. Next, the two groups of social workers were divided into groups based on their caseloads. Cunningham reported that group 1 had 40% or more of their caseloads with clients with the presenting concern of sexual abuse, group 2 had 40% or more of their caseloads devoted to clients with the presenting concern of cancer, and a third group had 40% or fewer clients with the presenting concerns of sexual abuse or cancer. An ANOVA was calculated and clinicians who worked primarily with sexual abuse had significantly more VT, specifically cognitive disruptions in self-safety [ $F(2,160) = 3.24, p = .04$ ] and other-esteem [ $F(2,160) = 3.44, p = .03$ ], compared to those who worked with clients with cancer. Post-hoc  $t$  tests were conducted. Clinicians who worked primarily with sexual abuse victims reported more VT and significant cognitive disruptions in other-trust [ $t(48) = 1.98, p = .03$ ], other-safety [ $t(62) = 2.22, p = .02$ ], and other-esteem [ $t(45) = 2.20, p = .01$ ]. A correlation analysis found a negative association between working with cancer patients and cognitive disruptions in self-safety ( $r = -.13, p = .04$ ) and other-safety ( $r = -.14, p = .03$ ). Sexual abuse counselors also reported more disruptions on the subscales of other-trust ( $t = 1.98, df = 48, p = .03$ ) and other-esteem ( $t = 2.27, df = 45, p = .01$ ) than cancer patient counselors. Therapists who worked primarily with sexual abuse victims reported more significant disruptions in other-trust, other-safety, and other-esteem than therapists who worked with cancer patients. This research is important because it not only indicated a difference in VT based on presenting problem (therapists who work with cancer patients versus therapists who work with sexual abuse victims), but it also indicated a possible minimum threshold of caseload (40% or higher of traumatized

clients) before vicarious trauma could be detected. Additionally, mental health professionals who worked with sexual abuse survivors experienced more VT than mental health professionals who worked with cancer patients.

There appears to be mixed evidence for the impact of exposure variables on VT. This is supported by a research synthesis (Baird & Kracen, 2006) that examined hypotheses regarding therapist exposure variables (operationalized in the studies as hours with trauma clients, percentage of trauma victims on caseload and cumulative exposure to traumatized clients) as the independent variables and vicarious trauma as the dependent variable. In their review of studies on exposure variables and VT, Baird and Kracen reported some evidence that the amount of exposure of therapists to traumatized clients increases the risk for VT, but also some evidence that it does not.

In the research reviewed in this section (Baird & Jenkins, 2003; Bober & Regehr, 2006; Brady, 1999; Pearlman & Mac Ian, 1995; Schauben & Frazier, 1995), there was some concern regarding the mix of populations in the samples studied that related to education, training and types of mental health professionals. The diverse samples led to the potential confounding variables of education and training (Baird & Jenkins, 2003; Bober & Regehr, 2006; Pearlman & Mac Ian, 1995; Schauben & Frazier, 1995), such as the inclusion of high school graduates with doctoral level professionals as well as mental health trainees with licensed mental health professionals. Some (Brady, 1999; Schauben & Frazier, 1995) included different types of mental health professionals while assessing for only one type of trauma, such as the inclusion of therapist generalists with those who specialize in sexual abuse and only assessing for sexual trauma in the sample. Others

(Bober & Regehr, 2006) included different types of professionals, including health professionals such as nurses, who likely interact with trauma victims very differently. Future research should include more homogeneous samples of mental health professionals who have at least a graduate level of education. Additionally, future research should assess for typical presenting problems in order to determine how much exposure mental health professionals might have to all types of trauma.

### **Therapist Exposure to Client Trauma and Secondary Traumatic Stress**

There appears to be some evidence for the relationship between the amount of therapist exposure to trauma clients and higher secondary traumatic stress (STS) levels experienced by mental health professionals. Several studies reported positive correlations between exposure variables and STS (Craig & Sprang, 2010; Deighton, Gurriss, & Traue, 2007; Sprang, Clark & Whitt-Woosley, 2007; Mckim & Smith-Adcock, 2013). Additionally, in a research synthesis, Baird and Kracen (2006) found strong evidence that therapist exposure to traumatized client variables increased risk for STS in mental health professionals. In contrast, only a few studies found no correlation between exposure variables and STS (Baird & Jenkins, 2003; Killian, 2008).

Neither Baird and Jenkins (2003) nor Killian (2008) found any relationship between hours per week counseling victims of trauma and secondary traumatic stress (STS) experienced by therapists. Baird and Jenkins' sample was composed of domestic violence and sexual assault counselors with education that ranged from a high school diploma to a doctoral degree. The subscale of secondary traumatic stress from the Compassion Fatigue Self-Test for Psychotherapists (Figley, 1995) was used to measure



STS. As noted in the previous section on exposure variables and VT, since some of the participants in this study were volunteers and some were paid staff, it is possible that volunteers would be less likely to see as many clients per week as paid staff and would also have less education or training. Therefore, differences in education and training may be confounding the relationship between exposure variables and STS.

Killian's (2008) sample included 104 graduate degree level therapists who worked with child sexual abuse victims or adult victims of domestic violence and who were referred by Child Protective Services. Out of all of the therapists, 36 were Licensed Professional Counselors only, 25 were Licensed Professional Counselors and Licensed Marriage and Family Therapists, 17 were only Licensed Marriage and Family Therapists, 14 were Licensed Social Workers, and 12 were Counseling Psychologists. The average number of cases per week ranged from 5 to 40 ( $M = 18.6$ ,  $SD = 11.2$ ). Killian reported that the surveys were administered by the principal investigator of the research study during a regularly scheduled administrative meeting at three agencies in a Southern metropolitan area of the United States. Killian reported a 100% response rate. Emotional self-awareness, or the ability to identify one's emotional states, was measured by the Emotional Self-Awareness Questionnaire (Killian, 2007). Work drain, a condition in which job-related stress interferes with personal life, was measured by 5 questions developed by the researcher. STS was measured by the STS subscale of the Professional Quality of Life III-R scale (Stamm, 2005b). In a regression model, therapists' sense of powerlessness toward social welfare and judicial systems ( $B = .32$ ), work drain ( $B = .32$ ), emotional self-awareness ( $B = -.24$ ) and personal trauma history ( $B = .23$ ) accounted for

54% of the variance in STS ( $F = 15.24, p < .001$ ); weekly hours of clinical contacts with trauma clients did not contribute to the model. Less clinical contact was not related to STS. However, Killian (2007) only assessed for clinical contacts and did not assess for how many of the clients in the current caseloads were experiencing symptoms of PTSD. While all of the therapists' clients appear to have a history of trauma, it is unclear how many of the clients were currently discussing PTSD symptoms with their therapists. Assessing for discussion of PTSD symptoms may have provided more information with regard to the therapists' risk for STS.

In another study, Deighton et al. (2007) found that STS was positively correlated with number of clients seen per week in their sample of German-speaking therapists who worked in treatment centers for torture victims in Germany, Switzerland, and Austria. A total of 186 surveys were distributed to therapists at the centers by mail or e-mail, and 103 were returned for a response rate of 55.4%. Out of the 103 surveys collected, 3 were removed due to participant errors leaving a sample of 100. The sample consisted of 35 clinical psychologists, 13 other psychologists, 10 psychiatrists, 9 doctors, 18 social workers, 6 physiotherapists, 7 art therapists and 1 child therapist. Out of 100 participants, 64 had completed some form of psychotherapy training, another 20 had begun psychotherapy training, and 16 possessed no formal psychotherapy training. The three scales of Compassion Satisfaction (CS), Secondary Traumatic Stress (STS), and Burnout (BO) from the Professional Quality of Life Scale III (ProQOL-III; Stamm, 2005b) were used to measure Compassion Satisfaction (CS), Secondary Traumatic Stress (STS), and Burnout (BO). The number of clients seen per week correlated with BO ( $r = .393, p <$

.001) and STS ( $r = .407, p < .05$ ). The researchers did not report a correlation between number of clients seen per week and CS. The diversity of professional psychotherapy training in this sample is problematic, as participants completed various levels of psychotherapy. Counselors with more psychotherapy training might be better equipped to work with victims of torture and therefore less likely to experience STS. Additionally, the differences in professional roles in this sample, such as physicians, social workers and physiotherapists, may also have a confounding effect. It is possible that medical providers might see more clients per week than psychologists or social workers and may also experience more STS.

Sprang, Clark and Whitt-Woosley (2007) examined a sample of 1,121 out of 5,752 possible participants (response rate 19.5%) who were general mental health professionals from a rural Southern US state. The sample included psychologists, psychiatrists, social workers, marriage and family therapists, professional counselors, and drug and alcohol counselors. Potential participants were mailed a survey along with a self-addressed postage-paid return envelope. The researchers found that an average of 30% of the mental health professionals' clients reported experiencing PTSD. The Professional Quality of Life Scale (Stamm, 2002b) was used to measure STS, BO, and CS. A MANOVA was conducted to determine if there were differences based on therapists' education (i.e. Bachelor's, Master's or Doctoral degree, or MD). They found that psychiatrists reported greater STS than master's or doctoral level mental health professionals [ $F(9,771) = 2.56, p < .01$ ]. A MANOVA was also conducted to determine if there were differences based on therapist licensure. Psychiatrists experienced more STS

than both licensed social workers and licensed psychologists [ $F(21, 1569) = 3.09$ ,  $p < .001$ ]. In a regression model, female gender ( $B = .85$ ), age ( $B = -.26$ ), higher educational degree ( $B = .146$ ), less experience ( $B = -.056$ ), and a higher percentage of clients diagnosed with PTSD ( $B = .138$ ) predicted 42% of the variance for STS. In another regression model, female gender ( $B = .012$ ), age ( $B = -.138$ ), educational degree ( $B = .115$ ), experience ( $B = -.066$ ) and a percentage of clients diagnosed with PTSD ( $B = .028$ ) predicted 69% of the variance for BO. In yet another regression model, female gender ( $B = .010$ ), age ( $B = .194$ ), educational degree ( $B = -.089$ ), experience ( $B = .029$ ) and a percentage of clients diagnosed with PTSD ( $B = .067$ ) predicted 59% of the variance for CS. This research better operationalized exposure to clients' trauma by assessing for number of clients with a PTSD diagnosis. However, while the authors attempted to account for confounding variables, the mix of mental health professionals was still a concern. It is likely that the daily tasks of a psychologist differ from those of a drug counselor or a psychiatrist.

In a follow-up study to the study by Sprang et al. (2007), Craig and Sprang (2010) reduced variability in their sample as they studied only master's and doctoral level mental health professionals. They randomly selected a sample of 2000 mental health professionals: 1000 were social workers selected from the 2003 National Association of Social Work register of social work clinicians, and 1000 were clinical psychologists who reported a specialization in trauma treatment from the American Psychological Association. Out of the 2000, 542 responded to the survey for a response rate of 27.1%. Respondents were given 6 months to return the survey. Of the 542 respondents, 47% had

master's level training and 52% had doctoral level training. Clinical experience ranged from 1 to 58 years with a mean of 22.9 years. Out of the total sample, 98% of the respondents reported that they had individuals on their caseload with a diagnosis of PTSD, and the average for this diagnosis on caseload was 27%. The Professional Quality of Life Scale III (ProQOL-III; Stamm, 2005b) was used to measure BO, STS, and CS. In the final step of a hierarchical regression model for BO, age ( $B = -.24$ ), type of mental health organization ( $B = .17$ ), special trauma training ( $B = .15$ ), use of evidence-based practice ( $B = -.09$ ), and percentage of clients with PTSD on caseload ( $B = .15$ ) were significant. In the final step of a hierarchical regression model for STS, percentage of clients with PTSD on caseload ( $B = .18$ ) and use of evidence-based practice ( $B = -.12$ ) were significant predictors for STS. In the final step of a hierarchical regression model for CS, years of clinical experience ( $B = .26$ ) and use of evidence-based practice ( $B = .17$ ) were significant predictors for CS, while percentage of clients on caseload with PTSD was not. This result replicated Sprang et al. finding that the percentage of clients with PTSD positively predicted STS and BO.

Mckim and Smith-Adcock (2013) found support for a positive correlation between exposure to clients' trauma and STS in a sample of graduate-level social workers, psychologists, and professional counselors recruited from the International Society for Traumatic Stress Studies (ISTSS) and the Association of Traumatic Stress Specialists (ATSS). Out of the 311 potential participants contacted through the ITSS online registry, 53 completed the survey for a response rate of 17%. Of the 585 ATSS members contacted through a mass email, 68 participants completed the survey for a

response rate of 11.2% After the initial data collection, 23 participants were removed because their profession was indicated as other than psychologist, professional counselor, or social worker for a total final sample of 98. The STS subscale of the Professional Quality of Life Scale (ProQOL; Stamm, 2005) was used to measure STS. In a regression model, amount of secondary exposure ( $B = .386$ ) [ $t(91) = 4.29, p < .001$ ] predicted STS. The researchers operationalized exposure to clients' trauma as hours per week spent in direct contact with traumatized clients. However, Mckim and Smith-Adcock did not report how clients' trauma was defined or whether clients exhibited symptoms of PTSD. The lack of information regarding how they assessed for traumatized clients makes it difficult to interpret the results. It is unclear if therapists had clear expectations regarding how to identify traumatized clients in their caseload or if the researchers left it up to therapist discretion. The lack of a solid definition for traumatized clients could introduce confounding variables into the results. Furthermore, this study reported an overall response rate of 10.9%, making it difficult to generalize the results. Finally, it is possible that therapists most impacted by STS may have been more likely to volunteer to participate in the study because of their own experience with STS.

In summary, there is evidence for a positive relationship between mental health professionals' exposure to client trauma and STS (Baird & Kracen, 2006; Craig & Sprang, 2010; Deighton et al., 2007; Sprang et al., 2007; Mckim & Smith-Adcock, 2013). However, there is concern regarding the lack of homogeneity in the samples studied regarding education variables (Baird & Jenkins, 2003; Deighton et al., 2007), as well as types of professionals surveyed (Deighton et al., 2007; Sprang et al., 2007). There is also

concern regarding the assessment of traumatized clients (Killian, 2008; Mckim & Smith-Adcock, 2013). Future studies should use more homogeneous samples and provide a clear operational definition for traumatized clients. Finally, one study that collected the majority of data in-person at community agencies (Killian, 2008), and not solely through the mail or internet, had the most robust response rate, so this method of data collection should be considered in future research.

### **Vicarious Trauma in Novice versus Senior Mental Health Therapists**

An important consideration is whether therapist professional experience level is a risk factor for vicarious trauma (VT). Many studies have found a negative correlation between mental health professionals' years of experience and VT, indicating that as years of clinical experience increases, VT decreases (Cunningham, 2003; Kadambi & Truscott, 2004; Pearlman & Mac Ian, 1995; VanDeusen & Way, 2006). Pearlman and Mac Ian (1993) used the Traumatic Stress Institute Belief Scale (TSI-BS; Pearlman, 1993) to measure VT. In a sample of general trauma therapists, the researchers found that years of trauma therapy experience were negatively correlated with VT, specifically the cognitive disruptions of self-trust ( $r = -.20, p > .01$ ), self-intimacy ( $r = -.14, p > .05$ ) and self-esteem ( $r = -.15, p > .01$ ). These cognitive disruptions reflect either more or less of trust, knowledge and esteem toward self.

VanDeusen and Way (2006) strengthened the literature on this topic by examining more closely the experience level of therapists for a particular trauma therapist population. They considered the relationship between therapist experience with sexual offenders or sexual abuse victims and VT. The measure used to assess for VT was the

Traumatic Stress Institute Belief Scale Revision L (TSI-BSL; Pearlman, 1996) and the subscales of other-trust and other-intimacy. The researchers conducted a regression analysis to predict disrupted cognitions about other-trust and other-intimacy. Other-trust refers to difficulties in trusting other people, and other-intimacy refers to difficulty in forming close relationships with others. Clinicians' age, gender, maltreatment history, and length of therapist tenure of sex abuse treatment explained 4% of the variability in disrupted cognitions about other-trust. These same four variables accounted for 8% of the variability in disrupted cognitions about other-intimacy. VanDeusen and Way reported that clinicians who had less experience providing sex abuse treatment had greater cognitive disruptions in other-trust and other-intimacy. However, they did not report correlations, so the strength of the associations could not be assessed.

Cunningham (2003) also studied the relationship between length of time in a trauma specialty (sexual abuse treatment and psycho-oncology) and VT with regard to the cognitive disruptions of other-esteem and self-safety. Disruptions in other-esteem impact a person's ability to hold others in high regard, and disruptions in self-safety impact sense of personal safety. Cunningham found a negative correlation ( $r = -.23, p = .001$ ) between the number of years in specialty and total score on the Traumatic Stress Institute Belief Scale Revision L (TSI-BSL; Pearlman, 1996) and the subscales of other-esteem ( $r = -.14, p = .04$ ) and self-safety ( $r = -.17, p = .01$ ), indicating that more years of experience with a trauma population may be protective against VT. The finding that VT was lower among therapists who had more years of experience in a particular specialty is



compelling, especially since this study looked at therapists who specialized in different areas, specifically psycho-oncology and sexual abuse treatment.

Kadambi and Truscott (2004) examined a diverse sample of three groups of trauma caregivers who worked in general practice, specialized in psycho-oncology, and specialized in sexual abuse. The sample included psychology professionals, nurses, social workers, and physicians. Participants were surveyed about their length of time in trauma work and length of time in general professional caregiving. The Traumatic Stress Institute Belief Scale Revision M (TSI-BSM; Pearlman, 1996) was used to measure VT. In a stepwise multiple regression analysis, length of time in the field and personal trauma history contributed to VT [ $F(1,205) = 4.57, p < .05$ ] and general length of time in the field ( $\beta = -.190, p < .05$ ) was negatively related to VT. However, the proportion of variance accounted for by length of time in the field and personal trauma history was small ( $R^2 = .056$ ). Therefore, less time in the mental health field appears to predict higher VT.

In contrast, other research has not found newer counselors to be at greater risk for VT. For example, Baird and Jenkins (2003) found no correlation between VT and therapist experience for counselors who work with victims of sexual or domestic violence. However, the researchers defined experience level by asking participants about months of paid counseling experience and months of paid trauma counseling. Since Baird and Jenkins studied a sample of both volunteers and paid staff, they should have assessed for months of experience level only. It is possible that some volunteers could have more experience than paid staff, but this was not considered in the analysis.

In another study, Bober and Regehr (2006) found more experienced mental health professionals to be at greater risk for VT. The researchers assessed for general counseling experience by asking participants to report how many years of experience they had as a counselor or therapist. They studied a diverse population of trauma caregivers that included social workers, nurses, professionals in a psychology field, physicians, child and youth workers, occupational therapists, and chaplains. The Traumatic Stress Institute Belief Scale Revision L (TSI-BSL; Pearlman, 1996) was used to measure VT. A total of 580 questionnaires were sent to clinical programs that specialize in treating victims of violence in southern Ontario. Two hundred and fifty-nine questionnaires were returned for a response rate of 45%. Bober and Regehr reported that average age of therapists was 41.3 years ( $SD = 9.3$ ). Years of experience was correlated with the other-intimacy sub-scale ( $r = .29, p < .01$ ); more experience as a counselor was associated with more disruptive beliefs regarding other-intimacy. Age of the therapist was only correlated with the other-intimacy sub-scale ( $r = .36, p < .001$ ), as being older was related to more disruptive beliefs regarding the ability to form close relationships with others. This study did not report correlations between therapist age and experience level. These correlations could have provided important additional information, since both of these variables were correlated with the other-intimacy scale. One problem with the study is the large professional role diversity in the sample. The researchers describe participants as conducting counseling sessions; however, there were many diverse professional roles in the sample, and it is likely that the professional counseling role of a nurse is very different from that of a child case worker or chaplain. It would have strengthened this

study to choose one profession such as physician, or two more closely aligned professions such as psychologist and social worker, in order to reduce the variability in the sample. This may explain the finding that older and more experienced participants experienced more VT than younger or less experienced participants.

While the literature is not totally consistent, there is evidence that newer clinicians working as trauma therapists may be especially vulnerable to VT compared to more experienced therapists. However, since this issue has been mostly examined through the use of correlational methods, it is unclear at what point in a professional's career the risk of VT begins to diminish. It would be important to determine if there are significant differences in VT risk between novice clinicians (e.g., 5 or fewer years of experience) and senior clinicians (20 years or more of experience). Additionally, a few studies used highly diverse samples (Bober & Regehr, 2006; Kadambi & Truscott, 2004) that included participants from several professions and education levels, which introduce extraneous variables into the studies. Future research should attempt to use more homogeneous samples in terms of level of education, training, and professional role when addressing VT risk with novice and senior therapists.

### **Secondary Traumatic Stress (STS) and Experience Levels in Mental Health**

#### **Therapists**

There is mixed evidence regarding therapist experience level as a risk factor for STS for therapists who work with trauma clients. In their mixed sample of psychologists, psychiatrists, physiotherapists and social workers who work in treatment centers with torture victims in Germany, Austria and Switzerland, Deighton et al. (2007) found no

correlations between years of therapy experience and years of trauma therapy experience on the subscale of STS and BO on the Professional Quality of Life Scale III (ProQOL-III; Stamm, 2005). However, as stated in an earlier section of this review, the sample was diverse in terms of professional role and psychotherapy training, including physicians, art therapists, and physiotherapists. It is possible that the effect of experience level on STS may vary among different professions, and therefore professional roles may be confounding the relationship between STS and experience level.

Thomas (2013) did not find evidence for a relationship between STS and experience level of the therapists. This study was correlational and used secondary data collected in 2008. The original data collection procedure was reported as follows. A recruitment letter, survey, and postage-paid return envelope were mailed to 400 Licensed Clinical Social Workers. After the first mailing, 132 surveys were returned, and 39 were returned after a second mailing, for a total of 171 (response rate was 42%). BO and STS subscales of the Professional Quality of Life Scale IV-R (ProQOL-IV-R; Stamm, 2005a) were used to measure BO and STS. In this study, Thomas found that years of work experience was not a significant predictor for either STS or BO in regression models.

Additionally, in a sample of trauma-focused social workers, psychologists and professional counselors, Mckim and Smith-Adcock (2013) operationalized years of clinical experience as number of years of therapy experience. They found no relationship between years of experience and STS. Craig and Sprang (2010) also found no relationship between BO and STS in their study of graduate-level educated mental health professionals. Collectively, these studies (Craig & Sprang, 2010; Mckim & Smith-

Adcock, 2013; Thomas, 2013) call into question the impact of therapist experience on STS risk.

In contrast, other research has found a relationship between experience level and STS. Sprang, Clark, and Whitt-Woosley (2007) found a negative correlation as less clinical experience predicted higher levels of STS in their sample of general mental health professionals from a rural Southern state. Other studies found a positive correlation between experience level and STS (Linley & Joseph, 2007; Rossi et al., 2012). For example, Linley and Joseph found a positive correlation between STS and greater length of time as a therapist. Participants were selected from the directory of chartered psychologists and the Counseling and Psychotherapy Resources Directory in Britain. A total of 156 therapists out of 400 responded to requests to complete the questionnaire (40% response rate). Some respondents (39%) were qualified at the diploma level, some held master's degrees (32%), and the rest (14%) had doctoral degrees. The therapists had been working between 2 and 40 years for a mean of 15.1 years. Respondents currently conducted therapy between 1 and 30 hours per week for a mean of 12.64 hours per week. A subscale of the Professional Quality of Life Scale (ProQOL; Stamm, 2002) was used to measure STS. There was a positive correlation between length of time as a therapist and STS ( $r = .20, p < .01$ ).

Rossi et al. (2012) conducted a study in the Verona Mental Health Department in northeastern Italy, served by four community-based mental health services. Mental health workers in this sample included psychiatrists, psychiatrists in training, psychologists, social workers, psychiatric nurses, rehabilitation therapists, and healthcare support

workers. The researchers reported that all staff were asked to complete the research survey anonymously. Out of a total of 311 possible respondents, 260 completed the questionnaire for a response rate of 84%. The STS subscale of ProQOL III (Stamm, 2005b) was used to measure STS. In a Poisson regression analysis for STS, they found that every additional year spent counseling was related to a significant increase in STS ( $IRR = 1.01$ ). While this study had an excellent response rate of 84%, the inclusion of multiple professional roles such as rehabilitation therapists, health care support workers, psychologists, and psychiatrists in training is problematic, as these different professions require different education and training. Additionally, the professional duties of each of these professions may have been too disparate to be placed in the same sample. Therefore, it is possible that education, training or professional role differences may be confounding the results.

The lack of consistent findings in the literature indicates a need for increased future research to clarify whether therapist experience level is a risk factor for STS. Additionally, like research on VT and experience level, this research was done using correlation or multiple regression analyses. Future research should be conducted to determine at what point during a mental health professional's career, if at all, he or she may be at increased risk for STS.

### **Positive Benefits of Trauma Work for Mental Health Professionals**

There are currently two constructs that explore the positive benefits for mental health professionals who work with trauma survivors. The two constructs are vicarious resilience (VR) and vicarious posttraumatic growth (VPTG). Only recently have the

constructs of VR and VPTG begun to be investigated with mental health professionals who work with trauma. The following sections contain a critical review of the literature regarding the evidence for VR and VPTG in mental health professionals. Literature was found using the search terms resilience, posttraumatic growth, therapist, counselor, and psychologist, in the Psych Info database from the years 1980-2013. Only literature that focused on vicarious resilience or vicarious posttraumatic growth in mental health professionals was selected for review.

**Vicarious Resilience.** Vicarious resilience (VR) is defined as a transformation in the clinician's inner experience that occurs as a result of therapist empathy with trauma survivors and increases the therapist's own belief in his or her ability to cope with adversity (Engstrom et al., 2008; Hernandez et al., 2007). Components of VR include recognizing the human capacity to heal from trauma, reaffirming the value of therapy, putting one's problems into perspective, incorporating spirituality into treatment, developing hope and commitment. It also includes recognizing the power of community healing and therapist desire to conduct advocacy work regarding clients' trauma (Hernandez, Engstrom, & Gangsei, 2010). These characteristics are considered natural components of therapy work that can provide healing to therapists conducting emotionally exhausting work. Therapists may increase VR by directing more conscious attention to clients' resilience and considering how this resilience might change the clinician's perspective about his or her own personal attitudes, emotions, and behaviors (Engstrom et al., 2008; Engstrom et al., 2010).

VR was first explored in a qualitative study by Hernandez et al. (2007). In their

study, participants were Colombian national mental health professionals that included one psychiatrist and eleven psychologists who were working with victims of political violence. Ten of the participants had attained post graduate education, and one held a bachelor's degree. Years of experience working in the field ranged from 3 to 27 years, while working with victims of political violence ranged from 1 to 18 years. Semi-structured interviews were conducted. The interviews were audio-taped, coded, and transcribed by a bi-lingual research assistant and reviewed by one of the two primary investigators (PIs) for translation and transcription accuracy. Themes were identified in the data by both PIs and two research assistants. After this process, a consultant reviewed the data and one of the PIs conducted a final data analysis. Participants reported the following themes regarding clients' impact on the therapists: (a) witnessing the human capacity to heal, (b) putting the therapist's own problems into perspective, (c) using spirituality in treatment, (d) increasing hope, (e) creating frameworks for personal and professional opinions regarding political violence, (f) creating frameworks for healing, (g) increased tolerance to frustration, (h) developing boundaries, (i) using community intervention and (j) increasing use of self in therapy work.

The Hernandez et al. (2007) study was innovative as it was one of the first to address positive implications for mental health professionals who work with trauma victims, and the study put forth a theoretical construct of a positive change process. Since the participants worked primarily with victims of political violence, it is unclear how this process might translate to therapy work with victims of other types of trauma.

Participants also self-selected after being informed of the purpose for the study, so it is



possible that participants most attracted to this topic would be more likely to report experiencing positive dimensions of the work. Finally, since this study was qualitative, the results cannot be generalized to other populations of mental health professionals.

A follow-up qualitative study was conducted at a regional torture treatment center in the United States (Engstrom et al., 2008). In this qualitative study, 25 mental health professionals were contacted and eleven chose to participate. Of the eleven, Engstrom et al. reported that 3 were licensed clinical social workers, 3 were licensed marriage and family therapists, and the remaining 6 had doctoral degrees in psychology. As this adds to 12, there appears to be a potential clerical error in the reporting of the education of participants. However, all of the mental health professionals worked with victims of torture. During the semi-structured interview, participants were asked how they felt that watching clients cope with adversity affected them, and whether they had any examples of clients coping with adversity from their own work with torture victims. Interviews were taped and transcribed. The principal investigator and a research assistant independently coded and identified themes. Common themes that were identified included: (a) recognition of the human capacity to heal, (b) altering perspectives about one's own life, and (c) reaffirming the value of therapy.

This study was able to replicate two important themes found in the previous VR study (Hernandez et al., 2007): the recognition of the human capacity to heal and altering perspectives about one's own life. The study found that therapists felt stronger and more resilient as a result of working with trauma clients. It is important to note that some components of the construct, including incorporating spirituality into treatment, the

power of community healing, and the desire to conduct advocacy work regarding the client's trauma, were not found in this research. This could indicate some possible concerns with the conceptualization of the VR construct. Like Hernandez et al. (2007), Engstrom et al. (2008) was qualitative and examined a group of therapists that specialized in working with victims of political violence and torture. Future studies are needed to examine therapists who work with different populations of trauma victims. Additionally, there is a need for quantitative research in this area.

In summary, the only research that supports VR as defined by Hernandez, et al. (2010) originates from two qualitative studies. The characteristics of VR supported by the two studies (Hernandez et al., 2007; Engstrom et al., 2008) included increased recognition of the human capacity to heal and therapists' altered perspectives regarding their own lives. Other components, including incorporating spirituality into treatment, developing hope and commitment, the power of community healing, and the desire to conduct advocacy work regarding the clients' trauma, were only supported by Hernandez et al. (2007). Due to the paucity of research on this topic, it is difficult to draw conclusions regarding the VR construct. Further mixed methods research might be particularly helpful, as it could allow clinicians to continue to describe their experiences regarding VR while using a quantitative measure that could then be generalized to a larger pool of trauma therapists.

**Vicarious Posttraumatic Growth.** Like VR, the vicarious posttraumatic growth (VPTG) construct posits that spirituality, personal strength, and outlook on life can be enhanced as a result of vicariously experienced trauma (Calhoun & Tedeschi, 1998;

Engstrom et al., 2008; 2010; Tedeschi & Calhoun, 2004). Calhoun and Tedeschi (2012) further describe the process of VPTG as growth that occurs through hearing about clients' trauma in the following ways: learning that humans have the capacity to persevere in very difficult circumstances, confrontation of existential issues and spirituality, increased appreciation for therapists' own lives, heightened focus on interpersonal relationships and a deepened compassion for others. VT and VPTG arise from the same empathic connections with clients that lead to disruptions of cognitive schemas (Cohen & Collens, 2012). The distress caused by the cognitive disruptions of VT acts as a catalyst for VPTG through changes in the clinician's worldview (Calhoun & Tedeschi, 1998). Additionally, through vicariously experiencing the trauma of their clients, therapists may reap the benefits of posttraumatic growth without suffering the same intensity of pain as their clients (Calhoun & Tedeschi, 2012).

A qualitative study by Arnold et al. (2005) deepened the investigation into VPTG of therapists who work with trauma victims. Participants were recruited through a snowball sampling methodology that included 21 licensed mental health professionals. Out of the 21 participants, 8 had doctoral degrees in counseling or clinical psychology, 6 had master's degrees in psychology, 4 had master's degrees in social work and 3 had master's degrees in counseling. For the purpose of this study, a traumatic event was defined as something disruptive enough to challenge a client's ability to cope. Some of the more common presenting problems included sexual assault, physical assault, disability, bereavement, divorce, witnessing violence, natural disasters, and military combat. The group mean of the percentage of clinical work that was trauma related was

45% with a range of 10%-80%. During a naturalistic interview, participants were first asked a neutral and open-ended question (e.g., “How have you been affected by your work with clients who have experienced traumatic events?”). If not addressed over the course of the interview, the interviewer asked participants about the negative and positive consequences of working with clients who have experienced traumatic events. All interviews were taped and transcribed. The transcription was coded into themes by the primary investigator. An independent rater coded 15% of the data for an inter-rater reliability of 84%. Themes regarding positive outcomes for clinicians included: (a) observing and encouraging client’s posttraumatic growth, (b) deepening of the clinician’s spiritual path, (c) heightened awareness of the clinician’s own good fortune, and (d) deepened appreciation for the strength and resilience of the human spirit.

This qualitative research was important as it was one of the first studies to explore the potential of VPTG with counselors who work with traumatized clients. It also allowed for clinicians to report their perceptions of client presenting problems related to trauma. However, there is some concern regarding the very broad definition of trauma used in the study as “anything that disrupted a client’s ability to cope.” It may not be accurate to put divorce in the same category as sexual assault or natural disaster. Stricter parameters regarding the definition of a trauma victim client, such as the presence of some posttraumatic stress symptoms, might have strengthened this research. Additionally, due to the wide range of trauma work in the caseloads that clinicians reported (10%-80%), it might have been useful to separate the sample into groups with high and low caseloads to assess for differences in themes between the groups.

A more recent qualitative study by Barrington and Shakespeare-Finch (2013) examined the experience of different categories of employees (i.e. front line clinical, administrative, and managerial staff) at an agency in Australia that specialized in working with torture and trauma survivors. The researchers did not report sample size for each of the groups but instead reported percentages based on the total sample. The sample was recruited using a snowball methodology and 43% of the staff chose to participate. Of the interviewed participants, 13 were clinical staff and 4 were administrative or managerial staff. The researchers did not specify how many of the four were administrative or managerial; however, 47% of the sample had a psychology degree and 20% had a social work degree. The researchers did not report what degrees the other employees held. Semi-structured interviews were between 45 and 60 minutes and were meant to capture the experience of working with trauma survivors. Interviews were transcribed and analyzed. Themes were identified and ordered. The primary investigator completed the analysis and an auditor analyzed a sub-set of the transcripts to ensure inter-rater reliability. Participants reported themes related to VPTG that included changes to life philosophy, including spirituality, changes in self-perception, increased personal strength and positive changes to interpersonal relationships.

The Barrington and Shakespeare-Finch (2013) study produced some insight into the possibility of VPTG that trauma caregivers report experiencing while working with trauma survivors. Some of the themes from Barrington and Shakespeare-Finch echoed Arnold et al. (2005), such as reports of changes to the clinicians' spiritual frameworks (e.g. increased or decreased faith) and positive changes to interpersonal relationships,

lends support to Calhoun and Tedeschi's (2012) construct of VPTG. However, there were some concerns regarding the inclusion of administrative and managerial staff with clinical staff. It is unclear why the researchers included administrative and managerial staff in the sample. It is unlikely that interactions with traumatized clients by administrative and managerial staff would be equivalent to the clinical staff in terms of detail and content, and inclusion of a rationale for interviewing administrative and managerial staff would have been helpful. Furthermore, Barrington and Shakespeare-Finch only included limited information regarding the educational levels of staff. It is possible that not all members had training in social work or psychology, which could have impacted their reactions to working at a center for torture victims. Additionally, like Arnold et al. this research was purely qualitative, precluding generalization to the greater population of trauma therapists.

Linley and Joseph (2007) conducted one of the first quantitative studies on the experience of VPTG in mental health professionals. Several measures were used in this study. The Posttraumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996) measured VPTG, and the compassion satisfaction (CS) subscale of the Professional Quality of Life Scale (ProQOL; Stamm, 2002) measured CS. Other measures used were: (a) Jefferson Scale of Physician Empathy (JSPE; Hojat et al., 2002), which measures therapists' empathy for clients, (b) Sense of Coherence Scale-Short form (SOC; Antonovsky, 1987), which measures whether people see the world as meaningful and coherent, and (c) Working Alliance Inventory (Form T)-Bond subscale (WAI-Bond; Horvath & Greenberg, 1989), which measures the bond between the therapists and clients.

Participants were selected from the directory of chartered psychologists and the Counseling and Psychotherapy Resources Directory in Britain. A total of 156 therapists out of 400 responded to requests to complete the survey (40% response rate). Some respondents (39%) were qualified at the diploma level, some held master's degrees (32%), and the rest (14%) had doctoral degrees. The therapists had been working between 2 and 40 years for a mean of 15.1 years. Respondents currently conducted therapy between 1 and 30 hours per week for a mean of 12.6 hours per week. Pearson correlations were used to assess the relationships between the variables of caseload and length of time as therapists. There was no association between therapists who reported a greater length of time as therapists and VPTG or CS. Therapists who reported more hours per week spent with clients reported more VPTG on the PTGI ( $r = .23, p < .01$ ), but there was no correlation with CS. In a multiple regression equation, only scores on the JSPE ( $\beta = 2.53, p < .05$ ) predicted VPTG. In another multiple regression equation, scores on the SOC ( $\beta = -5.10, p < .001$ ) and scores on the WAI-B ( $\beta = 5.53, p < .001$ ) predicted CS.

The Linley and Joseph (2007) study was one of the earliest studies to utilize a quantitative measure to assess for VPTG in mental health professionals. This study provided evidence that a higher caseload may increase the amount of VPTG in mental health professionals. However, since the construct of VPTG is based on therapist changes that occur as a result of counseling trauma clients, it is unclear why the researchers examined a general mental health professional population and did not assess for trauma in the presenting problems of clients who worked with these professionals. Therefore, it is difficult to assess whether VPTG occurred as a result of work with trauma victims or

simply as a result of general therapy work. Assessing for trauma work in the caseload of mental health professionals would be important in future studies in order to make this differentiation. Furthermore, while VPTG is associated with a higher caseload, CS is not, indicating a differentiation between these two positive effects of therapy. Finally, it appears that therapist empathy may be an important component of the transmission of VPTG from client to therapist, and that a positive bond between the therapist and client is a necessary ingredient for CS.

Gibbons, Murphy, and Joseph (2011) also examined posttraumatic growth in mental health professionals, but focused on professionals with a specialization in social work. The researchers reported the data collection procedure as follows: A questionnaire was e-mailed to the managers of social work departments in Nottinghamshire in the United Kingdom so it could be circulated to the social work staff and returned to researchers. The study did not report how many participants it attempted to recruit, and instead reported that participants were 62 practicing social workers who responded to the request. The Professional Quality of Life Scale III-R (ProQOL-III-R; Stamm, 2005b) was used to measure CS and BO. The PTGI (Tedeschi & Calhoun, 1996) was used to assess for VPTG. The social workers scored 53.7 on the PTGI on a scale from 0-105. This mean for this sample was lower than therapists from Linley and Joseph's (2007) study that reported a mean score of 64.4. Correlations were calculated between the variables. The Perceived Value of Social Work Scale (PVSW; Gibbons et al., 2011) was created for this study to assess social workers' perceptions of the value of their jobs to themselves and others in society. There was a positive correlation on the PVSW with VPTG ( $r = .36, p <$



.001) and CS ( $r = .47, p < .001$ ) and a negative correlation with BO ( $r = -.44, p < .001$ ), indicating that social workers who felt valued by themselves or others experienced increased VPTG and job satisfaction and lower levels of BO.

Gibbons, Murphy, and Joseph (2011) failed to report the trauma caseload of the social workers or presenting problems of those they served. If caseload variables had been included, it would have helped to elucidate whether VPTG scores were related specifically to social workers' caseload of trauma victims. Instead, it focused on a more general sample of mental health professionals and does not help to further inform the relationship between therapists working with traumatized clients and VPTG.

In a mixed methods study, Ben-Porat and Itzhazky (2009) compared a group of social workers who identified as working with victims of family violence and a group who did not on measures of VPTG and secondary traumatic stress. The Secondary Traumatic Stress Scale was used to measure secondary traumatic stress (STSS; Bride, Robinson, Yegidis, & Figley, 2003) The PTGI (Tedeschi & Calhoun, 1996) was used to assess VPTG. Out of a total sample of 214, 143 identified as family violence therapists and 71 reported that they did not work in the family violence field. Out of the sample of 143, 31.5 % of the family violence therapists worked as administrators, while 68.5% were practicing social workers. For those who did not work in family violence ( $n = 71$ ), 21.1% had administrative positions and the remaining 78.9% were practicing clinical social workers. In order to determine whether there were differences between the two groups on work experience and age,  $t$ -tests were conducted. The family violence therapists had significantly more years of work experience: ( $t = 2.72, df = 207, p < .01$ .)

and those who did not work in the field of family violence were younger, ( $t = 3.74$ ,  $df = 212$ ,  $p < .001$ ). A one-way MANOVA revealed a significant difference between the two groups [ $F(3,210) = 3.71$ ,  $p < .05$ ,  $\eta^2 = .05$ ]. Therapists who did not work in family violence showed significantly more VPTG [ $F(1,212) = 6.96$ ,  $p < .05$ ,  $\eta^2 = .03$ ] compared to family violence workers, calling into question whether working with victims of family violence versus other types of clients would lead to more VPTG in therapists. In contrast, in the qualitative section of the study chi-square tests revealed that family violence workers reported more positive changes with regard to interpersonal communication, such as improved assertiveness skills and anger control ( $X^2 = 17.25$ ,  $df = 1$ ,  $p < .001$ ), relationships with spouses (improved awareness and strengthening of relationship) ( $X^2 = 4.54$ ,  $df = 1$ ,  $p < .05$ ) and relationships with children (awareness and attempts to respond to children's needs) ( $X^2 = 4.24$ ,  $df = 1$ ,  $p < .05$ ).

The Ben-Porat and Itzhazky (2009) study was innovative in that it used a mixed methods design that allowed social workers to report their experience of negative and positive changes that have occurred as a result of their work while simultaneously using quantitative measures of posttraumatic growth and STS. The positive changes that therapists reported regarding parenting and spousal relationships support the posttraumatic growth construct regarding improvements in interpersonal relationships (Arnold et al., 2005; Calhoun & Tedeschi, 2012). Additionally, a subscale of the PTGI (Tedeschi & Calhoun, 1996) regarding interpersonal relationship contains items similar to these themes (e.g., "I put more effort into my relationships."). However, there are concerns regarding the comparison between therapists who self-identified as working in

the field of family violence and those who did not, especially since the researchers did not assess for the typical presenting problems of either group. Therefore, it is possible that the non-family violence group was working with trauma victims as well, but not with victims of family violence. Additionally, one third of each of the two groups contained administrators. Since the role of a therapist who is an administrator and a therapist who is working in direct service is likely to be very different, it is unclear why the administrators were included in the sample. This inclusion may have confounded some of the effects of STS and VPTG.

Lev-Wiesel et al. (2009) studied a group of social workers in Israel employed by the Haifa Welfare Department who were directly or vicariously exposed to war trauma. All of the participants originated from a city in Israel that was undergoing armed conflict. There was a 92% response rate of social workers for a total sample of 128 social workers. Out of the sample, 48% of the social workers reported having been directly exposed to war-related traumatic events such as destruction of property or physical injury to themselves or family members. In addition, 42% reported working with war-related trauma survivors. Social workers who reported being directly exposed to war were categorized as survivor-responders, whereas social workers who had worked with war-traumatized clients were categorized as responders. The PTGI (Tedeschi & Calhoun, 1996) was used to assess for posttraumatic growth (PTG), and the Compassion Fatigue Self Test for Therapists (CFST; Figley, 1995) was used to assess for STS. The PTSD symptom scale (PSS-I; Foa, Riggs, Dancu, & Rothbaum, 1993) was used to assess for PTSD symptoms. A MANOVA was conducted to determine the differences between

social workers who were directly and indirectly exposed to the war on the variables of PTG, VPTG, ST, and PTSD symptoms. No significant differences were found between the groups on any of the variables [Multivariate Wilk's  $F(5,115) = .25, p > .05$ ].

However, in a regression model, PTSD symptoms predicted STS ( $B = .35$ ) and VPTG ( $B = .28$ ).

The Lev-Wiesel et al. (2009) study lends support to the notion that indirect exposure to trauma may lead to STS and VPTG. However, it was unclear how much of an overlap there was between social workers who worked with survivors of trauma and those who experienced trauma themselves. The authors reported that 48% of the social workers who responded were directly impacted by war, but did not report how many of these worked with trauma victim clients. Researchers also reported that 42% of the social workers worked with trauma victims but did not report how many of these had a direct experience with war. If there were two independent groups of survivor responders (social workers directly exposed to conflict and who were working with victims) and responders (social workers working with victims only), it is unclear why these percentages do not add up to 100%.

Lambert and Lawson (2011) examined mental health counselors who served clients impacted by Hurricanes Katrina and Rita. Study participants were recruited by announcements on the American Counseling Association's (ACA) website, professional newsletter, and e-newsletter. Participants were also recruited by the ACA sending the announcement to members who responded to Hurricanes Katrina and Rita, as well as Hurricanes Ike and Gustav. Finally, ACA members who served on the ACA trauma

interest network or who lived in Texas, Louisiana, or Mississippi were sent an email soliciting participation. There were 125 participants recruited. The researchers did not report how many were in their pool of possible respondents or a response rate. A total of 85.2% of the respondents were licensed in a mental health field. Three different groups of professional mental health counselors were identified among the responders: (a) disaster mental health workers who volunteered and might spend as much as 10-12 hours a day de-briefing with victims of these natural disasters for days or weeks at a time, (b) counselors who worked and/or volunteered regularly in the affected hurricane areas and (c) counselors who volunteered outside of the hurricanes' region in shelters with displaced victims. The Professional Quality of Life Scale III-R (ProQOL-R-III; Stamm, 2005b) was used to measure CS, BO, and STS, and the PTGI (Tedeschi & Calhoun, 1996) was used to measure PTG and VPTG. Lambert and Lawson compared the scores from this sample to a national sample ( $n = 506$ ) of the general ACA membership (Lawson & Meyers, 2011). Rates of compassion satisfaction and burnout were similar between the samples of Lambert and Lawson and Lawson and Meyers, but a  $t$ -test reflected that STS ( $M = 12.59$ ,  $SD = 6.65$ ) was significantly higher for the Lambert and Lawson study of hurricane responders than for ACA members in general [ $(M = 10.32$ ,  $SD = 5.98)$ ,  $t(623) = 3.66$ ,  $p < .001$ ]. Scores on the PTGI were not compared to the national sample of the ACA membership (Lawson & Meyers) because Lawson and Meyers did not give the PTGI measure to their participants. Additionally, in the Lambert and Lawson study, participants who were responder volunteers were compared with survivor volunteers (31.2% of the counselors who responded lived in the area of the hurricane and

were also affected personally by these hurricanes through evacuation, personal injury, destruction of property, or death of a family member or friend). The total PTGI score for the survivor volunteers ( $M = 76.97$ ,  $SD = 23.38$ ) was significantly higher than for responder volunteers ( $M = 62.43$ ,  $SD = 23.57$ ) [ $F(1,102) = 8.88$ ,  $p < .04$ ], indicating that experiencing trauma firsthand leads to higher PTG than secondhand exposure to trauma.

This study appears to contradict Lev-Wiesel et al. (2009) in that the mental health counselors who were survivor responders experienced more PTG than the mental health counselors who did not have direct exposure to the hurricanes. It is unfortunate that no data from the national sample could be used as a comparison due to the PTGI measure (Tedeschi & Calhoun, 1996) not being included (Lawson & Meyers, 2011) because this comparison could have shed light on whether responders who were not traumatized might experience less PTG. This is especially relevant because both survivor-responders (counselors who responded lived in the area of the hurricane and were also affected personally by these hurricanes through evacuation, personal injury, destruction of property, or death of a family member or friend) and responders (counselors who worked with survivors of the hurricanes) experienced more STS than the ACA sample, and it is possible that the exposure to STS might lead to a higher level of PTG. It might also have been helpful to measure and report how much therapist exposure there was to survivors of the hurricane because while some disaster mental health workers could spend as much as 12 hours a day for several days on site interacting with hurricane victims, other counselors might have spent only a few hours volunteering or worked with clients in more traditional outpatient settings.

Brockhouse et al. (2011) examined the relationship between exposure variables, VPTG, and mental health professionals. Participants were recruited from a therapist registry in the United Kingdom through a recruitment e-mail that contained a survey link. Only therapists who self-identified as working with trauma therapists were allowed to participate, and only surveys that were fully completed were included, leaving a sample size of 118 out of 1,852 and a 6.4% response rate. Experience of therapists ranged from 1-50 years ( $M = 13.77$ ,  $SD = 11.67$ ). Brockhouse et al. examined several variables regarding exposure to and length of time working with trauma victims, including length of time working as a therapist, hours per week with clients, and a variable called vicarious exposure. Vicarious exposure to trauma was measured through duration of career, number of years working as a therapist, percentage of vicarious exposure to trauma over the last month, and number of clients who could be classified as suffering from PTSD. Vicarious exposure was intended to measure cumulative exposure to clients' trauma over the therapists' entire careers while considering therapist caseload and whether they worked full or part time. Based on the calculation, the average amount of time participants spent working with trauma victim clients was 2.47 years, even though clinicians reported that working with trauma victims represented approximately half of their caseload. The PTGI (Tedeschi & Calhoun, 1996) was used to assess for VPTG in the therapists. In a regression model, cumulative vicarious exposure to trauma positively predicted VPTG ( $p = .001$ ). In contrast, recent and relative measures of exposure, such as recent percentage of caseload of trauma victims or years of career working with trauma victims, did not predict VPTG, indicating that the cumulative exposure variable may be a

more accurate way to assess the vicarious exposure variable than other indicators such as number of clients or percentage on caseload with PTSD.

This study's use of a cumulative exposure measure was innovative and could be an important area of research to replicate in future studies. However, due a response rate of 6.4%, it will be difficult to draw conclusion from these results. It is also unclear why Brockhouse et al. (2011) did not assess for typical presenting problem of clients. This would have been helpful in order to better understand the types of trauma that therapists were reporting about their clients and the variety of vicarious trauma exposure the therapists experienced.

O'Sullivan and Wheelan (2011) studied the relationship between VPTG and STS in telephone counselors. A total of 70 telephone counselors responded from a possible pool of 200 for a response rate of 35%. However, only 64 counselors were included in the final analysis as a result of incomplete questionnaires, for a response rate of 32%. Participants were recruited from 9 organizations in Australia, and five organizations participated: Crisis Support Services (Suicide and Men's Helpline), Centre against Sexual Assault, the Grief Line, the Stillborn and Newborn Death Support, and one other organization that declined to be named. A total of 200 questionnaire sets were given to each of the above organizations, and 55 questionnaires were returned by mail and 15 completed online. The level of telephone counseling experience ranged from two months to 15 years with an average of 3.24 years. Of the sample, 76.6% were volunteers while 23.3% had paid positions. Additionally, 62.5% participated in telephone calls on a casual basis, 35.9% were part-time and 1 person worked full time. Finally, 47 of the 64



respondents identified that client trauma was addressed in their counseling calls. The PTGI (Tedeschi & Calhoun, 1996) was used to measure VPTG. A standard multiple regression analysis was conducted in order to analyze the degree to which VPTG was related to STS and calls per shift. ST significantly and positively predicted posttraumatic growth ( $\beta = .32, p < .05$ ). Shift calls were negatively related to VPTG ( $\beta = -.32, p < .05$ ); as call load rose, VPTG fell.

The finding that a higher number of calls during a shift predicts lower VPTG seems counterintuitive, since VPTG was positively related to STS and it would seem more likely that increased exposure to trauma would predict higher levels of both STS and VPTG. However, since there was no assessment for presenting problems of the callers, there is no way to determine what exposure to trauma the telephone counselors experienced during phone calls. It would have been more helpful to assess for number or percentage of trauma-related calls per shift. Additionally, while a shift was identified as a four-hour period, participating in telephone counseling on a casual basis was not defined. This lack of definition makes it hard to determine the average amount of time counselors participated in telephone counseling. It is possible that since many counselors worked casually or part time, those that spent less time counseling might be less experienced. Finally, demographic variables related to education were not reported. It is possible that those who worked part-time as telephone counselors might have less training or education than full-time telephone counselors, which may also help explain the negative relationship between VPTG and calls per shift.

Samios et al. (2012) examined the relationship between VPTG and STS in therapists who work with sexual violence survivors. Participants were recruited primarily from organizations that served sexual violence survivors. The organizations included 5 sexual assault services, one family planning service, and two drug rehabilitation centers. Forty-one returned the surveys to form the sample for a response rate of 51.2%. After this initial data collection, psychologists at a university and psychologists from an online registry who listed sexual violence work as a focus were also surveyed through an online survey. The researchers reported a 15.2% response rate for this group, although the number for the total participant pool was not reported. The final sample included 61 therapists (41 from the first group who completed hard copies and 20 from the second group who completed the survey online), all of whom reported that they had worked with sexual violence victims. Out of the total sample, 20 reported that the majority of their work was with sexual violence victims, and 38 reported that the majority of their work was with trauma victims. Additionally, 53 of the sample were psychologists, 5 were counselors, and 3 were social workers. The Secondary Traumatic Stress subscale of the ProQOL (Stamm, 2003) was used to measure STS, though the version was not reported. The PTGI (Tedeschi & Calhoun, 1996) was used to measure VPTG. The seven-item Depression and Anxiety subscales of the Depression, Anxiety, and Stress Scales (Lovibond & Lovibond, 1995) were used to measure depression and anxiety. Personal meaning in life was measured by the eight-item subscale of the Sense of Coherence Scale (Antonovsky, 1987). In a preliminary analysis of bivariate correlations, STS was moderately correlated with posttraumatic growth ( $r = .43$ ). In a hierarchical regression

model, VPTG moderated the relationship between STS and depression. For therapists with low levels of VPTG there was a significant positive slope ( $\beta = .82, p < .001$ ), but for therapists with high levels of VPTG the slope did not differ significantly from zero ( $\beta = .32, p < .05$ ), indicating that levels of depression increased for therapists with low levels of VPTG as STS increased, but not for therapists with high levels of VPTG. In hierarchical regression models, VPTG also moderated the relationship between STS and depression. For therapists with low levels of VPTG there was a significant positive slope ( $\beta = .95, p < .001$ ) but a non-significant slope for therapists with high levels of VPTG ( $\beta = -.17, p = .303$ ), indicating that levels of anxiety increased for therapists with low levels of VPTG as STS increased, but not for therapists with high levels of VPTG. Additionally, VPTG moderated the relationship between STS and personal meaning; a non-significant slope was found for therapists with high VPTG ( $\beta = -.20, p = .277$ ), while a significant negative slope was found for therapists with low VPTG ( $\beta = -.75, p < .001$ ), indicating that for therapists with high VPTG, personal meaning does not vary as a result of STS scores.

The Samios et al. (2012) study seems to support Calhoun and Tedeschi (2012) that VPTG and STS occur together and that the existence of VPTG can potentially lessen the impact of STS. While the researchers attempted to look closely at therapists who specialized in sexual abuse victims, the researchers later expanded its pool to therapists who reported working with a more general pool of trauma survivors. Unfortunately, they did not report how they assessed for trauma beyond sexual trauma. Also, while the researchers stated that the majority of participants worked with trauma survivors, they did

not quantify this statement. Including trauma exposure variables in the regression model would have enriched the research, as it may be connected to increases in STS and VPTG.

**Summary of VR and VPTG research.** Some of the early studies on vicarious resilience and vicarious post-traumatic growth were qualitative or contained a qualitative component (Arnold et al., 2005; Barrington & Shakespeare-Finch, 2013; Ben-Porat & Itzhazky, 2009). This is appropriate as VPTG in mental health professionals is a new area of research. There was support for Calhoun and Tedeschi's (2013) definition of VPTG in the following areas: improvement in interpersonal relationships (Barrington & Shakespeare-Finch, 2013; Ben-Porat & Itzhazky, 2009), increased focus on spirituality, changes in perception regarding the clinician's own good fortune and deepened appreciation for human strength (Arnold et al., 2005; Barrington & Shakespeare-Finch, 2013). Additionally, these results supported the VR construct (Engstrom et al., 2010) in the areas of personal strength, therapists' altered perspectives regarding their own lives (Hernandez, et al., 2007; Engstrom et al., 2008) and their own spirituality (Hernandez, et al., 2007). Since VPTG and VR are relatively new areas of research, these qualitative studies are helpful in elucidating therapists' experiences. However, since there is overlap between qualitative studies of VPTG, VR, and the five factors measured with the PTGI (i.e. new possibilities, relating to others, personal strength, spiritual change and appreciation of life) (Tedeschi & Calhoun, 1996), it would be appropriate to use the PTGI in order to measure VPTG quantitatively. The advantage of the PTGI is that more people can be surveyed and results can be generalized to larger populations of mental health professionals.

A few studies (Barrington & Shakespeare-Finch, 2013; Ben-Porat & Itzhaky, 2009; Brockhouse et al., 2011; Gibbons et al., 2011; Lambert & Lawson, 2011; Lev-Wiesel et al., 2009; Linley & Joseph, 2007) have utilized the PTGI in order to measure VPTG in mental health professionals. Two of these studies (Gibbons, Murphy, & Joseph, 2011; Linley & Joseph, 2007) examined VPTG in samples of mental health professionals but did not assess for the number of trauma victims in the caseload or clients' presenting problems. It was unclear if these mental health professionals worked with trauma victims, so these studies were unable to elucidate whether working with trauma victims contributes to VPTG.

Ben-Porat and Itzhaky (2009) attempted to examine this question by comparing social workers who worked with family violence victims to those who did not identify as working with victims of family violence. They found that there was a significantly higher level of VPTG among the social workers who did not work with family violence victims. However, some of their qualitative findings were contradictory, as more family violence workers reported positive changes in interpersonal relationships. However, since they did not assess for typical presenting problems in the group that did not work in family violence, it is possible that this group also worked with survivors of trauma.

A couple of studies (Lambert & Lawson, 2011; Lev-Wiesel et al., 2009) compared the experience of survivor responders and responders (mental health professionals who responded to war or natural disaster trauma) in order to differentiate between PTG (posttraumatic growth that occurs as a result of primary exposure to trauma) and VPTG of mental health professionals working with trauma victims. While

Lev-Wiesel et al. (2009) found no significant difference between mental health professions who were victims of trauma and those who were indirectly exposed to trauma through working with their clients, Lambert and Lawson (2011) found that survivor responders had significantly higher scores on measures of VPTG than did responders who were not directly impacted by trauma. However, neither of these studies assessed for percentage of trauma survivors on caseload. This missing information might partially explain the contradictory findings. It is possible that VPTG may only be present when there is a certain threshold of trauma victims on the therapists' caseloads. In one study, VT was only detected when a counselors' caseload consisted of 40% or more of trauma victims (Cunningham, 2003).

Brockhouse et al. (2011) did attempt to address how caseload and exposure variables might impact the presence of posttraumatic growth in mental health professionals. They found that a cumulative exposure variable predicted VPTG. However, they failed to assess for typical presenting problems of clients. Additionally, a low response rate calls the generalizability of these results into question.

A few studies have begun to explore the relationship between STS and VPTG (O'Sullivan & Wheelan, 2011; Samios et al., 2012). This is an important new area of research because it can help to assess the hypothesis that STS and VPTG are likely to occur together. Future studies should also consider the relationship between VT and VPTG since the theory behind posttraumatic growth relates to cognitive shifts in worldview (Calhoun & Tedeschi, 2012).

### **The Current Study**

The current study attempted to improve upon some of the concerns addressed in this review. The current study examined a homogenous population of licensed or licensed-eligible mental health professionals with a graduate degree. The study also assessed whether there is a minimum threshold for trauma victims in therapist caseload in order for VT, STS, BO, CS or VPTG to be detected. Three exposure groups were determined: 22 reported 70% and more (high exposure group), 19 reported between 40% and 70% (moderate exposure group) and 19 reported under 40% (low exposure group). This is especially important since VT was not detected in a sample of trauma therapists unless their caseloads had 40% or more trauma clients (Cunningham, 2003). Additionally, therapists in the current study were provided a definition of trauma clients as having PTSD symptoms in order to increase the reliability of “traumatized clients”. Typical presenting problems of these clients were also identified in order to better understand the client population.

This study also examined the differences among senior, mid-career, and novice mental health professionals in order to better understand if one of these groups may be more likely to experience VT, STS, BO, CS, or VPTG. In addition, this study examine the relationship among VT, STS, and VPTG in order to examine further the construct of VPTG put forth by Calhoun and Tedeschi, (2012). Finally, the use of mixed methodologies in this study is relevant as studies on the potential positive impacts for therapists working with trauma victims (VPTG and VR) is a new area of research and therefore somewhat exploratory in nature.

### **Hypotheses and Research Questions**

For this current mixed-methods study, there were 9 quantitative research questions and hypotheses. Additionally, 2 qualitative research questions were generated. The hypotheses from research questions 1, 3, 4, 5, 7, and 8 were tested using ANOVAs with follow-up post hoc tests conducted as appropriate. The hypotheses from research questions 2 and 6 were tested using MANOVAs because of the possibility of a higher correlation between the dependent variables STS and BO that make up the construct of compassion fatigue. Follow-up univariate analyses to test for mean differences among individual variables were conducted when appropriate. The hypothesis from research question 9 was tested using a hierarchical linear regression analysis. The qualitative data was examined using content analysis. Below are the hypotheses and research questions that guided this study.

### **Quantitative Research Questions and Hypotheses.**

RQ1. Are there differences among therapists who have high (70% and more), medium (between 40% and 70%) and low (under 40%) caseloads of trauma victims on reports of amount of vicarious trauma?

H01: There are no significant differences in amount of vicarious trauma as a function of levels (high, medium, low) of traumatized clients in mental health professionals' caseloads.

RQ2. Are there differences among therapists who have high (70% and more), medium (between 40% and 70%) and low (under 40%) caseloads of trauma victims on reports of amount of compassion fatigue (secondary traumatic stress and burnout)?

H02: There are no significant differences in amount of compassion fatigue



(secondary traumatic stress and burnout) as a function of levels (high, medium, low) of traumatized clients in mental health professionals' caseloads.

RQ3. Are there differences among therapists who have high (70% and more), medium (between 40% and 70%) and low (under 40%) caseloads of trauma victims on reports of amount of compassion satisfaction?

H03: There are no significant differences in amount of compassion satisfaction as a function of levels (high, medium, low) of traumatized clients in mental health professionals' caseloads.

RQ4. Are there differences among therapists who have high (70% and more), medium (between 40% and 70%) and low (under 40%) caseloads of trauma victims on reports of amount of vicarious posttraumatic growth?

H04: There are no significant differences in amount of vicarious posttraumatic growth as a function of levels (high, medium, low) of traumatized clients in mental health professionals' caseloads.

RQ5. Are there differences among therapists who are senior in their careers (20 or more years of experience), in the middle of their careers (more than 5 to fewer than 20 years of experience) or early in their careers (5 or fewer years of experience) on reports of amount of vicarious trauma?

H05: There are no significant differences in amount of vicarious trauma as a function of differences in therapist experience level.

RQ6. Are there differences among therapists who are senior in their careers (20 or more years of experience), in the middle of their careers (more than 5 to fewer than 20

years of experience) or early in their careers (5 or fewer years of experience) on reports of amount of compassion fatigue (secondary traumatic stress and burnout)?

HO6: There are no significant differences in amount of compassion fatigue (as measured by secondary traumatic stress and burnout) as a function of differences in therapist experience level.

RQ7. Are there differences among therapists who are senior in their careers (20 or more years of experience), in the middle of their careers (more than 5 to fewer than 20 years of experience) or early in their careers (5 or fewer years of experience) on reports of amount of compassion satisfaction?

HO7: There are no significant differences in amount of compassion satisfaction as a function of differences in therapist experience level.

RQ8. Are there differences among therapists who are senior in their careers (20 or more years of experience), in the middle of their careers (more than 5 to fewer than 20 years of experience) or early in their careers (5 or fewer years of experience) on reports of amount of vicarious posttraumatic growth?

HO8: There are no significant differences in amount vicarious posttraumatic growth as a function of differences in therapist experience level.

RQ9. Do vicarious trauma and secondary traumatic stress predict vicarious posttraumatic growth in mental health professionals above and beyond the effects of exposure to trauma victim clients?

HO9: The addition of the predictor variables secondary traumatic stress and vicarious trauma to the hierarchical regression model will not increase the percentage of

variance accounted for by vicarious posttraumatic growth that is already accounted for by the covariate variable, exposure.

### **Qualitative Research Questions.**

Question 10: What negative changes do mental health professionals report that are attributable to their work with trauma victims?

Question 11: What positive changes do mental health professionals report that are attributable to their work with trauma victims?

### **Summary**

In this chapter I have described the rationale, hypotheses and research questions used for this study. In the next chapter, I will describe the method I used to conduct the study.

## CHAPTER III

### Method

The above literature review examined research regarding therapists' exposure to traumatized clients and therapist experience level with regard to vicarious trauma (VT) and secondary traumatic stress (STS). It also revealed new areas of interest concerning vicarious resilience (VR) and vicarious posttraumatic growth (VPTG). This current study is designed to clarify the impact of therapist exposure variables and years of experience on VT and secondary traumatic stress (STS), Burnout (BO), Compassion Satisfaction (CS), and VPTG. By conducting this research I hope to clarify the potential relationships among VPTG, STS, VT, and therapists' exposure to clients' trauma.

### Population and Sample

The population for this study consisted of all licensed or license-eligible mental health professionals in the state of Oregon ( $N = 565$ ) who had obtained a graduate level education that qualified them to work in the mental health field. A total of 68 participants began the survey but only 60 responders completed all of the measures, so only 60 cases were included in the analysis for a return rate of 11%. An explanation of the pattern of responders by site is given below.

The sample consisted of clinicians from private practice, community mental health, inpatient and outpatient settings. The client population served by the clinicians included adults, children, and families. The different settings and client populations served allowed for a range of clinicians that could more accurately represent mental

health professionals from across Oregon. The sample included licensed professional counselors, marriage and family therapists, clinical social workers, psychologists in clinical practice, psychologists who primarily supervise, and one MD psychiatrist. The psychologists who supervise were included because they would be exposed to clients' trauma through the process of conducting supervision. Additionally, one psychiatrist was included because she worked with the same population as her counselor colleagues.

### **Instrumentation**

**Demographic questionnaire.** The instruments included a demographic questionnaire that asked for age, gender, practice setting, license, license status and years as a mental health professional. In addition, total caseload, trauma caseload and the most common client presenting problems for the therapists were collected.

**Posttraumatic Growth Inventory.** The Posttraumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996) was used to assess for posttraumatic growth in people who had vicariously experienced traumatic events. The 21-item scale includes factors of New Possibilities, Relating to Others, Personal Strength, Spiritual Change and Appreciation of Life. Tedeschi and Calhoun (1996) and Calhoun et al. (2000) reported a Cronbach's alpha internal reliability of .90 and a test-retest reliability of .70 with a sample of 199 Male and 405 Female undergraduate students from a southern university who reported that they experienced a significant life event such as bereavement, accident, divorce of parents, relationship breakup or criminal victimization within the last 5 years. Ben-Porat and Itzhaky (2009) report a Cronbach's alpha internal reliability of their PTGI

questionnaire of .93, adapted for their sample of 214 social workers employed at violence prevention centers, battered women's shelters, and welfare bureaus in Israel.

Tedeschi and Calhoun (1996) also reported construct validity of the PTGI. They measured construct validity by comparing 54 (23 men and 31 women) undergraduate students who reported at least one major trauma of great severity within the past year with 63 (32 men and 31 women) who denied experiencing any trauma. A gender by severity of trauma ANOVA with the total PTGI score as the dependent variable showed that women reported more posttraumatic growth benefits ( $M = 81.60, SD = 21.09$ ) than did men ( $M = 70.25; SD = 21.87$ ) [ $F(1,113) = 10.69, p < .001$ ], and the mean difference = 11.35). It also showed that persons experiencing severe trauma reported more benefits ( $M = 83.16, SD = 19.27$ ) than those who did not report the experience of a trauma ( $M = 69.75, SD = 20.47$ ) [ $F(1,113) = 12.33, p < .001$ ], and the mean difference = 13.41). The gender by severity interaction was not significant [ $F(1, 113) = 1.70, p > .05$ ]. While those who did not experience a traumatic event reported the experience of posttraumatic growth on the measure, perhaps indicating a positive cognitive bias about change, their scores were significantly lower than those who did experience a traumatic event, indicating that trauma was a catalyst for growth.

**Trauma Attachment and Belief Scale.** (TABS; Pearlman, 2003). The Trauma Attachment and Belief Scale was used to assess for cognitive disruptions in survivors of trauma as well as mental health professionals who treat trauma survivors. The TABS includes 84 items on a Likert scale, and negative items are reverse scored. The TABS contains ten sub-scales that relate to the need areas thought to be sensitive to trauma: self-

trust, other-trust, self-safety, other-safety, self-esteem, other-esteem, self-intimacy, other-intimacy and self-control and other-control. The TABS has an internal consistency of .96 and a test-retest correlation of .75 based on a sample of 260 college students (Pearlman, 2003). Adult norms are based on a sample of 1,743 people aged 17 and over (Pearlman, 2003). Pearlman (2003) reports that the measure has sound construct validity as demonstrated by the TABS correlations with the Trauma Symptom Inventory (TSI; Briere, 1995) in a sample of 207 outpatients with chronic disturbances. The TABS total score correlates with the TSI subscales of depression ( $r = .63, p < .001$ ), dissociation behavior, ( $r = .64, p < .001$ ), and impaired self-reference ( $r = .72, p < .001$ ). Studies have also used the TABS to examine VT in trauma therapists and found higher TABS scores in therapists with higher exposure to traumatized clients (Pearlman & Mac Ian, 1995; Schauben & Frazier, 1995).

**Professional Quality of Life Scale V** The Professional Quality of Life Scale V (ProQOL-V; Stamm, 2010) is comprised of two constructs: Compassion Satisfaction (CS) and Compassion Fatigue (CF). CS encompasses the positive aspects of one's job. CF encompasses the negative aspects and divides further into two parts: (a) Burnout (BO) and (b) Secondary Traumatic Stress (STS) that occurs as a result of the work. Stamm (2010) reports good construct validity as demonstrated by 200 previously published studies using various versions of this measure (ProQOL, ProQOL-III, ProQOL-IV, and ProQOL-V). Stamm also reports improved psychometric properties with the latest version, the ProQOL-V, over the previous versions. Killian's (2008) study of 104 mental health clinicians used a multiple regression analysis and found that the subscale of CS

was predicted by weekly hours of clinical contact ( $B = -.37$ ) and therapists' locus of control at work ( $B = .22$ ), and the subscale of STS was predicted by work drain ( $B = .32$ ), emotional self-awareness ( $B = -.24$ ) and therapists' history of traumas ( $B = .23$ ). Stamm also reports that the three subscales of CS, STS, and BO measure different constructs. Stamm reports that inter-scale correlations showed 2% shared variance ( $r = -.23$ ;  $co-\sigma = 5\%$ ;  $n = 1187$ ) with STS and 5% shared variance ( $r = -.14$ ;  $co-\sigma = 2\%$ ;  $n = 1187$ ) with BO. She reports that the shared variance between the BO and STS scales measure different constructs, and the shared variance likely reflects personal distress found in both conditions. The shared variance between these BO and STS is 34% ( $r = .58$ ;  $co-\sigma = 34\%$ ;  $n = 1187$ ). STS and BO measure negative affect, but the burnout scale does not address fear while the STS scale does.

**Qualitative questions.** Two open ended qualitative questions, designed by the researcher, asked participants to write about negative and positive aspects of their personal and professional lives as a result of their work with the trauma-affected client population. The questions were included as written responses in the questionnaire packet to allow mental health professionals to share additional aspects of their experience of working with traumatized clients that may not be captured by the quantitative measures. The questions were:

1. Please describe any positive changes in your personal or professional life that you attribute primarily to your therapy practice with trauma victims.
2. Please describe any negative changes in your personal or professional life that you attribute primarily to your therapy practice with trauma victims.



## **Data Collection**

Participants were recruited from 7 community mental health agencies in Southern Oregon and two internet listserves in Oregon. The listserves were a consultation group of mental health professionals in the Willamette Valley of Oregon and a listserve from the Oregon Psychological Association. Data collection began January 2013 and was completed in June 2013. Administrators of the mental health agencies were contacted by the researcher by phone and e-mail for the purpose of participating in the study. As a potential incentive for participation, the agencies were offered a training conducted by the researcher on the vicarious impact of working with traumatized clients prior to the data collection. In addition, agencies were offered a debriefing of the agency's overall results as reported by its staff. The procedures for each of the different data collection procedures are reported as follows.

Data were collected at an outpatient general community mental health agency that serves low-income adults and children in a rural community in Oregon. The majority of the data (9 cases) were collected with completed paper surveys after the participants received a training regarding the positive and negative effects of therapy work with traumatized clients. (This training was conducted by the primary investigator of this current study.) The training was conducted prior to participants completing the measures. This was done so as to not to introduce bias into the results related to explaining the constructs of VT, STS, BO, CS, and VPTG to participants prior to them completing the surveys. The surveys took approximately 30 minutes to complete. After the data were collected, a one-hour training was conducted by the researcher on vicarious trauma,

compassion fatigue, compassion satisfaction, vicarious resilience, and vicarious posttraumatic growth. In the training, these terms were defined and current literature related to them was reviewed. This same training was provided to all interested agencies. Due to an error, one of the measures (ProQOL-V) was not included in the original packet and was provided to the nine participants two weeks after the training and collected two weeks after that for a total of 4 weeks after the training. It is possible this may have changed the results for participants related to the ProQOL-V measure or this agency. A debriefing about the agency results was later given to the agency. Three more people volunteered to complete the surveys at that time (two completed paper surveys and one completed the surveys online). The estimated response rate for this agency was 40%, as 12 out of 30 potential participants completed the surveys.

Participants at another outpatient community mental health agency that served children, adolescents, and families in southern Oregon were asked to complete the surveys. Due to an error, the ProQOL-V was not included in the original survey packet. Six staff members were present for the initial data collection when all measures were completed, except the ProQOL-V. The researcher returned to conduct the training, and participants completed the ProQOL-V prior to the beginning of this training. One original participant was not present to complete the ProQOL-V. Two staff members who had not been present at the original data collection came to this training. One declined to participate, and the other completed all of the survey questionnaires at that time. A total of six out of eight staff members at this agency completed all the questionnaires for an estimated response of 75%.

An outpatient general community mental health agency with a volunteer clinical staff that serves under- and uninsured adults in Oregon was contacted. Agency staff were given the option to complete the survey in-person at the agency (which included a training) or complete the surveys online (which did not include a training). A total of 12 people attended the training and completed questionnaire packets in person prior to the commencement of the training. One person did not complete the questionnaires because the person was not licensed or license eligible as a mental health provider. Participants who did not attend the training ( $n = 3$ ) completed the surveys online after the training had taken place for a total of 14 out of 25 possible participants, leaving a response rate of 56%.

An outpatient community mental health agency housed in a human service agency in Oregon that serves low-income and homeless adults also completed the surveys and received training after completing the surveys. The packets were handed out and collected prior to the commencement of the training. Four out of five mental health professionals participated for a total response rate of 80%.

An Oregon residential-treatment community mental health agency for traumatized children also participated, with 10 of 14 staff completing questionnaire packets, yielding a 71% response rate. The entire packet was completed prior to the commencement of the training. Nine participants completed the paper surveys, and one completed the packet online prior to the training.

An outpatient mental health agency that was part of an Employee Assistance Program in Oregon was contacted for inclusion. Participants agreed to participate in the

data collection but declined the training. Paper packets were distributed at the agency by the researcher. Participants were given three weeks to complete the surveys, and they were collected at the end of this time by the researcher. Five of ten mental health professionals at the agency completed the questionnaire packet for a response rate of 50%.

Members of a group private practice in psychology that served both adults and children in Oregon were also recruited. Participants from the group practice declined to participate in the training. Packets were hand-delivered to the group practice members, and members had three weeks to complete the survey. Five members completed the questionnaires for a response rate of 55%.

Finally, members of the Oregon Psychological Association ( $n = 412$ ) and a consultation group for mental health professionals on a listserv ( $n = 52$ ) in the Willamette Valley of Oregon were contacted through online listserves and asked to participate in the study. Thirteen responded but only five returned completed surveys, yielding a response rate of less than 1%. Due to listserv regulations, the link to the survey could only be posted once.

### **Summary of Data Collection**

Out of a total population of 565 that was approached to participate in this study, either in person or online, a total of 68 agreed to participate and returned the questionnaire packets (response rate = 12%). However, due to incomplete surveys, only 60 of the 68 returned surveys were used in the data analysis. Therefore, this study yielded an overall response rate of 10.6%.

## Chapter IV

### Results

#### Participant Demographics

Of the possible overall participant pool of 565 that was approached to participate in this study, 60 returned useable questionnaire packets (return rate of 11%). The sample of participants for this study was licensed or license-eligible mental health professionals with a graduate level education. Participants who had not yet obtained a graduate degree were excluded from the study. Table 1 reports demographic information that is summarized in the following paragraphs.

There were 60 participants in this sample. The age of the sample ranged from 26 to 72 years with a mean of 48.6 years. The majority of the participants ( $n = 48$ ) reported their gender as female and the remaining participants ( $n = 12$ ) reported as male.

Participants worked in different clinical settings: 36 reported employment in community mental health, 2 in crisis centers, 2 in an Employee Assistance Program (EAP) clinic, 2 in a group practice, 18 in private practice, 9 in residential community mental health, and 5 reported that they worked in multiple settings.

The participants also reported their level of education. The participants who reported holding a master's degree reported that their degrees were in the following areas: 21 reported a master's degree in clinical or counseling psychology, 1 reported a master's degree in clinical mental health, 7 reported a master's degree in marriage and family therapy, 17 reported a master's degree in social work, 1 reported a master's degree in educational psychology and human development, and 2 reported a master's degree but

did not report their area of study. In addition, 10 reported doctoral degrees: 6 in clinical psychology, 1 in clinical psycho-pharmacology, 2 in counseling psychology, and 1 with an unspecified specialty. Also, 1 reported a medical degree in psychiatry.

Participants also reported the license they currently held or would be eligible to receive. Of those who reported being currently licensed, 24 reported holding the license of Licensed Professional Counselor (LPC), 8 reported being a Licensed Marriage and Family Therapist (LMFT), 15 reported being a Licensed Clinical Social Worker (LCSW), 7 reported Licensed Psychologist (LP), 1 reported holding multiple licenses (LPC, LMFT, and LP), and 1 reported holding a Medical Doctor (MD) license. Of the participants who reported being license-eligible, 8 reported being license-eligible for an LPC, 3 reported being license-eligible for an LMFT, and 3 reported being license-eligible for an LCSW. Additionally, four participants who did not initially report being license-eligible were included in the current study for the following reasons. One person who reported not being currently licensed or working towards licensure was in the process of retiring. This person was included in the sample because he/she reported holding a master's degree in counseling and therefore was assumed to be license-eligible. One participant was included who listed a master's degree in educational psychology and human development but did not report her license status. One participant reported that she was not currently licensed or working toward licensure. However, the participant indicated that she held a doctoral degree in clinical psychology and were therefore deemed license-eligible and included in the sample. Another person was included who reported a Ph.D in clinical psychology and ten years of experience.

Participants were also asked to report the number of years they had worked as mental health professionals and reported a range from less than 1 year to 43 years of professional mental health experience. The average length of professional mental health experience was 14.6 years. In this study, participants with 20 or more years of experience were considered senior practitioners. Participants with more than 5 to fewer than 20 years of experience were labeled mid-career. Participants with 5 or fewer years of experience were considered novice professionals. Out of the total sample, there were 23 senior mental health professionals, 21 mid-career mental health professionals, and 16 novice mental health professionals.

Participants were asked how many clients they saw on average per week. Data showed that 17 participants reported counseling between 1 and 10 clients per week, 20 participants reported 11 to 19 clients, 4 participants reported that they saw between 20 and 30 clients per week, and 1 reported counseling over 30 clients per week. Next, participants were asked about how many trauma clients they treated on average per month. Out of the sample, 29 reported that they worked with between 1 and 10 clients per month, 18 reported that they worked with between 11 and 19 clients, 4 reported that they worked with between 20 and 30 clients, and 9 reported that they worked with between 31 and 40 clients per month.

Participants were asked about their exposure to traumatized clients. Participants were asked what percentage of their caseload contained trauma victims in a typical month. These data showed that 20 participants reported that trauma victims made up less than 40% of their caseload in a typical month, 18 reported between 40% and 70%, and 22

reported 70% and more of their case load were trauma victims in a typical month.

Finally, participants were also asked what percentage of their caseload contained trauma victims in the past 6 months in order to determine the exposure variable. Three groups were determined: 22 reported 70% and more (high exposure group), 19 reported between 40% and 70% (moderate exposure group) and 19 reported under 40% (low exposure group).

Participants were asked to report the top three presenting problems of trauma victim clients with whom they worked. This question yielded the following: childhood abuse was reported most frequently, with 41 participants reporting clients with childhood sexual abuse, 36 reporting childhood emotional abuse, 33 reporting childhood physical abuse and 26 reporting childhood neglect. The next two most frequently reported presenting problems were domestic violence reported by 22 participants and sexual assault reported by 12 participants. Less commonly reported presenting problems were: car or plane accident ( $n = 4$ ), physical assault ( $n = 4$ ), mugging or robbery ( $n = 1$ ) and war trauma ( $n = 1$ ). Participants were also given the option to write in a trauma-related presenting problem of their clients. Several wrote responses that included: vicarious trauma as a first responder to a crisis ( $n = 1$ ), homelessness ( $n = 1$ ), depression/anxiety ( $n = 1$ ), substance abuse ( $n = 1$ ) and attachment trauma ( $n = 1$ ).

### **Descriptive Statistics**

In this section I report the descriptive statistics that were used to describe the data. The descriptive statistics for all variables are also reported in Table 2. In addition, Table 3 reports a correlation matrix for all dependent variables.



**Vicarious trauma.** Vicarious trauma (VT) was measured by the total score of the Trauma Attachment Belief Scale (TABS; Pearlman, 2003). Higher scores on this measure indicate higher levels of cognitive disruptions. This scale is reported in standard t scores that have been standardized to have a mean of 50 and a standard deviation of 10. Possible scores range from 20 to 80. Pearlman (2003) reports that on the TABS the mean VT total score for trauma therapists is 44 with a standard deviation of 9. The mean in the current study of mental health professionals was equivalent to Pearlman's sample of trauma therapists, as the mean for the current sample was 44.99 and the standard deviation was 7.91. In the current sample the range of TABS scores was 26 to 65. Individual means and standard deviations for the current sample based on experience level and exposure level were also calculated. The means and standard deviations for experience level were as follows: senior ( $M = 43.00$ ,  $SD = 7.46$ ), mid-career ( $M = 44.48$ ,  $SD = 7.45$ ), and novice ( $M = 48.67$ ,  $SD = 8.50$ ). The means and standard deviations for exposure levels were as follows: high ( $M = 47.00$ ,  $SD = 7.69$ ), moderate ( $M = 44.05$ ,  $SD = 8.65$ ) and low ( $M = 43.75$ ,  $SD = 7.38$ ).

**Compassion Fatigue and Compassion Satisfaction Scores.** Compassion fatigue consists of two components: secondary traumatic stress (STS) and burnout (BO). The Professional Quality of Life Scale V (ProQOL-V; Stamm, 2010) measures secondary traumatic stress (STS), Burnout (BO) and Compassion Satisfaction (CS) on three subscales. Stamm (2010) reports that the Pro-QOL-V, the last version of the Profession Quality of Life Scale, has improved psychometric properties over earlier versions of this scale. There is no total score for this measure and these subscales are used independently.

All subscales are reported in standardized t scores. Stamm reports that the ranges for the three subscales of the ProQOL V are as follows: STS = 34-77, BO= 28-73, and CS=19-68. Stamm also reports that the norms for the ProQOL V originate from a database of 1289 individuals that come from multiple studies of professionals from the helping professions such as mental health counselors, nurses, teachers, and attorneys.

The overall mean for STS in the current study was 61.45 with an SD of 5.68 and a range of 48-75. Stamm (2010) reports that an STS score of 61.45 would be considered a high score, which would place the current sample among the top 75% of scores in Stamm's STS database. The overall mean for BO in the current study was 50.40 and the SD was 5.73. The range of BO scores was 38-62. Stamm reports that the overall BO mean of the current sample would be considered average. The overall sample mean for CS in the current study was 55.95 with a SD of 6.78 and a range of 39-68. According to Stamm, the overall CS mean of the current sample would be slightly above average.

**Posttraumatic Growth.** The Posttraumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996) was originally intended to measure PTG after experiencing a trauma. There is no official manual for the PTGI, but it was originally normed on a sample of college students with an age range from 17 to 25 years of women and men who had been exposed to trauma (PTGI scores = 90.26 and 73.61, respectively) and women and men who had not been exposed to trauma (PTGI scores = 73.49 and 66.13, respectively). Higher scores on the PTGI indicate higher levels of PTG. PTGI scores range from 0-105. The PTGI has also been used to measure VPTG in mental health

professionals (Gibbons et al., 2011). The mean PTGI score for participants in the current study was  $M = 51.50$ ,  $SD = 24.78$ , and range = 2-100.

### **Data Analysis**

In this section, I will describe how each quantitative research question and corresponding hypothesis were examined and how each qualitative research question was analyzed. Hypotheses were tested using: (a) ANOVAs with follow-up post hoc tests as appropriate, (b) MANOVAs with follow-up univariate analyses of variance where appropriate and (c) hierarchical multiple regression.

**Demographic Questionnaire.** Results of the demographic questionnaire were aggregated in frequencies and percentages. They are reported in Table 1.

**Quantitative analysis.** Analysis of Variance (ANOVA) was conducted to see if there were differences on scores of vicarious trauma, compassion satisfaction, and vicarious posttraumatic growth as a result of differences in therapist caseload and experience level. The independent variables of the ANOVA analyses were: (a) caseload of trauma victims and (b) experience level of therapists. High, medium, and low caseloads were operationalized by participants selecting a range that corresponded to percentage of trauma victims on their caseload during the past six months. The high and low end of the caseload range was averaged to create a discrete value for that range. For example, if a participant reported a range of 10-20%, they were assigned the discrete value of 15. Based on these values, participants were placed into a high, medium, or low exposure group. Three groups in the caseload variable were determined: 22 reported 70% and more (high exposure group), 19 reported between 40% and 70% (moderate exposure

group), and 19 reported under 40% (low exposure group). Three groups in the experience variable were determined: 20 or more years of experience is considered senior ( $n = 22$ ), more than 5 to fewer than 20 years of experience is considered mid-career ( $n = 23$ ) and 5 or fewer years of experience is considered novice ( $n = 15$ ). The dependent variables are the scores the three quantitative measures: (a) ProQOL subscale of CS, (b) TABS total score and (c) PTGI total score. The  $p$  value for significance testing for all analyses was .05.

Multivariate Analysis of Variance (MANOVA) was conducted to see if there were differences on scores of compassion fatigue as a result of differences in therapist caseload and experience level. The independent variables of the MANOVA analyses were: (a) caseload of trauma victims and (b) experience level of therapists. Three groups in the caseload variable were determined: 22 reported 70% and more (high exposure group), 19 reported between 40% and 70% (moderate exposure group), and 19 reported under 40% (low exposure group). Three groups in the experience variable were determined: 20 or more years of experience is considered senior ( $n = 22$ ), more than 5 to fewer than 20 years of experience is considered mid-career ( $n = 23$ ) and 5 or fewer years of experience is considered novice ( $n = 15$ ). The MANOVA was used for this part of the analysis because these two dependent variables originate from the same measure. The dependent variables are the scores on two subscales of the ProQOL-V measure that comprise the compassion fatigue construct: (a) ProQOL-V subscale of STS and (b) ProQOL-V subscale of BO. Since STS and BO could be related, there was a need to control for family-wise error rate. Post hoc tests were conducted as needed and all tests

used SPSS for analyses. The  $p$  value for significance testing for all analyses was .05.

A hierarchical regression test was also conducted in order to determine the relationship of therapist exposure to traumatized clients, VT, and STS to VPTG; specifically, do the independent variables of VT and STS predict the dependent variable of VPTG in mental health professionals when the effects of the covariate variable, exposure to trauma victim clients, are controlled for? This question sought clarity as to whether VT or STS might predict VPTG based on Calhoun and Tedeschi's (2012) construct of VPTG. The TABS (Pearlman, 2003) was used to measure VT and the STS subscale of the ProQOL-V (Stamm, 2010) was used to measure STS. The  $p$  value for significance for this analysis was .05.

**Qualitative Analysis.** A content analysis of the open-ended questions was completed by the researcher in order to label, assess frequency, and assess importance of the domains and categories. After the domains and categories were identified, an auditor checked the themes for agreement. The auditor was a doctoral candidate in counseling psychology with previous experience in qualitative research. Consensus was reached between the rater and auditor regarding the domains and categories, as well as frequency and importance.

### **Research Question 1**

The first research question asked: Are there differences among therapists who have high (70% and more), medium (between 40% and 70%) and low (under 40%) caseloads of trauma victims on reports of amount of vicarious trauma?

**H01.** The null hypothesis for Research Question 1: There are no significant differences in amount of vicarious trauma as a function of levels (high, medium, low) of traumatized clients in mental health professionals' caseloads.

**Assumptions of the ANOVA.** Before calculating the Analysis of Variance (ANOVA) the following assumptions were checked in order to assess the appropriateness of using an ANOVA: data normality, homogeneity of variance, and the absence of univariate outliers. The results of this analysis found: (a) the Shapiro-Wilk test revealed that VT data were normally distributed; (b) there was homogeneity of variance as assessed by Levene's test of homogeneity of variance ( $p = .93$ ); (c) there were no univariate outliers as assessed by z scores. Based on these tests of assumptions, it was decided to conduct an ANOVA.

**Univariate Analysis.** An ANOVA was performed to determine the differences among the independent variable's high, medium, and low exposure groups on the dependent variable of VT. There was not a statistically significant difference in VT scores among mental health professionals from high, medium, or low exposure groups, [ $F(2,57) = 1.06, p > .05$ ].

**Null hypothesis results.** Based on this analysis, the null hypothesis for research question 1 was accepted: There are no significant differences on amount of vicarious trauma as a function of levels (high, medium, low) of traumatized clients in mental health professionals' caseloads.

## **Research Question 2**

The second research question asked: Are there differences among therapists who have high (70% and more), medium (between 40% and 70%) and low (under 40%) caseloads of trauma victims on reports of amount of compassion fatigue (secondary traumatic stress and burnout)?

**H02.** The null hypothesis for Research Question 2: There are no significant differences in amount of compassion fatigue (secondary traumatic stress and burnout) as a function of levels (high, medium, low) of traumatized clients in mental health professionals' caseloads.

**Assumptions of the MANOVA.** Before calculating the multivariate analysis of variance (MANOVA), the following assumptions were checked in order to assess the appropriateness of the MANOVA: data normality, the absence of univariate and multivariate outliers, linear relationships of each level of independent variable with the dependent variables, homogeneity of variance and no multi-collinearity between the dependant variables.

The results of this analysis found: (a) the Shapiro-Wilk test revealed that STS data were normally distributed ( $p > .05$ ), and BO was not normally distributed ( $p < .05$ ), but since MANOVA is robust against assumption violations of normality, the MANOVA was conducted (Stevens, 2009); (b) there were no univariate or multivariate outliers, as assessed by z scores and Mahalanobis distance ( $p > .001$ ), respectively; (c) there were linear relationships, as assessed by a scatter plot; (d) no multicollinearity, as assessed by Pearson correlations between BO and STS ( $r = .256, p = .048$ ); (e) there was

homogeneity of variance-covariance matrices, as assessed by Box's M test ( $p = .80$ ).

Based on these tests of assumptions, it was decided to conduct a MANOVA.

**MANOVA analysis.** MANOVA was performed to determine the differences among the independent variable's high, medium, and low exposure groups on the dependent variables that comprise compassion fatigue, STS and BO. Data are expressed as mean and standard deviation. Mental health professionals in high, medium and low exposure groups scored on STS ( $M = 63.05$   $SD = 6.72$ ,  $M = 59.74$   $SD = 4.91$  and  $M = 61.40$   $SD = 4.89$ , respectively) and BO ( $M = 52.43$   $SD = 5.61$ ,  $M = 49.84$   $SD = 5.81$  and  $M = 48.80$   $SD = 5.43$ , respectively). The differences among exposure groups on the combined dependent variables as calculated with the MANOVA were not statistically significant, [ $F(2, 112) = 2.27$ ,  $p > .05$ ; Wilks'  $\Lambda = .89$ ; partial  $\eta^2 = .06$ ].

**Null hypothesis results.** Based on this analysis, the null hypothesis for research question 2 was accepted: There are no significant differences on amount of compassion fatigue (secondary traumatic stress and burnout) as a function of levels (high, medium, low) of traumatized clients in mental health professionals' caseloads.

### **Research Question 3**

The third research question asked: Are there differences among therapists who have high (70% and more), medium (between 40% and 70%) and low (under 40%) caseloads of trauma victims on reports of amount of compassion satisfaction?

**H03.** The null hypothesis for Research Question 3: There are no significant differences in amount of compassion satisfaction as a function of levels (high, medium, low) of traumatized clients in mental health professionals' caseloads.



**Assumptions of the ANOVA.** Before calculating the Analysis of Variance (ANOVA) the following assumptions were checked in order to assess the appropriateness of using an ANOVA: data normality, homogeneity of variance and the absence of univariate outliers. The results of this analysis found: (a) the Shapiro-Wilk test revealed that CS data were normally distributed; (b) there was homogeneity of variance as assessed by Levene's test of homogeneity of variance ( $p = .67$ ); (c) there were no univariate outliers as assessed by z scores. Based on these tests of assumptions, it was decided to conduct an ANOVA.

**Univariate Analysis.** An ANOVA was performed to determine the differences among the independent variable's high, medium, and low exposure groups on the dependent variable of CS. There was not a statistically significant difference in CS scores among mental health professionals from high, medium, or low exposure groups, [ $F(2,57) = 1.08, p > .05$ ].

**Null hypothesis results.** Based on this analysis, the null hypothesis for research question 3 was accepted: There are no significant differences on amount of compassion satisfaction as a function of levels (high, medium, low) of traumatized clients in mental health professionals' caseloads.

#### **Research Question 4**

The fourth research question asked: Are there differences among therapists who have high (70% and more), medium (between 40% and 70%) and low (under 40%) caseloads of trauma victims on reports of amount of vicarious posttraumatic growth?

**H04.** The null hypothesis for Research Question 4: There are no significant differences in amount of vicarious posttraumatic growth as a function of levels (high, medium, low) of traumatized clients in mental health professionals' caseloads.

**Assumptions of the ANOVA.** Before calculating the Analysis of Variance (ANOVA) the following assumptions were checked in order to assess the appropriateness of using an ANOVA: data normality and the absence of univariate outliers. The results of this analysis found: (a) the Shapiro-Wilk test revealed that VPTG data were not normally distributed ( $p < .05$ ), but since ANOVA is robust against assumption violations of normality, the ANOVA was conducted (Stevens, 2009); (b) there was homogeneity of variance as assessed by Levene's test of homogeneity of variance ( $p = .19$ ); (c) there were no univariate outliers as assessed by z scores. Based on these tests of assumptions, it was decided to conduct an ANOVA.

**Univariate Analysis.** An ANOVA was performed to determine the differences among the independent variable's high, medium, and low exposure groups on the dependent variable of VPTG. There was a statistically significant difference in VPTG scores among mental health professionals from high, medium, and low exposure groups, [ $F(2,57) = 4.19, p < .05, \omega^2 = 0.10$ ]. VPTG scores increased from the low exposure group ( $M = 45.6, SD = 8.61$ ) to moderate ( $M = 49.99, SD = 10.29$ ) to high ( $M = 54.20, SD = 9.56$ ) exposure groups, in that order. Tukey post-hoc analysis of the VPTG ANOVA revealed an increase from low ( $M = 45.60, SD = 8.61$ ) to high ( $M = 54.20, SD = 9.56$ ) with a mean difference of 8.59 (95% CI 1.45 to 15.74), and this was statistically significant ( $p = .02$ ). No other group differences were statistically significant.

**Null hypothesis results.** Based on this analysis, the null hypothesis for research question 4 was rejected: There are significant differences on amount of vicarious posttraumatic growth as a function of levels (high, medium, low) of traumatized clients in mental health professionals' caseloads. A Tukey post-hoc test revealed that there was a significant difference between the high and low exposure groups on vicarious posttraumatic growth.

### **Research Question 5**

The fifth research question asked: Are there differences among therapists who are senior in their careers (20 or more years of experience), in the middle of their careers (more than 5 to fewer than 20 years of experience) or early in their careers (5 or fewer years of experience) on reports of amount of vicarious trauma?

**HO5.** The null hypothesis for research question 5: There are no significant differences in amount of vicarious trauma as a result of differences in therapist experience level.

**Assumptions of the ANOVA.** Before calculating the Analysis of Variance (ANOVA) the following assumptions were checked in order to assess the appropriateness of using an ANOVA: data normality, homogeneity of variance, and the absence of univariate outliers. The results of this analysis found: (a) the Shapiro-Wilk test revealed that VT data were normally distributed; (b) there was homogeneity of variance as assessed by Levene's test of homogeneity of variance ( $p = .84$ ); (c) there were no univariate outliers as assessed by z scores. Based on these tests of assumptions, it was decided to conduct an ANOVA.

**Univariate Analysis.** An ANOVA was performed to determine the differences among the independent variable's senior, mid-career or novice experience levels as a mental health professional on the dependent variables of VT. There was not a statistically significant difference in VT scores among mental health professionals from senior, mid-career, or novice level experience groups, [ $F(2,57) = 2.48, p > .05$ ].

**Null hypothesis results.** Based on this analysis, the null hypothesis for research question 5 was accepted: There are no significant differences in amount of vicarious trauma as a function of therapist experience level.

### **Research Question 6**

The sixth research question asked: Are there differences among therapists who are senior in their careers (20 or more years of experience), in the middle of their careers (more than 5 to fewer than 20 years of experience) or early in their careers (5 or fewer years of experience) on reports of amount of compassion fatigue (secondary traumatic stress and burnout)?

**HO6.** The null hypothesis for research question 6: There are no significant differences in amount of compassion fatigue (as measured by its two components of secondary traumatic stress and burnout) as a function of differences in therapist experience level.

**Assumptions of the MANOVA.** Before calculating the multivariate analysis of variance (MANOVA), the following assumptions were checked in order to assess the appropriateness of the MANOVA: data normality, the absence of univariate and multivariate outliers, a linear relationship of each level of independent variable with the

dependent variables, homogeneity of variance and no multi-collinearity between the dependant variables.

The results of this analysis found: (a) the Shapiro-Wilk test revealed that STS data were normally distributed ( $p > .05$ ) and BO was not normally distributed ( $p < .05$ ), but as MANOVA is robust against violations to the assumption of normality, the MANOVA was still conducted (Stevens, 2009); (b) there were no univariate or multivariate outliers, as assessed by z scores and Mahalanobis distance ( $p > .001$ ), respectively; (c) there were linear relationships, as assessed by a scatter plot; (d) there was no multicollinearity, as assessed by Pearson correlations between BO and STS ( $r = .26, p = .05$ ); (e) there was homogeneity of variance-covariance matrices, as assessed by Box's M test ( $p = .54$ ). Based on these tests of assumptions, it was decided to conduct a MANOVA.

**MANOVA Analysis.** A MANOVA was performed to determine the differences among the independent variable's senior, mid-career or novice experience levels as a mental health professional on the dependent variables of STS and BO. Data are expressed as means and standard deviations. Mental health professionals in senior, mid-career, and novice experience levels scored on STS ( $M = 61.87$   $SD = 6.72$ ,  $M = 61.30$   $SD = 5.50$  and  $M = 61.07$   $SD = 4.46$ , respectively) and BO ( $M = 48.18$   $SD = 5.47$ ,  $M = 50.39$   $SD = 5.01$  and  $M = 52.73$   $SD = 6.62$ , respectively). The differences among experience level groups on the combined dependent variables were not statistically significant, [ $F(4, 112) = 1.30$ ,  $p > .05$ ; Wilks'  $\Lambda = .91$ ; partial  $\eta^2 = .04$ ].

**Null hypothesis results.** Based on these analyses, the null hypothesis for Research Question 6 was accepted: there are no differences in amount of compassion

fatigue (secondary traumatic stress and burnout) as a function of differences in therapist experience level.

### **Research Question 7**

The seventh research question asked: Are there differences among therapists who are senior in their careers (20 or more years of experience), in the middle of their careers (more than 5 to fewer than 20 years of experience) or early in their careers (5 or fewer years of experience) on reports of amount of compassion satisfaction?

**HO7.** The null hypothesis for Research Question 7: There are no significant differences in amount of compassion satisfaction as a function of differences in therapist experience level.

**Assumptions of the ANOVA.** Before calculating the Analysis of Variance (ANOVA), the following assumptions were checked in order to assess the appropriateness of using an ANOVA: data normality, homogeneity of variance, and the absence of univariate outliers. The results of this analysis found: (a) the Shapiro-Wilk test revealed that CS data were normally distributed; (b) the assumption of homogeneity of variance was violated as assessed by Levene's test of homogeneity of variance ( $p = .36$ ); (c) there were no univariate outliers as assessed by z scores. Because the assumption of homogeneity of variance was violated, it was decided to conduct a Welch ANOVA.

**Univariate Analysis.** An ANOVA was performed to determine the differences among the independent variable's senior, mid-career or novice experience levels as a mental health professional on the dependent variable of CS. There was not a statistically

significant difference in CS scores among mental health professionals who were senior, mid-career, or novice professionals, [ $F(2,31.88) = 3.18, p > .05$ ].

**Null hypothesis results.** Based on these analyses, the null hypothesis for Research Question 7 was accepted: there are no differences in amount of compassion satisfaction as a function of differences in therapist experience level.

### **Research Question 8**

The eighth research question asked: Are there differences among therapists who are senior in their careers (20 or more years of experience), in the middle of their careers (more than 5 to fewer than 20 years of experience) or early in their careers (5 or fewer years of experience) on reports of amount of vicarious posttraumatic growth?

**HO8.** The null hypothesis for Research Question 8: There are no significant differences in amount of vicarious posttraumatic growth as a function of differences in therapist experience level.

**Assumptions of the ANOVA.** Before calculating the Analysis of Variance (ANOVA), the following assumptions were checked in order to assess the appropriateness of using an ANOVA: data normality, homogeneity of variance, and the absence of univariate outliers. The results of this analysis found: (a) the Shapiro-Wilk test revealed that VPTG data were normally distributed; (b) there was homogeneity of variance as assessed by Levene's test of homogeneity of variance ( $p = .70$ ); (c) there were no univariate outliers as assessed by z scores. Based on these tests of assumptions, it was decided to conduct an ANOVA.

**Univariate Analysis.** An ANOVA was performed to determine the differences among the independent variable's senior, mid-career or novice experience levels as a mental health professional on the dependent variable of VPTG. There was not a statistically significant difference in VPTG scores among mental health professionals who were senior, mid-career, or novice professionals, [ $F(2,57) = 1.09, p > .05$ ].

**Null hypothesis results.** Based on these analyses, the null hypothesis for Research Question 8 was accepted: there are no differences in amount of vicarious posttraumatic growth as a function of differences in therapist experience level.

### **Research Question 9**

The ninth research question asked: Do vicarious trauma and secondary traumatic stress predict vicarious posttraumatic growth in mental health professionals above and beyond the effects of exposure to trauma victim clients?

**HO9.** The null hypothesis for Research Question 9: The addition of the predictor variables of secondary traumatic stress and vicarious trauma to the hierarchical regression model will not increase the percentage of variance accounted for by vicarious posttraumatic growth that is already accounted for by the covariate variable, exposure.

**Assumptions of hierarchical multiple regression analysis.** Before calculating the hierarchical multiple regression analysis, the following assumptions were checked in order to assess the appropriateness of the hierarchical multiple regression analysis: (a) independence of errors (residuals), (b) linear relationship between the predictor variables and the dependent variable, (c) homoscedasticity of residuals, (d) no multicollinearity, (e)



no significant outliers or influential points, and (f) residuals are normally distributed. The results of this analysis found:

The assumptions of linearity, independence of errors, homoscedasticity, unusual points and normality of residuals were met. See Table 4 for full details of the regression model.

**Hierarchical multiple regression analysis.** A hierarchical multiple regression analysis was conducted to determine if the addition of VT and then of STS improved the prediction of VPTG over and above exposure to trauma victim clients. The full model of exposure, VT and STS to predict VPTG was statistically significant, [ $R^2 = .16$ ,  $F(4, 55) = 2.54$ ,  $p = .05$ ; adjusted  $R^2 = .10$ ]. However, the addition of VT and STS did not lead to a statistically significant increase in [ $R^2 = .03$ ,  $F(2, 55) = .91$ ,  $p > .05$ ].

**Null hypothesis results.** The null hypothesis for research question 9 was accepted; the addition of the predictor variables ST and VT did not increase the percentage of variance accounted for by VPTG that was already accounted for by the covariate variable: exposure to trauma clients.

### **Qualitative Analysis**

The next two sections contain the qualitative analysis of the study. Participants were asked to respond to two open-ended questions regarding negative and positive changes that occurred as a result of their work with traumatized clients. Responses to each question were classified into domains and categories.

#### **Research Question 10**

Research question 10 asked: What negative changes do mental health professionals report that are attributable to their work with trauma victims? In order to

address this question, participants were asked to complete the following open-ended question: Please describe any negative changes in your personal or professional life that you attribute primarily to your therapy practice with trauma victims. Out of 60 participants, 58 responded to this question.

Responses to this question yielded five domains (A-E) and 18 categories. Domains and categories are reported in Table 5. Participants were denoted by their experience level of senior, mid-career, or novice, as well as exposure level of high, moderate, or low.

**Domain A: Negative Personal Changes.** This domain addresses the negative changes mental health professionals reported about their personal lives. Domain A yielded 3 categories.

**Category 1: Interpersonal Relationships.** Eleven mental health professional reported experiencing difficulty in their interpersonal relationships such as less patience with significant others, desiring isolation, difficulty with transitioning to home life, and increased sensitivity to conflict and stress in relationships. Out of the 11 mental health professionals, three were senior professionals with a high level of exposure, three were mid-career professionals with a high level of exposure, one was a mid-career professional with a moderate level of exposure, one was a novice professional with a high level of exposure, two were novice professionals with a moderate level of exposure, and one was a novice professional with a low level of exposure. For example, they wrote:

Sometimes, I feel all tapped out when someone in my personal life needs additional support. I want to say, "Deal with it. I gave all I had at work!" But I don't say that. (Senior professional with high exposure)

The work trauma is passed on to my husband and family. This work leads to stress in my relationship with my husband (and) friends. (Mid-career professional with high exposure)

[I have] difficulties occasionally with returning to my comfortable safe, supported life and relationships, knowing others don't have that, out of no fault of their own often. (Novice professional with moderate exposure)

**Category 2: reminded about personal trauma.** Three mental health professionals reported being reminded through work as a therapist of their own painful past experiences, including past experiences with trauma. Out of the three participants, one was a senior professional with moderate exposure, one was a novice professional with high exposure, and one was a novice professional with low exposure. A few examples included:

[I have] no negative changes but some of the work has evoked some painful memories of my own. (Senior professional with moderate exposure)

[I have an] increased awareness of personal trauma that is unresolved. (Novice professional with low exposure)

**Category 3: stigma related to mental health.** One mid-career professional with moderate exposure wrote he/she sometimes felt stigmatized by working in the mental health field. The person wrote:

I think this is sometimes viewed as negatively, as a weakness or a "downer" in the general population. [I have] some association with the stigma of mental health and those who provide it.

**Domain B: negative professional changes.** This domain addresses professional challenges faced by mental health professionals. This domain yielded two categories.

**Category 1: frustration with bureaucracy.** Two mental health professionals reported frustration or stress related to agency work and bureaucracy. Of the two, one was a senior professional with high exposure and the other was a mid-career professional with high exposure. The mid-career professional wrote:

[I have] less patience about bureaucratic process that prevent children from receiving services.

**Category 2: difficulty working with clients.** One novice mental health professional with low exposure reported that he/she found working with the trauma client population to be particularly challenging:

It is sometimes hard because of resistance. Many clients have said this is useless when I tried this before and it didn't help so why will it be any different now? I try to do more research and try different techniques and this is very time-consuming. Sometimes it is exhausting, energetically draining, and frustrating because clients don't feel they can change.

**Domain C: awareness and sensitivity to greater culture.** This domain addresses the ways in which mental health professionals' perception of the greater culture has shifted in challenging ways. This domain yielded two categories.

**Category 1: concerns about greater culture.** Five mental health professionals reported frustration, anger and discouragement at the greater problems in the culture. Out of the five mental health professionals, one was a senior professional with high exposure, two were senior professionals with low exposure, one was a mid-career professional with moderate exposure, and one was a novice professional with a high level of exposure.

They wrote:

At times, [I feel] increased anger toward injustice, impatience with lack of change in culture, frustration with inability to change societal issues such as violence, parenting, and bigotry/attitudes. (Senior professional with low exposure)

[I feel] frustration, discouragement, powerlessness; not so much within individual sessions but when contemplating the big picture of society. (Mid-career professional with moderate exposure)

**Category 2: sensitivity to media.** Two novice mental health professionals wrote about finding media exposure traumatic. One novice professional had a high exposure and one had a low exposure. The novice professional with low exposure wrote:

[I have] difficulty with handling traumatic imagery (movies, TV. shows, books) or content.

**Domain D: vicarious trauma.** This domain included mental health professionals' reports of vicarious trauma reactions, including cognitive disruptions. It yielded two categories.

**Category 1: vicarious trauma.** Four mental health professionals directly reported experiencing vicarious trauma reactions. One was a senior professional with high exposure, two were senior professionals with low exposure, and one was a novice professional with high exposure. A few examples were:

[I am] paying attention to vicarious trauma reactions in myself. (Senior professional with high exposure)

[I have] vicarious trauma reactions. Sometimes, [I am] horrified of what I'm hearing. (Novice professional with low exposure)

**Category 2: cognitive disruptions-changes in my perceptions of how I see others.** Ten mental health professional reported about negative changes in how they saw others including increased cynicism, hopelessness, and fear of trauma to themselves or significant others. Of the ten mental health professionals, two were senior professionals with moderate exposure, one was a senior professional with low exposure, four were mid-career professionals with high exposure, one was a mid-career professional with moderate exposure, one was a mid-career professional with low exposure, and one was a novice professional with low exposure. Some examples were:

[I have] increased cynicism regarding human behavior. (Senior professional with moderate exposure)

This work leads to stress in how I see people in my life outside, such as the aisles in Safeway. (Mid-career professional with high exposure)

[I feel an] increased sense of vulnerability. (Novice professional with low exposure)

**Domain E: Compassion Fatigue.** This domain included mental health professionals' reports of compassion fatigue, including burnout and secondary traumatic stress, physiological stress and other negative emotions. This domain yielded four categories.

***Category 1: Post Traumatic Stress Disorder and Secondary Traumatic Stress symptoms.*** Nine mental health professionals reported about experiencing symptoms of STS including intrusive thoughts, anxiety, and difficulty sleeping. Of the nine mental health professionals, two were senior professionals with high exposure, one was a senior professional with moderate exposure, two were senior professionals with low exposure, one was a mid-career professional with moderate exposure, two were novice professionals with high exposure and one was a novice professional with low exposure. A few examples included:

[I have] occasional intrusive thoughts, bad dreams, preoccupations, [and] feeling "haunted". (Senior professional with high exposure)

At times, I have trouble sleeping. (Mid-career professional with moderate exposure)

[There are] more incidents of "bringing home" things I learn in session that affect my mood. [I have] occasional trouble sleeping and anxiety/concern for clients. [I have] a tendency to overeat and zone out on days where client symptoms are more intense. (Novice professional with high exposure)

***Category 2: burnout and exhaustion.*** Nine mental health professionals reported feeling a lack of energy or feelings of fatigue and exhaustion that occurred as a result of their work with traumatized clients. Of the nine mental health professionals, one was a senior professional with high exposure, two were senior professionals with moderate exposure, two were mid-career professionals with moderate exposure, two were mid-

career professionals with low exposure, one was a novice professional with moderate exposure, and one was a novice professional with low exposure. Some examples included:

[I have] increased emotional fatigue. (Senior professional with high exposure)

I find that I am often exhausted and need to have tight boundaries between work and my professional life. Thus, since I am working so hard with clients, I have little energy to expand myself professionally. The clinical work I do is satisfying but I feel there is little else I can do to expand myself professionally while working with clients. (Mid-career professional with high exposure)

Working with intense cases can make me feel fatigued during my time off. (Novice professional with low exposure)

**Category 3: negative mood and negative feelings.** Seven mental health professionals reported experiencing a negative mood or feelings related to their work with traumatized clients. Of the seven, one was a senior level professional with high exposure, one was a mid-career professional with moderate exposure, one was a novice professional with high exposure, one was a novice professional with moderate exposure, and three were novice professionals with low exposure. A few examples included:

[I experience] numbing and over sensitivity. (Senior professional with high exposure)

Sometimes hearing about the things that should never occur to a person can just make one so incredibly sad. (Mid-career professional with moderate exposure)

[I experience] a negative mood. [I feel] irritable, sad, fearful. (Novice professional with moderate exposure)

**Category 4: stress/physiological/somatic symptoms.** Nine mental health professionals reported difficulty with stress or stress-related somatic complaints. Of the nine, three were senior professionals with high exposure, one was a senior professional with moderate exposure, one was a senior professional with low exposure, one was a mid-career professional with moderate exposure, two were novice professionals with

high exposure, and one was a novice professional with low exposure. A few examples included:

[It is] too much responsibility. [I feel] overwhelmed all the time (cortisol and adrenaline surges). (Senior professional with high exposure)

[I have] increased tension/anxiety at times. [I experience the] manifestation of physical symptoms: headaches, etc. (Mid-career professional with moderate exposure)

[I experienced] a high level of stress [and the] physiological toll of high stress level. (Novice professional with high exposure)

**Summary.** Participants reported several areas in which they experienced personal negative consequences as a result of their work with trauma victims. For example, they reported that they experienced less energy for family members or significant others and were sometimes reminded of their own personal trauma. Participants also reported that they experienced vicarious trauma and became less trustful of other people in society. Participants also reported experiencing many aspects of compassion fatigue. These included: STS symptoms, burnout, exhaustion, negative moods and feelings and stress or stress-related complaints. Participants also reported experiencing frustration with their awareness of problems in the greater culture related to clients' trauma and an increased sensitivity to media. Finally, a few participants also reported experiencing some negative professional consequences such as difficulty with bureaucracy and difficulty with working with the client population.

### **Research Question 11**

The next research question asked: What positive changes do mental health professionals report that are attributable to their work with trauma victims? Participants were asked to complete the following open-ended question: Please describe any changes



in your personal or professional life that you attribute primarily to your therapy practice with trauma victims. All 60 participants responded to this question.

Responses to this research question yielded four domains (A-D) and 15 categories. Domains and categories are reported in Table 6. Participants were denoted by their experience level of senior, mid-career or novice as well as exposure level of high, moderate or low.

**Domain A: positive personal changes.** This domain addresses the ways in which mental health professionals reported positive changes to their personal lives that were not related to VR or VPTG. Domain A yielded 3 categories.

**Category 1: personal healing.** Five mental health professionals reported receiving personal psychological healing benefits from working with traumatized clients. Of the five mental health professionals, one was a senior professional with high exposure, one was a senior professional with moderate exposure, one was a senior professional with low exposure, one was a mid-career professional with high exposure, and one was a novice professional with moderate exposure. Some of the examples include:

In learning how to help them heal, I also heal on some deep level. (Senior professional with high exposure)

I also feel that my habit of co-dependency has been healed [through] working with survivors of trauma. (Mid-career professional with moderate exposure)

[It is] motivation for personal growth around past trauma. (Novice professional with moderate exposure)

**Category 2: motivation to practice self-care.** Eight mental health professionals reported that challenging clinical work with traumatized clients provided them with motivation for their own self-care. Of these eight mental health professionals, one was a senior professional with high exposure, two were senior professionals with low exposure,

one was a mid-career professional with high exposure, one was a mid-career professional with moderate exposure, one was a novice professional with moderate exposure, and two were novice professionals with high exposure. A few examples included:

[I] make sure I have and use support systems, plus outside activities I enjoy and experience as rejuvenating. (Senior professional with low exposure)

Personally, I practice gratitude and mindfulness on a daily basis. It helps with compassion fatigue. (Mid-career professional with high exposure)

[The] intensity of counseling sessions sometimes translates into increased passion/ creativity with music (I play sax after work sometimes). [I have an] increased ability to recognize self care needs. (Novice professional with low exposure)

***Category 3: deeper understanding of human nature /increased awareness.***

Seven mental health professionals reported a more complex and deeper understanding of human nature and behavior. Of the seven mental health professionals, one was a senior professional with high exposure, one was a senior professional with moderate exposure, one was a senior professional with low exposure, one was a mid-career professional with high exposure, one was a mid-career professional with moderate exposure, one was a novice professional with moderate exposure, and one was a novice professional with low exposure. Examples included:

It has given me an awareness level that others do not have. (Senior professional with moderate exposure)

I feel that my understanding of human beings [and] human frailty has deepened. (Mid-career professional with high exposure)

[I have a] greater awareness of what history I carry with me and what others carry with them. [This awareness] impacts my perspectives and interactions greatly. (Novice professional with moderate exposure)

**Domain B: positive professional consequences.** This domain addresses positive professional changes that were not related to CS. Domain B yielded two categories.

***Category 1: increased understanding of trauma/professional development.***

Thirteen mental health professionals reported positive growth in their clinical skills and in their ability to do trauma work with clients. Of the thirteen mental health professionals, two were senior professionals with high exposure, one was a senior professional with moderate exposure, one was a senior professional with low exposure, two were mid-career professionals with high exposure, one was a mid-career professional with moderate exposure, two were mid-career professionals with low exposure, two were novice professionals with a high-level of exposure, and two were novice professionals with a low level of exposure. A few examples included:

[I can] recognize natural healing processes at work. Positive results are more evident in the final decade of my work than earlier. (Senior professional with moderate exposure)

My clients help me to maintain focus on improving my skills as a therapist and their stories/narratives help me to develop a more sound theoretical approach. (Mid-career professional with high exposure)

Knowledge of [the] trauma experience helps me engage more effectively with clients and guide interventions [that are] appropriate for survivors. (Novice professional with high exposure)

***Category 2: therapist community.*** Three mental health professionals reported about finding support through becoming part of a therapist community. Of the three, two were novice professionals with a high level of exposure and one was a novice professional with low exposure. A novice professional with high exposure wrote:

[I] have a sense of community [and] support with other therapists.

**Domain C: Vicarious Posttraumatic Growth and Vicarious Resilience.** This domain addresses positive personal changes that are encompassed by VPTG and VR such as increased empathy, increased gratitude, positive changes to interpersonal relationships and personal growth. Domain C yielded seven categories.

**Category 1: increased compassion/empathy.** Sixteen mental health professionals endorsed an increase in empathy and compassion. Of the sixteen, three were senior professionals with high exposure, two were senior professionals with moderate exposure, four were senior professionals with low exposure, three were mid-career professionals with high exposure, one was a mid-career professional with moderate exposure, one was a mid-career professional with low exposure, one was a novice professional with a moderate exposure, and one was a novice professional with a low level of exposure.

Examples of responses included:

[I experienced] increased understanding and empathy for the human condition. (Senior professional with moderate exposure)

Due to the high prevalence of PTSD in my client case load, I feel like I have become more empathic to everyone that I interact with. I feel like I do not judge people as quickly or to the same extent that I did prior to beginning the work that I am currently doing. (Mid-career professional with high exposure)

[I] bring greater open-mindedness and compassion to all I encounter. (Novice professional with moderate exposure)

**Category 2: impacted by clients' resilience.** Sixteen mental health professionals reported an increase in understanding of the resilience inherent in clients and within human nature. Of the sixteen, three were senior professionals with high exposure, two were senior professionals with moderate exposure, three were senior professionals with low exposure, three were mid-career professionals with high exposure, three were mid-career professionals with moderate exposure, one was mid-career professional with low exposure, and one was a novice with low exposure. Examples of responses included:

I am moved by clients' resilience, their ability to continue to have hope and to grow in spite of the circumstances they have endured. (Senior professional with moderate exposure)

I feel that my understanding of human beings, human frailty, and resilience has deepened. (Mid-career professional with high exposure)

I have a greater understanding of the strength of the mind to protect us and allow us to live through traumatic events. (Mid-career professional with moderate exposure)

**Category 3: putting problems into perspective.** Nine mental health professionals reported an increased sense of perspective about their own problems or life circumstances. Of these nine, two were senior professionals with high exposure, one was a mid-career professional with high exposure, one was a mid-career professional with moderate exposure, one was a mid-career professional with low exposure, one was a novice professional with moderate exposure, and three were novice professionals with a low level of exposure. Examples of their statements included:

I am aware of the grace of my own life, despite personal issues. (Senior professional with high exposure)

[The work] puts things in perspective when I feel stressed over small things. (Mid-career professional with moderate exposure)

Self-awareness of the severity of my personal issues has heightened, i.e. [I realize] my problems could be worse/not that bad. (Novice professional with low exposure)

**Category 4: increased gratitude/ appreciation for own good fortune.** Seven mental health professionals reported an increased sense of gratitude for the positive aspects of their own lives. Of the seven, two were senior professionals with high exposure, one was a senior professional with moderate exposure, one was a senior professional with low exposure, two were novice professionals with a high level of exposure, and one was a novice professional with low exposure. A few examples included:

[I have] awareness of the good in my life. (Senior professional with moderate exposure)

I notice love and beauty around me more because often that is not how people are. (Novice professional with low exposure)

**Category 5: interpersonal relationships.** Four mental health professionals reported improvements within their interpersonal relationships. Of the four, one was a senior professional with moderate exposure, one was a mid-career professional with high exposure, one was a mid-career professional with moderate exposure, and one was a mid-career professional with low exposure. Examples of responses included:

[I am] more comfortable with all kinds of people in all kinds of situations.  
(Senior professional with moderate exposure)

[I] focus on my personal life and family. (Mid-career professional with low exposure)

**Category 6: personal meaning in life/spirituality.** Ten mental health professionals reported positive changes to their spirituality or personal life philosophy. Of the ten, two were senior professionals with high exposure, one was a senior professional with moderate exposure, two were mid-career professionals with high exposure, one was a mid-career professional with moderate exposure, one was a mid-career professional with low exposure, two were novice professionals with a moderate level of exposure, and one was a novice professional with low exposure. A few examples of responses included:

[I have] meaning and purpose. (Senior professional with high exposure)

The work has forced me to take refuge in spirituality, faith in our common humanity, [and] understanding of the evil in myself. (Mid-career professional with high exposure)

[I] recognize the interconnectedness of all things on a much deeper level.  
(Novice professional with moderate exposure)

**Category 7: personal improvements.** Eight mental health professionals reported that they made personal changes or had been encouraged to work on personal growth. Of the eight, one was a senior professional with high exposure, one was a senior professional with moderate exposure, one was a senior professional with low exposure, two were mid-

career professionals with high exposure, one was a mid-career with moderate exposure, and two were novice professionals with high exposure. A few examples included:

I think it has helped me become a more thoughtful and more patient person.  
(Senior professional with moderate exposure)

My clients encourage me to grow personally and be honest with my own shortcomings as a person. [I] face reality head on. (Mid-career professional with high exposure)

I feel encouraged to work on myself to model equanimity. (Novice professional with low exposure)

**Domain D: compassion satisfaction.** This domain addresses mental health professionals' reported changes related to compassion satisfaction. This domain yielded three categories. A few examples included:

**Category 1: positive emotions.** Four mental health professionals reported experiencing positive emotions as a result of their work with traumatized clients. Of the four, one was a senior professional with moderate exposure, one was a novice professional with high exposure, one was a novice professional with moderate exposure and one was a novice professional with low exposure. Some examples included:

[I experience] joy. (Senior professional with moderate exposure)

At times, I experience a sense of happiness in following a calling to work in the area of trauma. (Novice professional with moderate exposure)

**Category 2: self-efficacy/making a difference to clients.** Nine mental health professionals reported experiencing self-efficacy in their clinical work with traumatized clients and the ability to make a difference in the lives of others. Of the nine, one was a senior professional with high exposure, three were mid-career professionals with high exposure, one was a mid-career professional with moderate exposure, one was a mid-career professional with low exposure, one was a novice professional with high exposure,

one was a novice professional with moderate exposure and one was a novice professional with low exposure. A few examples included:

I [experience] making a difference [with clients]. (Senior professional with high exposure)

[I experience] satisfaction with ending and healing the generational trauma cycle. It's kind of like an extreme sport, emotionally intense. (Mid-career professional with high exposure)

[I] feel that I make a difference. [I experience] self-efficacy /helpful (Novice professional with moderate exposure)

**Category 3: enjoyment of working with the clients/the work is satisfying.** Six mental health professionals reported receiving professional satisfaction from their work with traumatized clients. Of the six, three were senior professionals with high exposure, one was a senior professional with moderate exposure, and two were senior professionals with low exposure. Examples included:

I feel so grateful to be able to do such meaningful work. (Senior professional with high exposure)

[It is] professionally gratifying to see growth and progress. [It feels] meaningful in contrast to neurotic complaints. (Senior professional with moderate exposure)

[I experience] career satisfaction. (Novice professional with moderate exposure)

**Summary.** Participants reported that they experienced many positive changes. These included positive personal changes such as personal emotional healing, a deeper understanding of the complexity of human nature, and an increased motivation to practice self-care. Participants also reported experiencing aspects of VR and VPTG. These included: increased compassion and empathy, being impacted positively by clients' resilience, putting their own problems into perspective, increased gratitude and appreciation for their good fortune, improvements to their interpersonal relationships, increased spirituality or meaning-making and the desire to improve themselves



personally. Participants also reported experiencing compassion satisfaction related to increased self-efficacy about their clinical work, increased positive emotions and that their work with this client population was satisfying. Finally, participants also reported experiencing positive professional consequences such as increased professional development regarding trauma work and belonging to a therapist community.

### **Summary of Results**

**Quantitative results.** There were no differences on mental health professionals' scores on VT, the two components of compassion fatigue (STS and BO) or CS based on differences of mental health professionals' exposure to high, medium or low caseloads of traumatized clients. There were difference between the high and low exposure caseload groups on scores of VPTG; participants who were in the high exposure group had significantly higher scores of VPTG than participants who were in the low group. There were no differences on scores of VT, STS and BO, CS or VPTG as a result of differences among mental health professionals' experience level of senior, mid-career or novice. The predictor variables ST and VT did not increase the percentage of variance accounted for by the dependent variable VPTG that was already accounted for by the covariate variable, exposure.

**Qualitative Results.** Participants reported that they experienced negative and positive consequences as a result of their work with trauma victims. Negative consequences included participant reports of vicarious trauma and participant reports of the components of compassion fatigue (secondary traumatic stress and burnout). Participants also reported experiencing negative moods and feelings as well as

experiencing stress or stress-related complaints. Finally, participants also reported that they became less trustful of other people in society.

Participants also reported that they experienced positive consequences as a result of their work with trauma victims. Participants reported experiencing aspects of VR and VPTG. These included: increased compassion and empathy, being impacted positively by clients' resilience, putting their own problems into perspective, increased gratitude and appreciation for their good fortune, improvements to their interpersonal relationships, increased spirituality or meaning-making and the desire to improve themselves personally. Participants also reported experiencing compassion satisfaction related to increased self-efficacy about their clinical work and increased positive emotions.

## **Chapter V**

### **Summary, Discussion, and Recommendations**

In this chapter, I will provide a summary of the results of this research. I will interpret the current findings and put them in context of the past literature base of vicarious trauma, the two components of compassion fatigue (secondary traumatic stress and burnout), compassion satisfaction, vicarious posttraumatic growth and vicarious resilience. I will also provide future directions for research and recommendations for practical applications of the current study's findings.

### **Discussion**

The purpose of this research was to examine the impact of trauma therapy work on mental health professionals who work with traumatized clients, including the potential for negative and positive effects of trauma therapy work on therapists. The potential negative effects studied included (a) vicarious trauma (VT) and (b) compassion fatigue (CF). CF includes two components: secondary traumatic stress (STS) and burnout (BO). The potential positive effects studied included (a) compassion satisfaction (CS), (b) vicarious resilience (VR) and (c) vicarious posttraumatic growth (VPTG). In this study, mental health professionals with differing caseloads were categorized as follows: 22 reported 70% and more (high exposure group), 19 reported between 40% and 70% (moderate exposure group) and 19 reported under 40% (low exposure group). The therapists were compared on measures of VT, STS, BO, CS and VPTG. Mental health professionals were also categorized by experience level: senior clinicians (20 or more

years), mid-career clinicians (more than 5 years to fewer than 20 years) and novice clinicians (5 or fewer years of professional experience), and compared on measures of VT, STS, BO, CS and VPTG. Since the consequences of providing therapy to traumatized clients is a new area of research, a qualitative component of this research allowed for additional aspects of the negative and positive effects of the therapy work to be explored. This study also examined the relationship between VT and STS as predictor variables for VPTG.

The participants included in this study were licensed or license-eligible mental health professionals with graduate level education that included professionals with master's degrees in counseling or social work as well as doctoral degrees in counseling or clinical psychology. The age of the sample ranged from 26 to 72 years with a mean of 48.6 years. The majority of the participants ( $n=48$ ) reported their gender as female and the remaining participants ( $n=12$ ) reported their gender as male. Participants worked in different clinical settings: 36 reported employment in community mental health, 2 in crisis centers, 2 in an Employee Assistance Program (EAP) clinic, 2 in a group practice, 18 in private practice, 9 in residential community mental health, and 5 reported that they worked in multiple settings.

Participants were recruited from local community mental health agencies and two listserves in the state of Oregon. The two listserves were a consultation group of mental health professionals in the Willamette Valley of Oregon and a listserve from the Oregon Psychological Association. Out of a total population of 565 that were approached to complete the questionnaires either in person or online, 68 returned surveys (response

rate= 12%). However, due to incomplete surveys, only 60 of the 68 surveys were used in the data analysis. Therefore, an overall response rate was 10.6% (60 out of 565).

The questionnaires that participants completed were: Trauma and Attachment Belief Scale (TABS; Pearlman, 2003) to measure VT, the Professional Quality of Life Scale V (ProQOL-V; Stamm, 2010, to measure STS, BO, and CS, and the Posttraumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996) to measure VPTG. A demographic questionnaire was developed by the author to gather information about the participants. In addition, respondents were asked to answer two qualitative questions that addressed negative and positive changes related to their work with trauma clients.

The quantitative results of the study were:

1. There were no differences on mental health professionals' scores of VT, STS and BO, or CS based on differences of mental health professionals' exposure to high, medium or low caseloads of traumatized clients.
2. There were significant differences between high and low exposure caseload groups on scores of VPTG; a univariate analysis found that participants in the high exposure group had significantly higher scores of VPTG than participants in the low exposure group.
3. There were no differences on scores of VT, STS and BO, or CS and VPTG as a result of differences among mental health professionals' experience level (e.g. senior, mid-career, and novice).
4. A regression analysis showed that the predictor variables of STS and VT did not increase the percentage of variance accounted for by the dependent variable, VPTG,

which was already accounted for by the covariate variable of therapist caseload of traumatized clients.

Qualitative results found that participants reported several areas in which they experienced personal negative consequences as a result of their work with trauma clients. These main themes included: having less energy for family or significant others, becoming reminded of their own personal trauma, experiencing VT and becoming less trustful of other people in society, being frustrated by increased awareness of problems in the greater culture related to clients' trauma, and an increased sensitivity to media reports of trauma. Participants also reported experiencing aspects of compassion fatigue. These included: STS symptoms, burnout, exhaustion, negative moods and feelings and stress or stress-related complaints. Finally, a few participants reported experiencing some negative professional consequences such as difficulty with bureaucracy and difficulty with working with a traumatized client population.

Participants also reported that they experienced many positive changes as a result of their trauma work. Main themes included: positive personal changes such as personal emotional healing, a deeper understanding of the complexity of human nature, an increased motivation to practice self-care, experiencing CS related to increased self-efficacy about their clinical work, increased positive emotions and feeling that their work with this client population was satisfying. Participants also reported experiencing aspects of VR and VPTG. These included: increased compassion and empathy, being impacted positively by clients' resilience, putting their own problems into perspective, increased gratitude and appreciation for their good fortune, improvements to their interpersonal

relationships, increased spirituality or meaning-making and the desire to improve themselves personally. Finally, participants reported experiencing positive professional consequences such as increased professional development regarding trauma work and belonging to a therapist community.

### **Vicarious Trauma**

It does not appear that therapists in this study were suffering from high levels of vicarious trauma (VT). The overall mean for the current sample was 44.99 with a standard deviation of 7.91 and a range of 26-65. As comparison, Pearlman (2003) reports an average score of 44 for trauma therapists. Pearlman also reports that scores of 56-60 are high and 60-69 are very high; these scores are found within traumatized clinical populations such as outpatient clients with a history of child abuse or hospitalized inpatient populations. In the current study, approximately 8% of the sample ( $n=5$ ) reported a high or very high VT score. Therefore, it appears that the majority of mental health professionals in the current study did not experience excessively high levels of VT. Furthermore, VT did not differ based on the therapists' exposure to traumatized clients, as there were no significant differences among therapists in the high, moderate, or low groups of exposure to trauma clients. These findings are supported by other research that did not find trauma therapists to experience high levels of VT (Baird & Jenkins, 2003; Kadambi & Truscott, 2004) and that also found that VT did not increase with more exposure to traumatized clients (Adams, Matto, & Harrington, 2001; Baird & Jenkins, 2003; Bober & Regehr, 2006; Brady et al., 1999; Pearlman & Mac Ian, 1995).

In the current study, levels of VT also did not differ across experience levels.

There were no significant differences among senior, mid-career, or novice therapists on VT. This appears to contradict some of the current literature base as many studies have found a negative correlation between mental health professionals' years of experience and VT, indicating that as years of clinical experience increases, VT decreases (Cunningham, 2003; Kadambi & Truscott, 2004; Pearlman & Mac Ian, 1995; VanDeusen & Way, 2006). In another study, Bober and Regehr (2006) found more experienced trauma caregivers to be at risk for VT, but their diverse sample of nurses, social workers, physicians, child and youth workers, occupational therapists, and chaplains may be too different from the current study to make an accurate comparison. The current finding is particularly surprising since there was such a large range of experience level in the current study (from less than 1 year to 43 years), and based on past evidence in the literature it would seem that years of experience in the mental health field would be protective against VT. However, Baird and Jenkins (2003) also found no connection between VT and therapist experience for counselors, calling into question the relationship between experience level and VT.

In the qualitative section of the current study, participants reported themes related to VT. Four mental health professionals directly reported experiencing vicarious trauma reactions, and ten mental health professionals reported experiencing cognitive disruptions about negative changes in how they saw others or themselves, including increased cynicism, hopelessness and fear of trauma. These reports centered on fears that trauma could occur to themselves or their loved ones. Some participants also reported reduced trust in others. The cognitive disruptions reported by the mental health professionals in



the current study echo Pearlman and Saakvitne's (1995) conceptualization of the cognitive disruptions of self-safety, other-safety, and other-trust. Since the mental health professionals reported that the majority of the presenting problems of their traumatized clients were interpersonal in nature (e.g. child abuse, sexual assault, domestic violence), it is reasonable that therapists might begin to notice disruptions in safety or trust.

There appears to be a discrepancy between the qualitative and quantitative results for VT in the current study. There may be several possible reasons for this. Firstly, due to the small sample size, only the total score for the Trauma Attachment Belief Scale (TABS) was used in the quantitative analysis of the current study. Therefore, it is possible that trauma therapists may have scored higher on the subscales of self-safety, other-safety, and other-trust than the other scales which were not revealed in the total score. Additionally, several quantitative studies have not found evidence for high levels of VT among trauma therapists (Adams et al., 2003; Baird & Jenkins 2003; Bober & Regehr, 2006; Brady et al., 1999; Pearlman & Mac Ian, 1995), but the qualitative sections of some studies have included themes related to therapists experiencing cognitive disruptions related to VT (Barrington & Shakespeare-Finch, 2013; Ben-Porat & Itzhaky, 2009; Cohen & Collens, 2013; Illife & Steed, 2000; Schauben & Frazier, 1995). Therefore, it is also possible that while trauma therapists may experience VT, it may not be very intense or debilitating and therefore may not reach clinical significance.

Another possibility is that the TABS (Pearlman, 2003) or its predecessor, the Traumatic Stress Institute Belief Scale (Pearlman, 1993) is not an accurate measure of cognitive disruptions. There are few validation studies on this latest instrument (TABS;

Pearlman, 2003), and earlier versions did not demonstrate strong construct validity (Adams, Matto, & Harrington, 2001; Devilly, Wright, & Varker, 2009). While the quantitative studies are not consistent on the evidence for VT, many of the qualitative studies do have counselor self-reports of cognitive disruptions. In addition, while Kadambi and Truscott (2004) did not find a difference between groups in cognitive disruptions on the Traumatic Stress Institute Belief Scale Revision M (TSI-BSM; Pearlman, 1996), they did find that sexual violence victim therapists reported that they were more traumatized by their therapy work than other groups. Unfortunately, the results of qualitative studies cannot be generalized to the larger pool of trauma therapists. Strengthening and validating the TABS (Pearlman, 2003) will be an essential element in continued research on this subject.

### **Compassion Fatigue and Compassion Satisfaction**

Compassion fatigue (CF) consists of two components: secondary traumatic stress (STS) and burnout (BO). The mental health professionals in this study reported a mean STS score of 61.45 with a standard deviation of 5.68, and a range of 48-75. Stamm (2010) reports that an STS score of 61.45 would be considered a high score. This would place the current sample among the top 75% of scores in the STS database that includes 1289 individuals who come from multiple studies of professionals such as mental health counselors, nurses, teachers, and attorneys (Stamm, 2010). Furthermore, only 12% of the sample in the current study scored below the high score of Stamm, indicating high levels of STS for the majority of the current study sample. However, since the STS measure is normed on a variety of people from the helping professions, it is important to consider the

results of studies of STS that are specific to mental health professionals, as there are likely differences between the general population of helping professionals and those who specialize in mental health.

Some research has found that mental health professionals report high levels of STS (Deighton et al., 2007; Gibbons et al., 2011) while others have reported low levels of STS (Craig & Sprang, 2010; Lawson & Myers, 2011). Among the samples of mental health professionals with high STS scores, Deighton et al. included therapists who worked in a torture treatment center, and Gibbons et al. included a sample of licensed clinical social workers. Samples of mental health professionals (Craig & Sprang, 2010; Lawson & Myers, 2011; McKim & Smith-Adcock, 2013) who reported low STS scores included two studies of mental health professionals (Craig & Sprang, 2010; Lawson & Myers, 2011) who served a general population including some traumatized clients and one study (McKim & Smith-Adcock, 2013) that sampled therapists who specialized in trauma work.

Since the current study focused on mental health professionals from multiple settings (outpatient community health, inpatient and private practice, and an Employee Assistance Program) and did not focus solely on mental health professionals who specialized in trauma work, it seems surprising that the sample would have such high STS scores. Additionally, in contrast to other research (Baird & Kracen, 2006; Craig & Sprang, 2010; Deighton et al., 2007; Sprang et al., 2007; Mckim & Smith-Adcock, 2013), there were no significant differences among therapists on STS based on exposure to traumatized clients in caseload. However, at least 73.3% of the current sample saw at

least 6 clients with symptoms of PTSD per month. It may be that this amount of exposure is enough for mental health professionals to experience symptoms of STS. Therefore, it is possible that only a small caseload of traumatized clients may lead to high levels of STS.

While STS was high for all the participants in the current study, there were no significant differences among senior, mid-career, or novice mental health professionals. Other studies have also found no relationship between STS and experience level of mental health professionals (Craig & Sprang, 2010; Deighton et al., 2007; Mckim & Smith-Adcock, 2013 Thomas, 2013). In contrast, other research has found a relationship between experience level and STS. Sprang, Clark, and Whitt-Woosley (2007) found a negative correlation, as less clinical experience predicted higher levels of STS in their sample of general mental health professionals; other studies have found a positive correlation between experience level and STS (Linley & Joseph, 2007; Rossi et al., 2012). While there is not complete consensus in the literature, it appears that more research supports the finding from the current study that experience level is not implicated as a risk factor for STS.

BO scores were lower for the current study sample than scores of STS. The mean for BO was 50.40, the standard deviation was 5.73 and the range of BO scores was 38-62. Stamm (2010) reports that the overall BO mean of the current sample would be considered to be in the average range. However, 21.6% of the mental health professionals in the current study scored in the high range on BO with scores over 56. In contrast to past research on BO and caseload exposure (Deighton et al., 2007; Sprang et al., 2007), there were no significant differences among therapists on BO in the low, moderate or

high exposure groups. The same studies that reported high levels of STS (Deighton et al.; Gibbons et al., 2011) also reported high levels of BO; studies that reported low levels of STS (Craig & Sprang, 2010; Lawson & Myers, 2011) also reported low levels of BO. In contrast, mental health professionals in the current study reported average levels of BO and high levels of STS. Although BO and STS measure different constructs, it would seem likely that they are related. If mental health professionals are experiencing many symptoms of STS such as intrusive thoughts of clients' traumatic material or nightmares, it would seem likely that this might contribute to feelings of overall distress and exhaustion, two characteristics of BO. However, this was not reflected in the current study. While overall, current study participants reported high levels of STS, the BO scores were average.

The qualitative section of the current study supported the quantitative results in that participants reported themes related to the domain of compassion fatigue. Nine mental health professionals reported experiencing symptoms of STS in their qualitative responses. They included intrusive thoughts, anxiety and difficulty sleeping. Nine other mental health professionals also reported symptoms of BO. They included feeling a lack of energy and feelings of fatigue and exhaustion that occurred as a result of their work with traumatized clients. Six additional mental health professionals reported experiencing a negative mood or feelings related to their work, and nine mental health professionals reported difficulty with stress or stress-related somatic complaints. The qualitative results of this study cannot be generalized, but in tandem with the quantitative results they may

suggest that STS and BO are problem areas for mental health professionals who work with traumatized clients.

The sample mean for compassion satisfaction (CS) in the current study was 55.95 with a standard deviation of 6.78 and a range of 39-68. According to Stamm (2010) the overall CS mean of the current sample would be considered moderately high. Furthermore, according to Stamm, 48% of the current study sample scored in the CS high range and only 6.6% scored in the low range, indicating that the majority of mental health professionals in this sample were experiencing average to high levels of CS. This was also demonstrated in the qualitative section of the study as participants reported themes related to the domain of CS. These themes included positive emotions such as joy, increased self-efficacy in their work with clients and enjoyment of their work with clients.

Stamm (2010) also reported that high levels of CS may moderate the effects of BO in the current study. Therefore, the high levels of CS may partially explain why the sample reported average levels of BO even as they reported high levels of STS. Skovholt and Trotter-Mathison (2011) also suggest that the enjoyment gained from the helping professions can inoculate professionals against BO. Therefore, CS may be an important variable in the mitigation of BO that can occur for people in the helping professions.

### **Vicarious Posttraumatic Growth and Vicarious Resilience**

This study used the Post Traumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996) to measure VPTG. The mean PTGI score for current study participants was 51.50 with a standard deviation of 24.78 and a range of 2-100. Although the PTGI

was originally intended to measure PTG for people who experienced a trauma firsthand, it has recently been used for measuring VPTG in mental health professionals (Ben-Porat & Itzhazky, 2009; Gibbons et al., 2011; Linley & Joseph, 2007). Higher scores on the PTGI indicate higher levels of PTG, and PTGI scores range from 0-105 (Tedeschi & Calhoun, 1996). The PTGI was normed on a sample of 199 male and 405 female undergraduate students from a Southern university who reported that they experienced a significant life event such as bereavement, accident, divorce of parents, relationship breakup, and criminal victimization within the last 5 years. (Tedeschi & Calhoun, 1996). Since the current study is examining VPTG rather than PTG, the current sample's mean score was compared to a study of clinical social workers (Gibbons et al., 2011). The current sample's mean was 51.50 with a standard deviation of 24.78, while Gibbons et al. reported a mean of 53.7 and a standard deviation of 11.8 for their sample of clinical social workers. Therefore, there is some evidence that this level of VPTG may be normative for mental health professionals.

One intriguing result from the current study was the relationship between mental health professionals' exposure to trauma and VPTG. Therapists with the highest level of exposure (70% or more of their caseload were traumatized clients) experienced significantly more VPTG than individuals in the low exposure group (less than 40% of their caseload were traumatized clients). Other research has also found higher exposure to traumatized clients to be related to higher levels of VPTG (Brockhouse et al., 2011; Linley & Joseph, 2007). However, Brockhouse et al. only found a similar relationship when they examined a cumulative exposure variable which included number of years

working as a therapist, percentage of vicarious exposure to trauma over the last month, and number of clients who could be classified as suffering from PTSD. Brockhouse et al. did not find the caseload variable on its own to be significant. Additionally, one other study of telephone counselors found lower VPTG scores correlated with exposure to higher numbers of telephone calls (O'Sullivan & Wheelan, 2011). However, it is possible that the population of telephone counselors may be too different from other types of mental health professionals to make such a comparison meaningful.

It appears that increased VPTG may be a benefit to mental health professionals who work with a high number of traumatized clients. This is especially true in light of the current study's finding that levels of STS were high irrespective of exposure level. Skovholt and Trotter-Mathison (2011) describe that connecting to the growth of others can provide deeper meaning and joy to the mental health practitioner. It may be that through exposure to the resilience and growth of traumatized clients, mental health professionals with the highest exposure to these clients can reap the most personal benefits from this type of practice.

There were no differences in levels of VPTG as a result of therapist experience level for senior, mid-career, or novice mental health professionals. Although there is limited research on the relationship between experience level and VPTG, two other studies (Brockhouse et al., 2011; Linley & Joseph, 2007) found no relationship between VPTG and years of experience as a mental health professional. However, Brockhouse et al. did find higher levels of VPTG to be associated with older age. Therefore, it is possible that VPTG increases with clinician age but not with years of practice.



The current study also examined whether scores of VT and STS might predict VPTG. This analysis was conducted because previous literature theorized that the experience of STS and/or VT was central to the development of VPTG. This literature posited that VT and VPTG arise from the same empathic connection with a client that leads to disruptions of cognitive schemas (Cohen & Collens, 2012); in the case of VPTG, the distress caused by cognitive disruptions acts as a catalyst for personal growth through changes in worldview (Calhoun & Tedeschi, 1998). There has been some evidence for the contribution of STS to VPTG (Lev-Weisel et al., 2009; O'Sullivan & Wheelan 2011). However, in the current study, VT and STS did not contribute to the prediction of VPTG above and beyond the impact of exposure. It may be that the co-occurrence of STS is a necessary but not sufficient condition for VPTG, and that higher exposure to traumatized clients may be a necessary ingredient for higher levels of VPTG.

Some of the positive qualitative themes identified in the current study also included elements of VR and VPTG. The themes identified were: impact by clients' resilience, the ability of clients to persevere in or recover from difficult circumstances, personal meaning in life/spirituality, increased compassion and empathy for other people, increased gratitude and appreciation for one's own good fortune, improvements in interpersonal relationships and personal growth. Characteristics of VR and VPTG supported by other qualitative studies (Arnold et al., 2005; Barrington & Shakespeare-Finch, 2013; Engstrom et al., 2008; Hernandez et al., 2007) include increased recognition of human resilience and therapists' altered perspectives regarding their own lives. Other studies found evidence for positive changes to spirituality (Arnold et al. 2005; Barrington

& Shakespeare-Finch, 2013; Hernandez et al., 2007). However, some of the qualitative themes identified in the current study related only to the VPTG construct. They included increased compassion and empathy, increased gratitude, improvements in interpersonal relationships, and personal growth. Positive personal changes and positive changes to interpersonal relationships were also supported by past qualitative research (Barrington & Shakespeare-Finch; Ben-Porat & Itzhazky, 2009).

Based on previous qualitative research studies and the results of the current study, it appears that VPTG may more fully capture the positive benefits of working with traumatized clients. The reason for this is that the themes of VR overlap so strongly with VPTG; the overlapping themes are clients' resilience, the ability of clients to persevere in or recover from difficult circumstances, and personal meaning in life and spirituality (Arnold et al., 2005; Barrington & Shakespeare-Finch, 2013; Engstrom et al., 2008; Hernandez et al., 2007). Additionally, VPTG describes themes such as more positive interpersonal relationships, increased empathy, and increased personal growth (Calhoun & Tedeschi, 2012), all of which were found in the qualitative part of the current study. Therefore, it seems that VPTG may encompass more of the components of positive change that occur for mental health professionals who work with traumatized clients than does the construct of VR.

### **Limitations**

Attempts were made to contact as many mental health professionals as possible. The response rate varied among data collection sites. Responses to online data collection were low, with less than a 1% response rate. However, response rate from data collection

on site ranged higher, from 40% to 80%. The majority of these sites were in the southern portion of Oregon, so it is likely that mental health professionals from this part of the state were over-sampled. It is also possible that therapists who opted to participate in the study were more likely to be affected by VT, the two components of compassion fatigue (BO and STS), or CS and VPTG. Additionally, a small number of participants ( $n = 4$ ) completed surveys after receiving some training on these constructs and perhaps this introduced bias into the results. Finally, one other possible limitation involves a measure in this study, the TABS (Pearlman, 2003). It is possible that the TABS may not accurately measure the VT construct.

### **Suggestions for Future Research**

Future research should continue to explore the relationship between therapist exposure to traumatized clients and VT, the two components of compassion fatigue (BO and STS), and CS and VPTG. In particular, further study of exposure variables and STS may be important as the current study contradicted previous research that found exposure to traumatized clients to be a risk factor for STS (Baird & Kracen, 2006; Craig and Sprang, 2010; Deighton et al., 2007; Sprang et al., 2007; Mckim & Smith-Adcock, 2013). Additionally, since there is limited research in the literature regarding exposure to traumatized clients and VPTG, and since the literature is not consistent on whether increased exposure leads to higher VPTG (Brockhouse et al., 2011; Linley & Joseph, 2007; O'Sullivan & Wheelan, 2011), this an important area to consider for further research.

Future research should also continue to address the relationship between therapist

experience level and VT, STS, BO, CS and VPTG. There is still some contradiction in the literature as to whether less experience may be a risk factor for STS or VT. Furthermore, there is very limited research on experience level and VPTG (Brockhouse et al., 2011; Linley & Joseph, 2007), so this is an important new area to explore. Finally, the majority of studies that have examined VT, STS, BO, CS and VPTG have been cross-sectional in design. Future research that utilizes longitudinal designs will be important in order to determine whether there are differences for VT, STS, BO, CS and VPTG among different experience levels over time, or if differences might be the result of younger clinicians leaving the field of trauma work prematurely.

Another possible area of research to consider is the impact of the positive benefits of therapy work, such as CS and VPTG, on the possible negative consequences (e.g. VT, STS, and BO) of therapy work with traumatized clients. For example, it will be important to examine further the relationship between BO and CS to better understand if and how CS moderates the presence of BO. Furthermore, additional examination of the relationship between VPTG and STS and/or VT is warranted, as this is still a very new area of research and the results of the current study contradict previous research that found STS to be a predictor variable for VPTG (Lev-Weisel et al., 2009; O'Sullivan & Wheelan 2011).

Finally, research that provides additional clarification of the variables in the current study is warranted. In previous research, compassion fatigue (CF) has been identified as both STS and BO, or only STS, and also has been called secondary trauma (Newell & MacNeil, 2010). Research that clarifies and contextualizes CF, STS and BO

will be important in future studies. In addition, confirmation of the VT construct is necessary as it is unclear whether VT causes difficulties for therapists who work with traumatized clients. There is also a need for validation studies of the TABS (Pearlman, 2003) measure of VT. Finally, additional research of the differences and similarities between VR and VPTG is warranted in order to determine which of these constructs might best address the potential positive benefits of working with traumatized clients.

### **Recommendations**

It may be particularly important for mental health professionals in the field of trauma work to consider ways in which they may be able to cultivate an increase in positive benefits that they receive as a result of their therapy work. It is notable that in the current study participants who worked with the highest numbers of traumatized clients experienced higher levels of VPTG. For mental health professionals who work with high numbers of traumatized clients, VPTG may be a protective factor. Therefore, supervisors of therapists working with traumatized clients may wish to examine ways to increase VPTG for their supervisees. Calhoun and Tedeschi (1998) theorized ways in which clinicians can support PTG in their traumatized clients: working within the clients' existential and/or spiritual belief system and highlighting the clients' perception of thriving, even if the clients' behaviors are not entirely congruent with the clients' self-perceptions. Adapting these ideas for use in supervision may help supervisors increase supervisees' VPTG. Furthermore, Hernandez et al. (2010) describe a training for supervisors that includes a series of guided questions for supervisees that is aimed at increasing supervisee self-reflection regarding their relationship with traumatized clients

and what they have learned from witnessing their clients' resilience. Increasing VPTG and VR in supervisees in the field of trauma work may increase protective effects for clinicians doing challenging work and reduce attrition for new therapists working with the traumatized population.

### **Conclusions**

This study investigated possible negative and positive consequences for mental health professionals as a result of their work with traumatized clients. This study examined the impact of the potential negative effects of VT and compassion fatigue, which includes the two variables of STS and BO. This study found that mental health professionals experienced average amounts of VT, high amounts of STS, and average amounts of BO. Qualitative themes also included reports of VT, STS and BO. There were no significant differences on VT, STS, or BO as a result of level of therapist exposure to traumatized clients. There were also no significant differences based on the experience level of senior, mid-career, or novice mental health professionals.

This study also investigated possible positive consequences for mental health professionals as a result of their work with traumatized clients. This study examined CS, VPTG, and VR. Mental health professionals reported moderately high levels of CS and also reported experiencing VR and VPTG. Qualitative themes also included reports of CS, VPTG, and VR. There were no significant differences in CS based on therapist level of exposure. However, therapists with the highest levels of exposure to traumatized clients experienced significantly more VPTG compared to therapists with the lowest

levels of exposure. There were no significant differences in CS and VPTG based on differences in therapist experience level of senior, mid-career or novice.

It may be possible that the positive benefits of CS, VPTG, and VR mitigate some of the potential negative consequences of trauma therapy work. Additionally, through vicariously experiencing the trauma of their clients, therapists may also reap the benefits of VPTG without suffering the same intensity of pain as their clients (Calhoun & Tedeschi, 2012). Furthermore, those who work with the greatest amount of trauma appear to benefit the most (higher levels of VPTG) without the addition of detrimental effects such as increased levels of VT or STS. Therefore, supervisors may wish to attempt to train supervisees on methods by which to cultivate VR and VPTG through therapist reflection on the growth and resilience of their traumatized clients.

Future research should attend to the VPTG and VR constructs as there is little quantitative research about these constructs. Studies should examine training and supervision to see what factors might increase a mental health professional's level of VPTG or VR. Future studies should also examine how positive consequences such as CS, VPTG, or VR may mitigate potential negative consequences such as VT and CF. This may be of particular importance as increasing the positive effects of trauma therapy work for therapists may be protective and reduce attrition for therapists involved in trauma work.

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## **Appendix**

### Demographic Questionnaire for Participants

1 Age

2. Gender

3. Practice setting (examples, community mental, college counseling,

4. Your degree and major

5. What is the name of your license that you have or are eligible for?

(a) If you are licensed, how many years have you had your license?

(b) If you do not have a license, are you currently working on meeting the requirements for licensure? Please respond to one of the following.

(c) No, I do not have a license and am not currently license-eligible.

(d) Yes, I am working on becoming licensed and the name of my future license is

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6. How many years have you been working as a mental health professional?

7. The Diagnostic and Statistical Manual of Mental Disorders edition IV (DSM IV) identifies symptoms of PTSD as flashbacks of the traumatic event, nightmares, intrusive thoughts avoidance of memories of the trauma, hyper-arousal to everyday stimuli, intense emotional reactions, and difficulty sleeping. Estimate the number and percent of your clients in a typical month who have experienced any of the following symptoms as the result of a traumatic event.

8. What is the main presenting problem of your trauma clients? Please select top three from list below.

Childhood Sexual Abuse

Childhood Physical Abuse

Childhood Neglect

Childhood Emotional Abuse

Sexual Assault

Domestic Violence

Mugging/Robbery

Physical Assault

Kidnapping

Combat or War Trauma

Terrorist attack

Natural Disaster Trauma

Car or Plane Accident

Other. Please list ----

9. Please select the number of clients treated every week.

1-5, 6-10, 11-15, 16-19, 20-24, 25-30, 31-34, 35-39, 40+

10. Please select the percentage of trauma clients you have treated in the past 6 months?

0% -10%, 10%-20%, 20%-30%, 30%-40%, 40%-50%, 50%-60%, 60%-70%, 70%-80%, 80%-90%, 90%-100%.

Table 1					
<i>Participant Demographics (n=60)</i>					
Age in years					
<u>20-29</u>	<u>30-39</u>	<u>40-49</u>	<u>50-59</u>	<u>60-69</u>	<u>70-79</u>
4	13	13	15	14	1
Gender					
<u>Male</u>	<u>Female</u>				
12	48				
Practice Setting					
<u>Community Mental Health</u>	<u>Residential CMH</u>	<u>Private Practice</u>	<u>Multiple*</u>		
33	8	14	5		
* Three participants worked in private practice and CMH, one in private practice and an EAP clinic, and one in both residential and outpatient CMH.					
Highest Degree					
<u>MA or MS Counseling</u>	<u>MSW</u>	<u>M.Ed</u>	<u>PhD</u>	<u>PsyD</u>	<u>MD</u>
27	17	5	7	3	1
License Type					
<u>LCSW</u>	<u>LMFT</u>	<u>LP</u>	<u>LPC</u>	<u>MD</u>	<u>Multiple*</u>
16	8	7	24	1	1
* One participant held LPC, LMFT, and LP licenses.					
Years Licensed					
<u>Not Licensed/No Response</u>	<u>0-4</u>	<u>5-9</u>	<u>10-19</u>	<u>20-29</u>	<u>30-39</u>
14	12	4	8	12	2
Years Working as a Mental Health Professional					
<u>Novice (0-5years )</u>	<u>Mid-career (6-19years)</u>	<u>Senior(20+years)</u>			
16	21	23			
Clients Treated per Week					
<u>1-10</u>	<u>11-19</u>	<u>20-30</u>	<u>&gt; 30</u>		
17	20	22	1		
Clients Treated per Month with PTSD Symptoms					
<u>1-10</u>	<u>11-19</u>	<u>20-30</u>	<u>31-40</u>		
29	18	4	9		
Percentage of Clients per Month with PTSD Symptoms					
<u>Low (Under 40%)</u>	<u>Moderate (40%-Under 70%)</u>	<u>High (70%+)</u>			
20	18	22			
Percentage of Clients in Past Six Months with PTSD Symptoms					
<u>Low (Under 40%)</u>	<u>Moderate (40%-Under 70%)</u>	<u>High (70%+)</u>			
19	19	22			

Table 2

*Descriptive Statistics*

<u>Variable</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Mean</u>	<u>Std. Deviation</u>
VPTG	2.00	100.00	51.50	24.79
CS	39.00	68.00	55.95	6.78
STS	48.00	75.00	61.45	5.68
VT	26.00	65.00	44.98	7.92
BO	38.00	62.00	50.40	5.74

VPTG: Vicarious Posttraumatic Growth; CS: Compassion Satisfaction; STS: Secondary Traumatic Stress; VT: Vicarious Trauma; BO: Burnout

Table 3					
<i>Correlations</i>					
	CS	BO	STS	VPTG	VT
CS	1.00				
BO	-0.48 <sup>**</sup>	1.00			
STS	0.11	0.26 <sup>*</sup>	1.00		
VPTG	0.31 <sup>*</sup>	-0.05	0.20	1.00	
VT	-0.45 <sup>**</sup>	0.44 <sup>**</sup>	0.28 <sup>*</sup>	0.12	1.00
** Correlation is significant at the 0.01 level (2-tailed).					
* Correlation is significant at the 0.05 level (2-tailed).					
CS: Compassion Satisfaction; BO: Burnout; STS: Secondary Traumatic Stress; VPTG: Vicarious Posttraumatic Growth; VT: Vicarious Trauma					

Table 4				
<i>Hierarchical Multiple Regression Predicting Vicarious Posttraumatic Growth</i>				
Variable	VPTG			
	Model 1		Model 2	
	B	$\beta$	B	$\beta$
Constant	54.20		34.56	
Exposure Low-Moderate	-4.21	-0.197	-3.16	-0.15
Exposure Low-High	-8.59	-0.409	-8.02	-0.38
STS			0.29	0.17
VT			0.03	0.02
$R^2$	0.13		0.16	
$F$	4.19		2.54	
$\Delta R^2$	0.13		0.03	
$\Delta F$	4.19		0.91	

VPTG: Vicarious Posttraumatic Growth; STS: Secondary Traumatic Stress; VT: Vicarious Trauma

Table 5: Summary of Domains and Categories: Negative Responses										
		Number of Counselor Responses								
<u>Domains and Categories</u>	Experience:	Novice			Mid-Level			Senior		
	Exposure:	Low	Moderate	High	Low	Moderate	High	Low	Moderate	High
<b>Domain A: Negative Personal Changes</b>										
<b>Categories:</b>										
1. Interpersonal Relationships		1	2	1		1	3			3
2. Reminded about Personal Trauma		1		1					1	
3. Stigma related to Mental health						1				
<b>Domain B: Negative Professional Changes</b>										
<b>Categories:</b>										
1. Frustration with Bureaucracy							1			1
2. Difficulty working with clients		1								
<b>Domain C: Awareness and Sensitivity to Greater Culture</b>										
<b>Categories:</b>										
1. Concerns about Greater Culture				1		1		2		1
2. Sensitivity to Media		1		1						
<b>Domain D: Vicarious Trauma Responses</b>										
<b>Categories:</b>										
1. Vicarious Trauma				1				2		1
2. Cognitive Disruptions - Changes in perceptions of how I see others		1			1	1	4	1	2	
<b>Domain E: Compassion Fatigue Responses</b>										
<b>Categories:</b>										
1. PTSD symptoms/STS		1		2		1		2	1	2

2. Burnout/Exhaustion	1	1		2	2			2	1
3. Negative Mood/Feelings	3	1	1		1				1
4. Stress/Physiological/ Somatic symptoms	1		2		1		1	1	3



Table 6: Summary of Domains and Categories: Positive Responses										
		Number of Counselor Responses								
Domains and Categories	Experience:	Novice			Mid-Level			Senior		
	Exposure:	Low	Moderate	High	Low	Moderate	High	Low	Moderate	High
<b>Domain A: Positive Personal Changes</b>										
<b>Categories:</b>										
1. Personal Healing			1				1	1	1	1
2. Motivation to Practice Self-care			1	2		1	1	2		1
3. Deeper Understanding of Human Nature /Increased Awareness		1	1			1	1	1	1	1
<b>Domain B: Positive Professional Consequences</b>										
<b>Categories:</b>										
1. Increased Understanding of Trauma/ Professional Development		2		2	2	1	2	1	1	2
2. Therapist Community		1		2						
<b>Domain C: Post-traumatic Growth/Vicarious Resilience</b>										
<b>Categories:</b>										
1. Increased Compassion/Empathy		1	1		1	1	3	4	2	3
2. Impacted by Clients' Resilience		1			1	3	3	3	2	3
3. Putting Problems into Perspective		3	1		1	1	1			2
4. Increased Gratitude/Appreciation for Own Good Fortune		1		2				1	1	2
5. Interpersonal Relationships					1	1	1		1	

6. Personal Meaning in Life/ Spirituality	1	2		1	1	2		1	2
7. Personal Improvements			2		1	2	1	1	1
<b>Domain D: Compassion Satisfaction</b>									
<b>Categories:</b>									
1. Positive Emotions	1	1	1					1	
2. Self-Efficacy/Making a difference to clients	1	1	1	1	1	3			1
3. Enjoyment of working with the clients/ The work is satisfying							2	1	3