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EXPLORING VICARIOUS RESILIENCE  
AMONG PRACTITIONERS WORKING WITH CLIENTS  
WHO HAVE EXPERIENCED TRAUMATIC EVENTS

by

ADAM REYNOLDS

A dissertation submitted to the Graduate Faculty in Social Welfare in partial fulfillment of the requirements for the degree of Doctor of Philosophy, the City University of New York

2020

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Exploring Vicarious Resilience among Practitioners Working with Clients who Have Experienced Traumatic Events

by

Adam Reynolds

This manuscript has been read and accepted for the Graduate Faculty in Social Welfare in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

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THE CITY UNIVERSITY OF NEW YORK

## ABSTRACT

### Exploring Vicarious Resilience among Practitioners Working with Clients who Have Experienced Traumatic Events

by

Adam Reynolds

Advisor: Diane DePanfilis

Vicarious Resilience is the positive impact that practitioners may experience when working with individuals who have lived through traumatic events. The effects of this phenomenon may be noticed as changes in life goals and perspective, client-inspired hope, increased recognition of clients' spirituality as a therapeutic resource, increased capacity for resourcefulness, increased self-awareness and self-care practices, increased consciousness about power and privilege relative to clients' social location, and increased capacity for remaining present while listening to trauma narratives.

While prior research into vicarious resilience has focused primarily on practitioners in trauma-specific settings, this quantitative dissertation studied the experiences of a convenience sample of 302 practitioners working in a variety of human services settings. Using an online survey platform, respondents provided demographic and situational information, and completed two standardized instruments: The Vicarious Resilience Scale (VRS) and the Professional Quality of Life Scale (ProQOL).

The sample population had a mean score of 95.5 on the VRS, indicating that they scored at or above the 70th percentile of the VRS, indicating a strong prevalence of vicarious resilience experiences within this population of practitioners across a variety of settings. In contrast to prior studies of this measure, vicarious resilience was positively associated with other positive effects

(compassion satisfaction) and negatively associated with negative effects (burnout, secondary traumatic stress) measured. Vicarious resilience was not associated with the reported prevalence of clients with traumatic experiences within practitioners' caseload. Of the demographic and situational factors reported, two—length of practice and the presence of trauma-informed supervision—were found to predict higher values of vicarious resilience within the sample.

Ultimately, the negative impact on practitioners of working with clients who have experienced traumatic events is more extensively studied and more widely understood than the positive impact. This dissertation demonstrates that this population of practitioners do experience vicarious resilience and highlights the need for further research into this phenomenon.

## ACKNOWLEDGEMENTS

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## **CHAPTER I: INTRODUCTION**

This dissertation was designed to explore the phenomenon of vicarious resilience (VR) among clinicians working with persons who have experienced traumatic events. One of the primary frameworks for conceptualizing the positive effects that practitioners can experience when working with these clients, VR has been studied predominately with practitioners working with survivors of extremely traumatic events. This quantitative cross-sectional dissertation measures and observes VR among a population of practitioners within a broader range of settings whose clients have experienced trauma, and attempts to identify factors that may promote the phenomenon's presence/development.

### **Statement of the Problem**

#### **The Effects of Working with Survivors of Trauma on Practitioners**

As research reveals more information about how individuals and communities respond to trauma, we also develop more meaningful ways to prevent, identify and treat negative responses to traumatic events. Correspondingly, we have also begun to better understand how work with clients who have survived trauma can affect practitioners. Research in this arena has focused primarily on the negative impact this work can have on practitioners – effects collectively described as “empathic stress reactions” (Weingarten, 2003) – including burnout, compassion fatigue, and vicarious trauma (Cieslak et al., 2014). This preoccupation with negative effects can be stigmatizing to survivors of trauma who are seen as difficult or dangerous to work with (Rogers, Bobich, & Heppell, 2016), and contributes to high rates of turnover as well as other negative psychological and professional consequences among practitioners dealing with these populations (DePanfilis & Zlotnik, 2008; Liebling, Davidson, Akello, & Ochola, 2016).

Research into the impact of trauma on survivors has followed a recognizable path: it was initially focused on identifying the effects of trauma and exploring how best to mitigate those effects; it subsequently concentrated on avenues of prevention and the promotion of internal resilience, particularly the marshalling of factors to inoculate against the negative impact of trauma (Luthar, 2015). A body of research was ultimately developed around the understanding that there are also *positive* outcomes after individuals survive and grow as a result of traumatic experiences, a process often described as post-traumatic growth (Tedeschi & Calhoun, 1996).

As our awareness of trauma's impact on survivors of such experiences has grown, it has become possible to develop a deeper understanding of the experiences of practitioners who work with this emergent population. The development of this knowledge has followed a parallel pattern: first an identification of the negative effects on practitioners working with individuals who have experienced trauma and the development of concepts related to empathic stress reactions, followed by research exploring how to prevent or promote resilience against these negative effects. More recently a modest body of research has begun to identify similar positive outcomes as a result of the experiences of practitioners who work with trauma survivors, a phenomenon described variously as vicarious post-traumatic growth (VPTG), vicarious resilience (VR) (Edelkott, Engstrom, Hernandez-Wolfe, & Gangsei, 2016) or shared resilience in a traumatic reality (SRTR) (Nuttman-Shwartz, 2015).

These positive outcomes have been explored primarily in practitioners working with populations who have survived particularly extreme traumatic experiences, such as torture survivors (Hernandez-Wolfe, Killian, Engstrom, & Gangsei, 2015) and large-scale natural disaster survivors (Nishi et al., 2016), or in individuals who work within an environment where the threat of trauma is constant (Dekel, Nuttman-Shwartz, & Lavi, 2016; Nuttman-Shwartz &

Sternberg, 2017). The majority of this research has taken the form of qualitative inquiry, describing positive practitioner effects that can be separated into seven categories clearly defined within the VR literature: (1) changes in life goals and perspective, (2) increased client-inspired hope, (3) increased recognition of clients' spirituality as a therapeutic resource, (4) increased capacity for resourcefulness, (5) increased self-awareness and self-care practices, (6) increased consciousness about power and privilege related to clients' social location, and (7) greater capacity to remain present while listening to trauma narratives. (Engstrom, Hernandez, & Gangsei, 2008; Hernandez-Wolfe et al., 2015; Killian, Hernandez-Wolfe, Engstrom, & Gangsei, 2016).

Much of the quantitative research into this phenomenon exists within the VPTG literature and focuses primarily on the uncertain relationship between the positive effects and practitioners' experiences of negative empathic stress reactions. Relatively few quantitative inquiries have been undertaken to establish the existence of these positive effects across a broader population of practitioners and settings and it also remains unclear what factors may predict and contribute to its development. Further research into this phenomenon can help support the work of practitioners in the field, as well as inform strategies to reduce burnout, vicarious trauma, and turnover. In particular, research that examines how the positive experience of VR is expressed and experienced within a broader population of practitioners can help us gain a better understanding of how this phenomenon manifests and can best be supported across a wide variety of settings.

### **Terminology Relating to Positive Effects**

There is some uncertainty with regard to how best to describe and conceptualize positive effects within the literature, particularly when it comes to the complexity of separating post-



traumatic growth (which takes place after a traumatic event) from resilience (which can only be demonstrated by a positive response to a traumatic event). Difficulty is also encountered in outlining the mechanism of change – from focusing on the transmission of effects from client to practitioner (as in vicarious theories) to emphasizing the mutual relationship between practitioner and client (Levine, Laufer, Stein, Hamama-Raz, & Solomon, 2009; Nuttman-Shwartz, 2015; Tedeschi, Calhoun, & Cann, 2007). Within this dissertation, the term vicarious resilience is used to describe these positive effects whenever not referring to concepts developed specifically within another framework, as the VR phenomenon has the clearest conceptual and experiential structure developed through their qualitative explorations, and is most closely connected to the primary instrument being used within the research methodology (Hernandez-Wolfe et al., 2015; Killian et al., 2016).

### **Definition of Trauma**

In this dissertation, the term “trauma” refers to a particular set of psychological and physical responses that occur in individuals after they have experienced a stressful event. Rather than identify external or objective criteria to say what sort of event or response qualifies as trauma, I draw upon the definition established by Laurie Pearlman and Karen Saakvitne, who define (psychological) trauma as “the unique individual experience of an event or enduring conditions, in which: (a) the individual’s ability to integrate his/her emotional experience is overwhelmed, or (b) the individual experiences (subjectively) a threat to life, bodily integrity, or sanity” (Pearlman & Saakvitne, 1995, p. 60). This definition asserts that it is the subjective experience of the person who has undergone an event that determines whether or not the experience was traumatic.

## **Empathic Stress Reactions**

In her 2003 book, *Common Shock: Witnessing Violence Every Day*, Kathe Weingarten explores the encounter with traumatic violence as a social phenomenon; challenging the reductive preoccupation with the dual roles of perpetrator and victim and incorporating our growing understanding of the additional role of witness within the trauma structure. Particularly when exploring the phenomenon of interpersonal trauma, it is the engagement of witnesses (either to the traumatic event itself or in relationship with the survivor after the fact) that gives the experience its social dimension. She highlights the reciprocal nature of the role of witness: the behavior and response of the witness (particularly witnesses who have a professional role that relates to the trauma) can deeply affect the well-being of the victim of the trauma. At the same time, exposure to the trauma can have significant effects on the witness as well (Weingarten, 2003).

Weingarten explores in particular a sort of ‘double jeopardy’ that can be experienced by individuals whose professional role regularly requires them to witness (either directly or indirectly) traumatic events: police and first responders, journalists, clergy and other helping professionals. These professional roles within society require the individuals concerned to perform crucial tasks in the face of traumatic events and violence, and the stress of fulfilling that role – and the fallout should they fail in their responsibilities – therefore creates the potential for significant negative impact. Weingarten asserts that because of the social pressures on these professionals, they tend to express biases towards objectivity and against emotionality in the face of trauma, and this can increase the chance that they experience what she terms “empathic stress reactions” which is a blanket term she uses to cover a variety of associated phenomena, including burnout, compassion fatigue, secondary traumatic stress, and vicarious trauma (Weingarten,

2003, p. 99). These phenomena have been shown to manifest and to be related within populations of practitioners who work with individuals who have experienced trauma (Cieslak et al., 2014).

Weingarten has not continued to develop the concept of empathic stress reactions through further publications within the field of social trauma: however, her focus on the relationship between the survivor of trauma and the helping professionals who work with them remains valuable in creating a social context for the phenomenon of VR. This understanding creates an awareness that other professional roles, whether directly analogous to trauma practitioners (such as clergy, who often provide pastoral counseling and support) or more distinct (such as journalists, who often witness traumatic events or interview survivors first hand but are not called upon to assist survivors professionally) have the potential to experience negative and positive responses to traumatic events. This can help us to focus our attention appropriately on various kinds of practitioners within organizations: not just psychotherapists/clinicians.

### **Aims and Objectives**

Qualitative studies of the phenomenon of VR have been restricted to populations of clinicians working with clients who are survivors of political violence and torture, with research less frequently exploring the experiences of practitioners who work in settings that deal with a broader range of clients, who may not identify as survivors of trauma or seek to address issues related to trauma in their work with practitioners. Quantitative studies of these phenomena are relatively few in number.

**Aim 1: Identify and explore the phenomenon of vicarious resilience in practitioners working with clients who have had traumatic experiences**

Hypothesis 1a: Practitioners from a variety of settings working with clients who have experienced trauma will report experiences of vicarious resilience comparable to practitioners in prior studies.

Hypothesis 1b: For practitioners who work with individuals who have experienced traumatic events, there will be no significant association between practitioner's vicarious resilience and negative effects scores ("Vicarious resilience is not simply the opposite of vicarious trauma.")

Hypothesis 1c: There will be a significant positive correlation between the prevalence of survivors of trauma in the practitioner's caseload and the practitioner's vicarious resilience score ("Greater exposure to clients' traumatic material increases the possibility of developing vicarious resilience.")

**Aim 2: Identification of factors that may promote or mediate vicarious resilience (SR) in practitioners**

Hypothesis 2: Demographic and/or environmental factors related to individual practitioners will significantly explain practitioners' variance in vicarious resilience scores. Specific factors that that will be explored include: gender, age, race/ethnicity, education, length of time working with this client population, category of professional setting, spiritual practice, history of trauma, trauma-specific education, inclusion of trauma-related content in supervision, and sense of connection with peers.

## CHAPTER II: SITUATION IN-CONTEXT

### Trauma's Negative Effects on Clients and Practitioners

While there is considerable research into the effects of trauma on individuals, there remains uncertainty about why certain individuals who experience trauma have significant chronic negative psychological effects, while others with similar experiences suffer only transient distress and return to customary functioning within time. Similarly, there is no single theory that explores why certain practitioners working with individuals who have survived trauma experience significant negative consequences, while others can survive or even thrive in similar clinical settings.

Some practitioners' responses to clients' traumatic experiences can be as intense as individuals' responses to direct trauma exposure. The American Psychological Association points out that, for some individuals, "repeated or extreme indirect exposure to aversive details of the event(s), usually in the course of professional duties" can result in the same intense symptoms – emotional dysregulation, intrusive thoughts and images, and avoidance/numbing – as those experienced by the individuals who have had direct experience of the traumatic event (American Psychiatric Association, 2013).

For most practitioners who report them, the negative experiences of empathic stress reactions surface in a more subdued form than that of a formal psychiatric disorder. Feelings of numbness, depression and avoidance may surface from encounters with clients who have experienced trauma, contributing to the ongoing professional challenges of burnout and compassion fatigue which are not exclusive to practitioners working with trauma survivors (Craig & Sprang, 2010a). For some clinicians the experience is more focused and intense; they experience anxiety, intrusive thoughts or images, or ongoing depression and avoidance as a

result of secondary traumatic stress or vicarious trauma (Bischoff, 2014). One response to the greater awareness of negative effects on practitioners has been the implementation of trauma-informed practices, particularly in settings where clients may be presenting to receive assistance in areas unrelated to their traumatic experience (Butler, Critelli, & Rinfrette, 2011; Reeves, 2015).

### **Social Trauma and Empathic Stress Reactions**

Traumatic events do not happen in isolation. Interpersonal trauma happens in the context of relationships, families, communities. Traumatic events on a larger scale – natural disasters, acts of terrorism, and military actions, for example – affect even larger groups of people. Though each individual has his or her own unique response to a traumatic experience, we are constantly engaged with others in our lives whose responses range from resilience in the face of adversity to long-term distress and challenges to normal functioning. When we come into contact with individuals who are struggling with intense responses to traumatic events, it is understood that we are affected as well. Several terms have been developed to describe this phenomenon, particularly among practitioners who work in helping professions that provide services to such individuals.

### **Burnout and Compassion Fatigue**

Though burnout and compassion fatigue are often referenced when describing practitioner responses to client populations who have been exposed to traumatic experiences, they represent phenomena that do not require an inciting traumatic event in order to surface within a practitioner. Burnout is most often described and defined as a condition inspired by friction between the needs of the practitioner and the resources and flexibility of the workplace. Growing caseloads, reduced staffing, and increasing acuity create a sense of enervation and

hopelessness that can impact a practitioner's ability to do their work, experience satisfaction, and remain in challenging placements (Bell, Hopkin, & Forrester, 2019; Boscarino, Adams, & Figley, 2010).

While burnout represents a tension between a practitioner and his or her work responsibilities, compassion fatigue is most often described as a sort of affective response experienced by practitioners as a natural consequence of being engaged in helping profession tasks over an extended period of time. It manifests more as a diminishing of enjoyment and satisfaction in tasks that had once been meaningful or pleasant but can also negatively impact quality of life, job performance, and sense of well-being (Bride, Radey, & Figley, 2007).

In a 2014 meta-analysis of the relationship between practitioners with indirect exposure to trauma and subsequent experiences of burnout and secondary traumatic stress, Roman Cieslak examined more than 40 original studies, surveying a total of 8,256 workers who reported indirect exposure to trauma. The associations between burnout and secondary traumatic stress were strong ( $r=.69$ ). An analysis of the measures involved demonstrated that a stronger relationship was identified when utilizing measures designed according to the compassion fatigue framework than when utilizing measures that focused on a cognitive shift in the clinician(s) or were based on report of symptoms related to post-traumatic stress disorder (PTSD) (Cieslak et al., 2014). Ultimately, it can be difficult to differentiate between these phenomena, and yet they seem to represent certain distinct experiences of practitioners in dealing with such pressures at work across a variety of settings, including mental health (Beaumont, Durkin, Martin, & Carson, 2016), child welfare (Salloum, Kondrat, Johnco, & Olson, 2015), prison and forensic settings (Bell et al., 2019), and hospitals (Duarte & Pinto-Gouveia, 2017).

## **Vicarious Traumatization and Secondary Traumatic Stress**

The concept of vicarious traumatization was first introduced in the 1990s by Laurie Pearlman on the basis of observations made in her work with survivors of sexual abuse and incest. Her work described a process through which practitioners could indirectly or vicariously experience the clients' traumatic reactions (Finklestein, Stein, Greene, Bronstein, & Solomon, 2015; McCann & Pearlman, 1990). At around the same time, drawing on his work in exploring the symptomology of PTSD, Charles Figley began exploring the "natural and consequential behaviors and emotions resulting from knowing about a traumatizing event experienced by a significant other (or client) and the stress resulting from helping or wanting to help a traumatized or suffering person" (Figley, 1995, p. 7) which he ultimately described as secondary traumatic stress. While some components of these two phenomenon overlap, vicarious trauma includes changes in thoughts and cognitions on the part of the practitioner (connected to constructivist self-development theory), whereas secondary traumatic stress involves effects that more directly mirror the symptoms of a person who directly experienced the traumatic event; though generally with less intensity (Hunt, 2018; Newell, Nelson-Gardell, & MacNeil, 2016).

### **Trauma-informed practice**

Survivors of trauma may experience certain elements of normal service delivery as intrusive or invasive, serving to trigger traumatic responses. As a result, it is imperative for the organization concerned to address this risk consistently on multiple levels to provide for greater security within the clinical environment, to assist in engagement with vulnerable populations, and to foster safety for individuals seeking assistance (Butler et al., 2011; Reeves, 2015). Trauma-*informed* services reflect an understanding of and sensitivity to clients' experiences of violence and victimization. Such services are distinct from trauma-*specific* services in that they



are also provided in settings where the clients' trauma itself (or its consequences) may not be obvious or directly related to the issues the client presents (Butler et al., 2011).

Although trauma-informed practices have been developed largely in response to perceptions and understanding about the needs of clients who have experienced traumatic events, there is some evidence to indicate that the implementation of trauma-informed practices can contribute to the fostering of positive effects among practitioners who are working with clients who have had these experiences; or at minimum, provide some exposure to protective factors against negative effects of empathic stress reactions.

### **Increased Focus on Practitioner Self-Care**

Since traumatic symptoms and experiences are not always familiar to service providers, some components of trauma-informed care focus on interventions that can assist practitioners; particularly by increasing awareness of the beneficial effects of self-care as a primary component of service provision, not simply as adjunctive support to offset the consequences of this particular kind of work (Dattilio, 2015). Qualitative research conducted with mental health practitioners has identified self-care practices that are closely allied to the principles of VR work: reducing isolation, developing an appreciation of complexity, and active optimism, among others (Harrison & Westwood, 2009). Research indicates that these practices could have benefits in a variety of settings, including child welfare (Salloum et al., 2015).

### **Emphasis on Psychoeducation about Trauma/Supervision**

Another key component of trauma-informed practices that has implications for the development of vicarious resilience is the focus on the provision of education about trauma and its effects, and the provision of trauma-informed supervision. The vicarious resilience literature contains evidence demonstrating that an understanding of traumatic processes and the capacity to

reflect upon them in supervision are components that can reduce negative effects and promote VR in practitioners focused on trauma work (Berger & Quiros, 2016; Neswald-Potter & Simmons, 2016).

### **CHAPTER III: LITERATURE REVIEW**

A search for “vicarious resilience” or “shared resilience” within the following databases: Academic Search Complete, CINAHL Complete, Health and Psychosocial Instruments, MEDLINE Complete, PsycINFO, Social Sciences Full Text (H.W. Wilson), SocINDEX with Full Text, and PubMed yields 56 results. A search for “vicarious posttraumatic growth” or “vicarious post-traumatic growth” yields 38 items making up a total of 94 results.

After removing duplicates (28) and excluding articles that did not represent published, edited or peer-reviewed content (12), as well as removing content not substantively related to practitioners (as against clients) or not pertaining to psychological resilience to negative effects from the therapeutic encounter (10), there remained a total of 44 items. Four additional journal articles were added during the course of the review making up a total of 48 items.

#### **Vicarious Post-Traumatic Growth**

In the VPTG literature, a close connection is almost always drawn between the processes of vicarious trauma and vicarious post-traumatic growth.(Cosden, Sanford, Koch, & Lepore, 2016; Manning-Jones, de Terte, & Stephens, 2016; McCann & Pearlman, 1990). The framework of post-traumatic growth – which requires a traumatic event to serve as its catalyst – also seems to require this symbiotic connection between vicarious trauma and vicarious post-traumatic growth. This seems to contribute to certain challenges in differentiating between these two phenomena, indeed, in a number of quantitative studies VPTG is operationalized or demonstrated simply as the absence of or reduction in symptoms of vicarious traumatization or secondary traumatic stress. In addition, since post-traumatic growth has a more cohesive literature base and semantic identity, there is a greater convergence of language and concepts related to the phenomenon across the quantitative and qualitative literature. Most studies draw

very strongly on the language and concepts originated by Tedeschi and Calhoun (1996) in their development of measurement instruments for post-traumatic growth in survivors of trauma. This could create challenges in observing how this phenomenon is uniquely experienced by practitioners.

### **Vicarious Post-Traumatic Growth: Qualitative Studies**

The earliest and most widely-cited survey of practitioners among the VPTG literature was conducted by Deborah Arnold in conjunction with Richard Tedeschi and Lawrence Calhoun, and consisted of naturalistic interviews conducted with 21 psychotherapists about their work with individuals who had experienced trauma (Arnold, Calhoun, Tedeschi, & Cann, 2005). Unsurprisingly, its results are most connected to Tedeschi and Calhoun's initial theories related to post-traumatic growth in individuals who have experienced trauma, focusing in particular on shifts in practitioner perceptions of personal growth and alterations in schemas and memories (Arnold et al., 2005; Tedeschi & Calhoun, 1996).

This methodological structure and these results are similar to studies undertaken in 2014 and 2015 by Debra Hyatt Burkhart with 12 mental health clinicians at a residential mental health facility in Pennsylvania, and Chaya Possick, with 14 social workers working at government and nonprofit agencies in Israel. Both of these studies focused on practitioners who worked primarily with child and adolescent survivors of trauma (Hyatt-Burkhart, 2014; Possick, Waisbrod, & Buchbinder, 2015). In such smaller studies, greater attention is devoted to the interplay between the positive and negative experiences within practitioner's experience. Possick explores this phenomenon as a dialectic between experiences of "chaos and control," and Hyatt-Burkhart focuses on interactions between practitioners and the environment as a representation of how

clients who have experienced traumatic events can be stigmatized by the mental health community at large.

Acknowledging the impact of global trauma and displacement on clients and practitioners who work with them, Katie Splevins and her colleagues in the United Kingdom undertook a qualitative study with eight interpreters working with asylum seekers and refugees, demonstrating that even within nonclinical interactions, intimate and empathic connection with individuals who have experienced traumatic events can create positive and negative effects in the practitioner (Splevins, Cohen, Joseph, Murray, & Bowley, 2010). The clinical impact of working with refugees and asylum seekers was also explored by Allysa J. Barrington and Jane Shakespeare-Finch who worked with 17 clinical and non-clinical staff members at a facility in Australia (Barrington & Shakespeare-Finch, 2013). In both studies there was ample evidence of both positive and negative impacts on practitioners as a result of work with this challenging population, with Barrington and Shakespeare-Finch focusing particularly on the role that effortful meaning-making plays in the development of VPTG.

### **Vicarious Post-Traumatic Growth: Quantitative Studies**

In the past ten years there have been a number of studies exploring the phenomenon of vicarious post-traumatic growth utilizing quantitative methods. In most cases, relationships are drawn between VPTG and measures of secondary traumatic stress, however, there remains a lack of consensus with regards to the exact nature of the relationship between these two phenomena, with some results indicating that the processes may exist on one continuum, where the greater presence of VTPG results in a corresponding decrease in secondary traumatic stress (Măirean, 2016; Mairean & Turliuc, 2013), and other results revealing that increased VPTG and increased secondary traumatic stress may coincide (Manning-Jones et al., 2016).

Quantitative research on the VPTG phenomenon has been undertaken with a variety of populations, including mental health workers/therapists (Brockhouse, Msetfi, Cohen, & Joseph, 2011; Manning-Jones et al., 2016), telephone counselors (O'Sullivan & Whelan, 2011), substance abuse providers (Cosden et al., 2016), medical professionals (Mairean, 2016; Mairean & Turliuc, 2013), child protective workers (Rhee, Ko, & Han, 2013).

A majority of the studies utilize Tedeschi and Calhoun's Post Traumatic Growth Inventory as a measure of vicarious post-traumatic growth, despite that measure having been developed for primary survivors of traumatic events, rather than those who encounter it through a professional relationship. This could imply that some qualities unique to VPTG could go unnoticed. Different operationalization of variables and measures mean that it is difficult to identify themes in significant results across the various studies. Some factors that were found to be associated with increases in VPTG were empathy (Brockhouse et al., 2011), a history of traumatic experience on the part of the clinician (Cosden et al., 2016), and self-care (Manning-Jones et al., 2016).

Brockhouse et al (2011) have provided one of the more unexpected results in that, contrary to expectations, the perception of organizational support does not relate significantly to the experience of VPTG. Possibly highlighting the connection between the ability to adapt schema to engage in meaning-making, therapists having a strong sense of coherence were also negatively correlated with measurements of VPTG. Also of interest, in one of the studies where measurements of VPTG and secondary traumatic stress were differentiated, was that humor and peer support were seen to be associated with greater vicarious post-traumatic growth, but not decreased secondary traumatic stress, where social support was seen to be associated. Self-care was correlated with beneficial effects on both measures (Manning-Jones et al., 2016).

Based upon their research with telephone counselors, O'Sullivan and Whelan have hypothesized a "threshold of adversity," whereby a certain amount of vicarious traumatic experience has the capacity to generate VPTG, but beyond a certain threshold of stress, there is no further growth but instead the possibility of increased negative effects (O'Sullivan & Whelan, 2011). This idea was further developed in Manning-Jones' et al.'s 2017 study exploring the possibility of a curvilinear relationship between secondary traumatic stress and vicarious post-traumatic growth, where initially the two phenomena increase together, with growth eventually reaching a plateau and then decreasing at higher levels of stress. This particular curvilinear result was only discovered among psychologists in this study, not in other professions involved in the study, where no significant association was found (Manning-Jones, de Terte, & Stephens, 2017).

### **Vicarious Resilience**

The term vicarious resilience, to describe the positive effects of working with survivors of trauma on practitioners, was first coined by Pilar Hernandez-Wolf, David Gangsei, and David Engstrom in a study published in the journal *Family Process* (2007). This qualitative grounded theory and phenomenological analysis explored the experiences of 12 psychotherapists working with victims of political violence and torture in Colombia. The intensity of trauma experienced by the client population cast the practitioners' narratives of positive impact of the therapeutic encounter in high relief. The social location of the work was highlighted as well, with the authors exploring issues specifically related to trauma generated by politically motivated violence, and the international context of the work where psychotherapy services to trauma survivors is largely provided and coordinated by international nonprofit agencies. Theoretically, the authors place the concept squarely between the two antecedent concepts of secondary traumatic stress and

resilience, while arguing for VR as a phenomenon distinct from either. While the article offers concrete examples of VR, there is no general synthesis of themes (Hernández et al., 2007).

Hernández, Gangsei, and Engstrom further developed the concept of VR in a 2008 article in the journal *Traumatology*, describing a grounded theory analysis built along the framework of the prior study, this time working with a population of 10 U.S. mental health providers working with survivors of torture. This study began to develop the categorical themes of VR experiences from participant interviews, describing three broad categories of VR: mental health providers being positively affected by clients' stories of resilience; the providers describing experiences where their own perspectives on their lives were altered; and a reinforcement of the value of the clinical work undertaken in the therapeutic encounter (Engstrom et al., 2008, p. 16). This study remains deeply contextualized, providing additional information about the complexities and unique pressures of torture treatment. The connection between VR and empathic processes (positive and negative) within the therapeutic process is emphasized, and the authors differentiate between VR and post-traumatic growth on a conceptual level: explaining the VR can be experienced in a consistent state as an ongoing process, whereas vicarious post-traumatic growth is linked theoretically to a particular traumatic experience and is measured via an improvement in functioning (Engstrom et al., 2008).

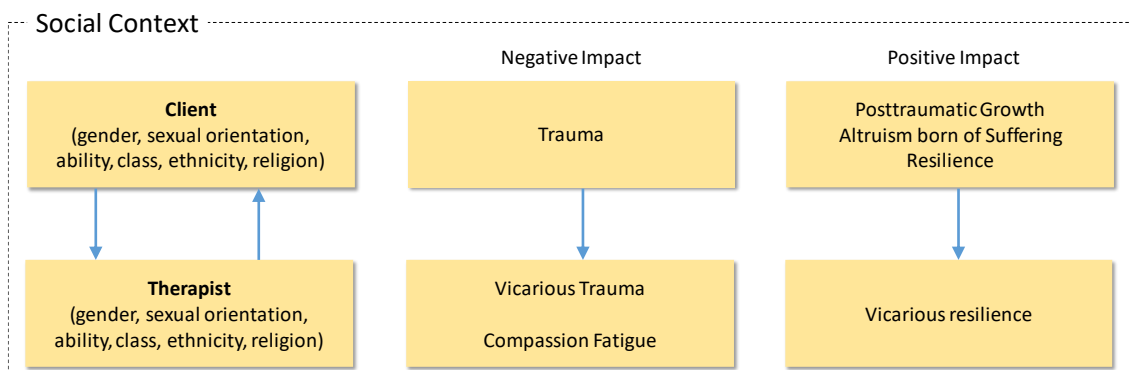
In 2010, Hernández, Gangsei, and Engstrom adapted these results to build a proposed integrative framework for training therapists who would work with survivors of trauma. Their article in the *Journal of Systemic Therapies* pursues an integrative framework where VR is located alongside other components in the larger, reciprocal relationship between therapists and survivors of trauma. The authors highlight the importance of exploring both the positive and negative effects that practitioners may experience when working with trauma survivors: both



secondary traumatic stress as well as VR phenomenon. The authors create a streamlined map of some of the reciprocal concepts in the therapeutic encounter, as illustrated below:

**Figure 1**

*Reciprocal Concepts in the Therapeutic Encounter*



(Hernández, Engstrom, & Gangsei, 2010, p. 75)

After a five-year gap, the research team continued to refine and develop the construct of vicarious resilience through a study of 13 mental health providers (again in the field of torture treatment) across the United States, using a constructionist framework and a constant comparison methodology (Hernandez-Wolfe et al., 2015). In a continuation of the social location of this research team, they highlighted several elements of power and intersectionality that arise within torture treatment: including the irony that medical professionals (who would ostensibly be healers of torture) are sometimes consulted and utilized in the design and implementation of torture, as well as the importance of remaining conscious of the therapist's power within the relationship (Hernandez-Wolfe et al., 2015, p. 155). In this study the authors discuss how trauma treatment has been compartmentalized to avoid the integration of multiple dimensions of identity and experience and how understanding and exploration of the reciprocity inherent in the phenomenon of VR allows these identities to enter into the therapeutic encounter.

In the 2015 study the research team identifies six primary themes within the qualitative data describing vicarious resilience (representing an enhancement over the three categories previously described): Changes in goals or priorities; Increased hopefulness and client-based inspiration; Change/impact on spiritual beliefs and practices vis-à-vis the therapeutic process; Increase in self-care practices; Increased resilience and perspective taking on one's own challenges; Increased racial, cultural, and structural consciousness, and awareness of relative privilege, marginalization, and oppression (Hernandez-Wolfe et al., 2015, p. 161).

In 2016, the core authors reported on the phenomenon with another 13-therapist study, publishing the results in the *American Journal of Orthopsychiatry* to further develop the concept, in an article entitled "Vicarious Resilience: Complexities and Variations." Within this article the concept is more specifically located theoretically – comparing and contrasting the concept with other positive constructs such as compassion satisfaction and vicarious post-traumatic growth. Some conflictual viewpoints arose where practitioners uniformly saw the clients' spirituality as contributing positively to the clients' experiences, but where the effects of the therapeutic encounter on practitioners' spirituality was more ambiguous. The social context for the idea of resilience itself continues to be a focus of the research, with the authors describing both "moral clarity" as well as an increased skepticism and criticism with respect to governments and power systems as outcomes for practitioners (Edelkott et al., 2016).

The 2016 article echoes the 2010 educational framework in identifying awareness of VR as a factor in developing it within the practitioner – initially included as part of a training program for practitioners working in the field. The 2016 article raises for future study the question of whether or not it is possible to experience the phenomenon without being explicitly conscious of it. In addition, the authors address (among other literature) a 2014 article by

Margaret Pack in the *Journal of Women and Social Work* positing a framework she describes as “vicarious resilience” which is effectively limited to preventing or reducing the impact of vicarious traumatization (Pack, 2014). Edelkott and other VR theorists have argued that the two constructs (vicarious resilience and vicarious trauma) operate independently of one another, and while it is likely that they do affect one another, most practitioners experience elements from both phenomena (Edelkott et al., 2016; Killian et al., 2016).

### **Vicarious Resilience: Expansion and Development**

Drawing upon the cross-cultural experience of the initial research into the phenomenon, a significant component of most qualitative research into VR involves an acknowledgement of the international context, both in terms of the impact of international events on refugees, asylum seekers, and survivors of international trauma (Puvimanasinghe, Denson, Augoustinos, & Somasundaram, 2015; Sil Jin, 2016), as well as in terms of the cross-cultural comparison of the phenomenon across countries/continents (Hurley, Alvarez, & Buckley, 2015). Significant additional research has been conducted using qualitative exploration into the phenomenon in clinicians who work with children and youth (Hurley et al., 2015; Pack, 2014; Silveira & Boyer, 2015; Tassie, 2015).

The bulk of these VR studies reinforce the core themes developed within the existing literature, with each adding some variation based on the population being studied. Looking at the personal experiences of the clinician, Tassie (2015) has highlighted the need for a reflective stance on the part of the practitioner to develop vicarious trauma, while Silveira and Boyer (Silveira & Boyer, 2015) identify optimism and hope as important qualities in practice. Work satisfaction and a sense of cultural flexibility were identified as crucial by practitioners working with refugees (Puvimanasinghe et al., 2015), and in a connection to the literature specifically

connected to shared trauma and resilience, Hunter (2012) has identified mutual affirmation within the therapeutic dyad as a component that contributes to the development of VR.

### **Development of Empirical Measurement of Vicarious Resilience**

In a 2016 article in the journal *Psychological Trauma: Theory, Research, Practice & History*, the original group of VR researchers described the creation and pilot testing of the Vicarious Resilience Scale (VRS), an instrument designed and delivered to 190 therapists dealing with survivors of “extreme trauma.” This exploratory factor analysis yielded seven factors drawn from the earlier qualitative research on VR: changes in life goals and perspective; client-inspired hope; increased recognition of clients’ spirituality as a therapeutic resource; increased capacity for resourcefulness; increased self-awareness and self-care practices; increased consciousness about power and privilege relative to clients’ social location; and increased capacity for remaining present while listening to trauma narratives (Killian et al., 2016).

The VRS was determined to be reliable with a Cronbach’s alpha of .92, and results on the VRS were moderately and positively correlated with subjects’ scores on post-traumatic growth and compassion satisfaction scales, which was interpreted as indicating convergent validity. There was no negative correlation between VR and measured compassion fatigue or burnout, which the researchers felt supported their conceptual view that VR is a distinct construct and not merely the capacity to avoid negative vicarious effects within the clinical encounter.

### **Vicarious Resilience – Other Quantitative Studies**

There are a limited number of studies that use a quantitative methodology to study VR phenomena, particularly those that can be meaningfully distinguished from research on vicarious post-traumatic growth. In 2012 a group of European psychotherapists were studied who had

worked extensively with clients who had been diagnosed with post-traumatic stress disorder. Utilizing a resilience measure more commonly used in business based research (the Adversity Response Profile), personal meaning was found to be the factor most important in determining resilience, as well as a mediating factor in the relationship between resilience and the diminishment of secondary traumatic stress (Želeskov-Đorić, Hedrih, & Đorić, 2012).

In a 2017 study looking at the experience of VR in the professional work of domestic violence advocates, Lisa Frey and her colleagues (Frey, Beesley, Abbott, & Kendrick, 2017) highlight the categories of definitional overlap that complicate the study of VR. In her study of 222 professional advocates working with domestic violence survivors, Frey argues that the results highlight the idea that vicarious trauma and vicarious resilience are two independent but collocated phenomena: since reducing the risk of vicarious trauma does not result in a corresponding promotion of the experience of vicarious resilience. In a slight contrast to the empirical literature on vicarious post-traumatic growth, their study indicates a decreased importance of intrinsic factors in the clinician as a contributor to VR, with the quality of peer relationships and a personal history of exposure to trauma more predictive of vicarious resilience. Organizational support contributed only to compassion satisfaction. From a conceptual perspective, they identified a significant shared variance between vicarious post-traumatic growth and compassion satisfaction, which they interpreted as a rationale for using vicarious resilience (the more comprehensive conceptual phenomenon) as a more appropriate measure for exploring the positive impact of working with individuals who have experienced trauma (Frey et al., 2017).

### **Shared Trauma/Shared Resilience**

In part because of a greater awareness globally of natural disasters and acts of terror, there has been a subset of trauma literature focused on experiences where the trauma worker and their clients are both exposed to the same traumatic threat. Often described as “shared trauma,” this term has been used to describe the work of clinicians living and working in the border zone between Israel and Palestine (Dekel et al., 2016; Nuttman-Shwartz, 2015; Nuttman-Shwartz & Sternberg, 2017), in post 9/11 New York City (Tosone, 2011; Tosone, Nuttman-Shwartz, & Stephens, 2012), with individuals surviving Hurricane Katrina (Faust, Black, Abrahams, Warner, & Bellando, 2008), and survivors of the Great East Japan Earthquake (Nishi et al., 2016), just to select several specific examples.

In most of these qualitative studies into shared trauma, there is an exploration of the negative impact and/or challenges that are introduced into the clinical or therapeutic encounter as a result of the practitioner being exposed to the same traumatic stimuli as the client. In some of the literature, a distinction is drawn between traumatic events that are singular and time-delineated in nature (such as 9/11 or a natural event), versus those that are ongoing and without clear time boundaries (such as the Israeli/Palestinian conflict). In both situations, however, there are challenges for the practitioner in terms of creating boundaries between the personal and professional domains; as well as intrusions of traumatic material into the clinical encounter from the experiences of both participants (Nuttman-Shwartz & Sternberg, 2017; Tosone et al., 2012).

In her 2015 article, Orit Nutman-Schwartz developed from the perspective of shared traumatic reality, the concept of “shared resilience” in this shared reality as a way of looking at the positive effects that can develop within the therapeutic encounter between the practitioner and the client. Highlighting the overlap and complexity within the various concepts used to

describe the positive effects of working with individuals who have experience trauma on clinicians, she identified the experience as one of empathic bonding within a situation of mutual aid (2015, p. 471), which has the ability to alter the practitioner's emotions, behaviors, and conceptions (Nuttman-Shwartz, 2015). While this concept of shared resilience has not received a similarly extensive exploration as some of the other concepts related to the positive effects experienced by practitioners, its greater inclusion of the social and environmental context of the location of the trauma, and its particular focus on the interpersonal engagement between the practitioner and the client creates the potential for a more holistic and sensitive interpretation of the mutual processes at work.

## CHAPTER IV: THEORETICAL FRAMEWORK

The phenomenon of vicarious resilience draws on a variety of theoretical constructs, with its initial roots in social learning theory and vicarious learning theory, which focus on conceptualizing how people's behaviors influence and reinforce one another's. However, in order to better understand the more specific phenomenon occurring between practitioners and individuals who have experienced trauma, it is necessary to explore theoretical frameworks that have been developed in order to explain how trauma-related experiences can contribute to positive and negative outcomes for individuals who did not experience the trauma in question.

I begin by discussing some of the current and historical research around resilience theory, exploring both some of the challenges encountered when conceptualizing resilience and how that has contributed to the development of concepts such as post-traumatic growth, as well as vicarious/shared trauma and vicarious/shared resilience. Secondly, I briefly look at some theoretical approaches that attempt to describe the mechanisms behind vicarious trauma and resilience, including biologically-based theories and social and intergenerational trauma theories. Lastly, I focus on an exploration of constructivist self-development theory (CSDT), which was initially created as a framework to better understand variation in presentation around response to trauma and provide a rationale for vicarious trauma. While it is likely that each individual is affected by factors on several of these levels, it is within the CSDT theoretical base that the phenomenon of VR seems to be explored most naturally, while acknowledging that there is limited use in exploring this phenomenon without taking environmental context into account.



## **Resilience Theory**

### **Conceptualizing Resilience**

As examined by Luthar, Cicchetti, and Becker (2000), resilience is defined as a “dynamic process encompassing positive adaptation within the context of significant adversity” (Luthar, Cicchetti, & Becker, 2000, p. 543). Despite some consensus that individuals are able to prove themselves resilient, there remain significant challenges to researching resilience in a coordinated and systemic fashion: namely a persistent ambiguity in definitions and terminology related to the phenomenon, instability in the experience of resilience and its expression among those who ostensibly are resilient. Perhaps more concerning is that the concept of resilience itself rests on shaky theoretical foundations, or at least presents a concept of only limited scientific utility (Luthar et al., 2000).

Initially developed to describe the capacity of children to survive and thrive despite significant environmental adversity, the concept has since been expanded to apply to individuals across the full developmental lifespan. The initial focus of resilience research was on qualities that were believed to be possessed by the individual themselves; essentially what “makes them,” resilient. However, over time, the concept has grown to encompass three domains – attributes of resilient individual themselves, supportive interpersonal structures, and aspects of the wider social environment (Ungar, 2011; Yates & Masten, 2012). These fluid ingredients evolve and shift over time and effect and are affected by changing life circumstances. Given the transformation of the concept, individuals interested in the phenomenon of resilience increasingly describe it as a process that is experienced by an individual, rather than a trait that any particular individual might have or be lacking. This allows for a greater engagement with the cultural, social and familial processes that generate resilience (Yates & Masten, 2012).

Over time, the challenges of measuring and predicting either the amount of adversity/risk within a particular environment, as well as the complexity involved in assessing performance across multiple domains of functioning, have prompted theorists to explore multiple domains of resilience, such as educational resilience (Waxman, Gray, & Padron, 2003), emotional resilience (Brown, 2006; Rajan-Rankin, 2014), and behavioral resilience (Degnan & Fox, 2007). These concepts can increase the precision with which resilience is measured, but creates more complexity in describing the multifactorial outcomes within any given population (Harvey, 2007; Luthar, 2015).

The overall breadth of experiences and phenomena included under the umbrella of resilience challenges researchers' ability to synthesize or generalize research about the concept, although a broader understanding of the concept of resilience that identifies it as a quality that is more than just a positive response to a singular traumatic event, as well as definitions that expand the understanding of resilience beyond merely the absence or reduction of negative impact after trauma or oppression, contribute to a better understanding of this complex concept (Luthar et al., 2000).

### **Biological, Intergenerational and Environmental Frames for the Transmission of Traumatic Impact**

Though his writing has focused largely on the experiences of individuals who have directly suffered trauma, Bessel van der Kolk (2014) has outlined a theory of trauma and its effects on individuals that has significant implications for practitioners working with this population. He has described in detail how the body's biological response to extreme threats affects perception and memory, prompting the intense experiences and negative coping behaviors typical of people who have experienced trauma. In particular, he has highlighted the

role of mirror neurons, structures within the frontal lobes of the brain that seem to connect with our experiences of empathy and learning. Studied under functional magnetic resonance imaging (fMRI), these networks in the brain are activated when we see activity, and ‘mirror’ the activity patterns our brains demonstrate when we undertake the action ourselves. Van der Kolk has indicated that this process is part of the therapeutic action between practitioners and those who have experienced trauma, and while it is framed largely in a positive light – that the client can mirror the calmer, regulated manner of the practitioner – it is essential to the theory that the process works in both directions: implying that the practitioner can also mirror the dysregulation and discomfort of the individual who had directly experienced the trauma. This neurobiological framework has value within the process as it provides some explanation for the transmission of positive and negative effects independent of therapeutic approach or focus (Van der Kolk, 2014; van der Kolk, Roth, Pelcovitz, Sunday, & Spinazzola, 2005).

Theories of intergenerational trauma also offer some frameworks for understanding how trauma can come to affect individuals who did not experience its initial impact. Research into intergenerational trauma describes how social traumas of oppression or intrafamilial trauma (such as domestic violence or child abuse) can have negative effects that are transmitted from one generation to the next (Yehuda & Lehrner, 2018). This research has tended to focus on the children of survivors of mass oppressions or abuses, such as the Holocaust (Matz, Vogel, Mattar, & Montenegro, 2015; Volkas, 2014), apartheid in South Africa (Prager, 2015), refugees (Sangalang & Vang, 2017), or the systematic oppression of indigenous peoples (Menzies, 2010).

Just as interpersonal trauma can promote stigma in how individuals who have experienced trauma can be perceived, Rachel Yehuda and her colleagues have explored how public responses to the idea of epigenetic mechanisms in the transmission of intergenerational

trauma (drawn from epigenetic animal research) demonstrate that public opinion can be intensely provoked by the concept of intergenerational trauma transmission, which could reify narratives of damage and brokenness rather than support concepts connected to resilience (Yehuda, Lehrner, & Bierer, 2018).

Like research conducted into trauma itself, theoretical frameworks around intergenerational trauma tend to focus on the negative effects transmitted from one generation to the next. However, social worker Michael Ungar (2013) has explored the relationship between environment and resilience in a way that begins to explore both interpersonal and social context as a means to better understand how environment and culture contribute to resilience – both in the context of a traumatic experience as well as in trauma’s aftermath and for years afterwards. Within his culturally-sensitive framework, Ungar (2013) has argued that nurturing and support play a larger role in developing resilience than implicit qualities, and that environmental supports are among the most significant factors promoting resilience in the case of adversity. He has also highlighted a lack of cultural sensitivity in resilience research, resulting in a lack of diversity in the generalized understanding of what resilience looks like and how it is developed.

The greater context this theoretical approach provides to understanding resilience can have implications for VR generated between practitioners and people who have experienced trauma. It highlights a need for greater understanding of the impact of the therapeutic environment, particularly the organizational context and support provided within it on the development of resilience by the practitioner. It also demonstrates the need for further research into the cultural dynamics at play in the transmission or reinforcement of positive and negative effects within the therapeutic encounter.

## **Constructivist Self-Development Theory**

### **The Internal World of Those Who Experience Trauma**

Constructivist self-development theory (CSDT), developed by Lisa McCann and Laurie Ann Pearlman, grew out of a desire to better understand the inner experiences of individuals who have experienced trauma, and to better explain the exceptional variety of individual responses to traumatic experiences. Built upon a constructivist premise that individuals' perceptions of reality are subjective and developed as an ongoing process (rather than as a series of encounters with a fixed, objective universe with predictable attributes and outcomes), it conceptualizes that traumatic events of all sorts have an impact on individuals' "schemas" or "beliefs, expectations, and assumptions about oneself, other people, and the world (McCann & Pearlman, 1992, p. 190)." Drawing upon the developmental theories of Piaget (1971), McCann and Pearlman have posited that individuals' experiences are either assimilated into existing schemas, or if that is impossible, new schemas must be developed (or old schemas altered) to accommodate the new information. Constructivist self-development theory identifies early childhood as a critical time for schema development, which the authors believe indicates why early childhood trauma in particular can have significant and lasting negative consequences for individuals.

Within the CSDT perspective, events are seen as traumatic to the degree to which they interfere with individuals' schemas about themselves and their understanding of the world (McCann & Pearlman, 1992). Since schemas are unique to each individual, this helps to explain why it is that two individuals could experience similar traumatic stimuli but have very different responses. When a child has received consistent love and care from her caregivers, a schema corresponding to the belief that "adults can be trusted to help me" will be created. An encounter with a hostile adult figure can be assimilated into the schema as anomalous: while she may

experience distress or add some complexity to her schemas (“some adults are not trustworthy, but in general they can be trusted to help me”) it does not affect schemas about her self-concept or core understanding of the world. Conversely, if a child has had patterns of negative or abusive encounters with his caregivers, a corresponding schema (“attention from adults has bad consequences”) will be created. For that child, a similar traumatic experience will reinforce that negative schema and can also impact schemas about the self (“I deserve to get hurt”) or the world (“everybody is out to get me.”). Maladaptive schemas such as these can have significant impact on individuals’ behaviors.

As a theoretical construct, CSDT has been used to conceptualize responses to a variety of challenging events, including work with individuals who practice self-harm (Deiter, Nicholls, & Pearlman, 2000), community responses to genocide (Pearlman, 2013), legal professionals’ responses to violent events (Miller, Flores, & Pitcher, 2010), and institutions responding to collective traumas (Esaki et al., 2013).

### **Linking Constructivist Self-determination Theory to Vicarious Trauma and Post-Traumatic Growth**

Drawing upon their experience with clinicians who have worked extensively with persons who had experienced traumatic events, theorists have extended the principles of constructivist self-determination theory to apply to the interactions between practitioners and clients. In the therapeutic encounter with persons who have experienced trauma, practitioners confront individuals’ traumatic narratives in the context of mutual empathic engagement. The schemas and stories presented by clients can challenge or reinforce the practitioner’s own beliefs and schemas about how the world is organized, and require accommodation or adaptation to the new information discovered through the contact with the client (Pearlman, 1995). While this

research was originally conceptualized around the concept of vicarious trauma (transmitting only or primarily negative effects to the practitioner), the theory also supports the idea of the practitioner incorporating new positive or beneficial information into their schemas or belief structures. While CSDT is more explicitly referenced in writing about vicarious traumatization, it is included in the VR literature as a core contribution to their understanding of the phenomenon (Hernandez-Wolfe et al., 2015).

## CHAPTER V: METHODOLOGY

### Dissertation Design and Overview

This quantitative dissertation consisted of an anonymous online survey conducted with practitioners working with individuals who have experienced trauma in a variety of service settings. Demographic and practice-specific information was collected, and respondents were asked to complete two data-gathering instruments about the impact of working with individuals who have experienced trauma: one related to positive effects, one related to negative effects.

### Research Hypotheses

Hypothesis 1a: Practitioners from a variety of settings working with clients who have experienced trauma will report experiences of vicarious resilience comparable to practitioners in prior studies.

Hypothesis 1b: For practitioners who work with individuals who have experienced traumatic events, there will be no significant association between practitioner's vicarious resilience and negative effects scores ("Vicarious resilience is not simply the opposite of vicarious trauma.")

Hypothesis 1c: There will be a significant positive correlation between the prevalence of survivors of trauma in the practitioner's caseload and the practitioner's vicarious resilience score ("Greater exposure to clients' traumatic material increases the possibility for developing vicarious resilience.")

Hypothesis 2: Demographic and/or environmental factors related to individual practitioners will be seen to significantly explain practitioners' variance in vicarious resilience scores. Specific factors that were explored included: gender, age, race/ethnicity, education, length of time working with this client population, category of professional setting, spiritual



practice, history of trauma, trauma-specific education, inclusion of trauma-related content in supervision, and sense of connection with peers.

### **Target Population, Sampling Strategy, and Participant Selection**

#### **Target Population**

As this dissertation was intended to expand the initial research into VR across a broader population of practitioners working with individuals who have experienced trauma, the pool of respondents represents practitioners serving a variety of populations with significant exposure to trauma. This includes: practitioners within trauma-specific agencies, domestic violence and victims' services agencies, child welfare agencies, homeless services providers, and mental health providers. This form of purposive sampling allowed the researcher to collect sufficient respondents whose experience as practitioners met the selection criteria (Etikan, Musa, & Alkassim, 2016).

#### **Sampling and Recruitment Strategy**

The use of a convenience sample was deemed appropriate for this dissertation primarily due to resource limitations, which prevented the use of a broader, probability-based sampling method (Kennedy et al., 2016). In addition, because the particular subset of practitioners sought (those working with clients who have experienced trauma) stretched across a variety of heterogeneous settings, it was appropriate to utilize a purposive sampling strategy, which has been demonstrated to create sufficiently representative samples when a comparison population sampled randomly has been available (Koch & Emrey, 2002). There were additional benefits to utilizing an online survey methodology including the reduction of interviewer bias, and increased convenience for the respondents (Selm & Jankowski, 2006).

### ***Agency-Level Recruitment***

Initial recruitment involved the primary researcher connecting with local social service agencies in the larger New York City area that employ practitioners likely to have worked with individuals who have experienced trauma. These included homeless services and supportive housing agencies (Community Access), mental health agencies (Mental Health Providers of Western Queens, The Post-Traumatic Stress Center), and multi-site victims' and homeless services agencies (SafeHorizons). These initial contacts represented a convenience population as these agencies have prior research or professional relationships with the primary researcher or the Silberman School of Social Work. Two agencies responded positively to initial inquiries and provided access for the researcher to provide recruitment materials by email to staff members who were then able to participate in the dissertation research via the online survey platform. Several agencies ultimately failed to respond to inquiries or indicated that they felt stretched too thin to participate in the research process. No agencies participated in any in-person or on-site recruitment.

Given that the researcher had prior relationships with some of these agencies, care was taken to ensure that screening and consent processes made clear the high degree of anonymity provided by the research methodology, so that no respondent's agency of origin could be identified. Personal influence on the part of the researcher was minimized as no recruitment took place in person, heightening the respondents' capacity to elect whether or not to participate.

### ***Internet-Based Recruitment***

The second area of recruitment was from a broader segment of practitioners approached through electronic means: via professional email listservs for practitioners, online forums and LinkedIn and Facebook groups relating to human service providers and therapists, as well as

alumni email lists of educational institutions that train practitioners. Respondents were provided (via email or internet group posting) with a recruitment flyer and directed to the online data collection instrument where they provided their demographic information and were subject to the same screening procedures as respondents recruited through agency-based recruitment.

### ***Aggregated Recruitment Pool***

Given the anonymity of the online survey instrument, it is impossible to determine which respondents were recruited via the agency recruitment strategy and which through the internet recruitment strategy. However, given the very low engagement rate of agencies, and strong anecdotal evidence based on when in the survey process respondents replied, the far larger potential population reached through the internet-only recruitment represents a far larger proportion of the sampling pool. In any case, this sample cannot lay claims to representativeness of the population of practitioners who work with clients who have experienced trauma, and the anonymity provided by the survey collection instrument prevents stratification based on recruitment source.

### **Incentives**

Respondents who elected to provide their contact email addresses were entered into a raffle to receive one of ten \$50 gift cards allocated randomly after data collection was completed. The use of incentives in this fashion has been demonstrated to increase response and completion rates from online survey respondents (Sue & Ritter, 2007). These email addresses represent the only data collected that could be linked to individual survey respondents and was stored separately from participant responses to the survey instrument in order to reduce risks to respondents' anonymity. In addition, in order to comply with the requirements of the Office of Human Subjects Protection, the incentive was made available to anyone interested in the

research project – prior to screening, post screening but prior to consent, or at any point during the completion of the survey. This ability to register for the incentive regardless of level of participation in the survey meant it could not be determined whether any person who provided their contact information actually provided survey responses for the dissertation research, and it would not be possible to connect any email address with any survey response, as IP addresses were not stored once they were utilized to screen out multiple attempts.

### **Screening and Exclusion/Inclusion Criteria**

When respondents followed the link to the online survey instrument, they answered the following questions to screen for appropriateness for the dissertation, with the following inclusion and exclusion criteria:

**Table 1**

*Inclusion and Exclusion Criteria*

Inclusion criteria	Exclusion criteria
<ul style="list-style-type: none"> <li>• Practitioner has worked with clients individually in a case management, counseling or psychotherapeutic context for at least 45 minutes per week</li> <li>• Practitioner identifies clients as dealing with issues related to trauma within the working relationship</li> </ul>	<ul style="list-style-type: none"> <li>• Practitioner works with clients in a setting other than case management, counseling or psychotherapy</li> <li>• Practitioner works with clients only in group modality or individually less than 45 minutes weekly</li> <li>• Practitioner does not identify client as working on issues related to trauma with the practitioner</li> <li>• Practitioner has only worked with clients who have experienced trauma in an internship or pre-professional setting</li> </ul>

## **Procedures**

### **Data Collection**

Potential respondents from either sampling method received a link to the online survey instrument via email (Qualtrics, 2017). This link led them to an online survey platform (Qualtrics) where they answered screening questions, read the informed consent documents and provided consent, provided their responses to the questions of the research instrument, and (if desired) provided a contact email in order to participate in a raffle to receive one of the incentives provided for participation in the dissertation. Qualtrics uses transport-layer-security (TLS) protocols for protecting respondent data in transit, and survey data are encrypted and backed up to prevent data loss or theft. Qualtrics has no access to the respondent data (Qualtrics, 2017).

### **Human Subjects Protection**

This dissertation was determined to be exempt from full committee review and approved by the City University of New York Integrated Institutional Review Board (Protocol #2018-1026) on September 25, 2018.

Anonymity of the participants was protected by the use of the online data collection tool (Qualtrics). This allowed respondents to be screened, engaged in an informed consent process, and subsequently allowed them to provide their responses for the survey, and (if desired) to provide a contact email address for any project incentive – all without providing identifying information to the researcher. Where a contact email was provided (for purposes of fulfilling incentives), it was stored separately from individual respondent data and therefore could not be used to connect respondents with any specific survey response. However, for respondents who provided their email addresses for fulfillment of the incentive, it could have ultimately connected

them with having participated in the survey in some fashion (Alessi & Martin, 2010; Sterzing, Gartner, & McGeough, 2018). To comply with human subjects protections, the survey instrument was developed so that any individual could participate in the incentive raffle; as a result, providing an email address to the researcher to make earning an incentive possible does not indicate that an individual was screened for or consented to participate in the dissertation research. As such, there was significant protection for participant privacy and confidentiality.

With any survey relating to sensitive issues such as trauma, there is some concern that answering questions about clients who have experienced trauma, or reflecting on negative symptoms or challenging issues that may have surfaced as a result of working with clients, may cause practitioners some distress (Labott, Johnson, Fendrich, & Feeny, 2013). Empirical evidence demonstrates that these negative responses are very rare even when the questions are directly about respondents' traumatic experiences, and generally occur only when respondents have underlying vulnerabilities to negative emotional responses. In such cases, the discomfort or distress is usually minimal and resolves quickly, resulting in an assessment of only minimal risk (Labott et al., 2013; Yeater, Miller, Rinehart, & Nason, 2012). Given that the dissertation research was focused on professional encounters, rather than direct experiences of traumatic events, it was considered likely that such possible negative effects would happen less frequently than in the empirical studies that focused on direct traumatic experience (Braithwaite, Emery, de Lusignan, & Sutton, 2003; Sterzing et al., 2018). At the conclusion of the survey instrument, a list of general mental health supports/resources was made available for survey respondents to access if they were experiencing any mental distress. There were several places in the survey for participants to offer their thoughts about particular questions or the survey experience itself and no participants shared any negative responses to questions or the survey content.

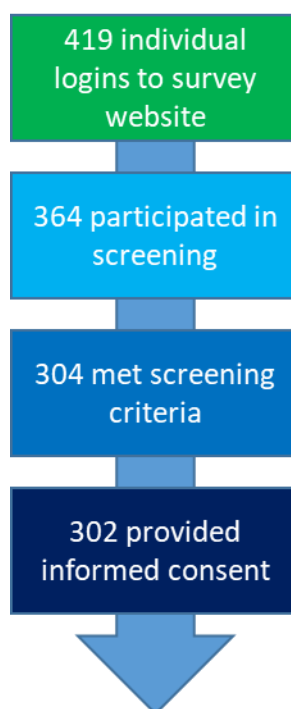
## Description of Sample Population

### Engagement and Consent

Of the 419 respondents who logged onto the survey data collection site, 36 elected not to go through the screening process, either by logging off/not answering, or responding in the negative to requests to consent to screening. Sixteen respondents consented to be screened, but subsequently did not provide answers to the screening questions. Three respondents did not provide answers to the screening questions, but were allowed by the system to provide informed consent and contribute to the dissertation. These three results were removed along with all others who were not screened, which makes up a total of 55 removals prior to the screening process.

### Figure 1:

#### *Screening and Consent*



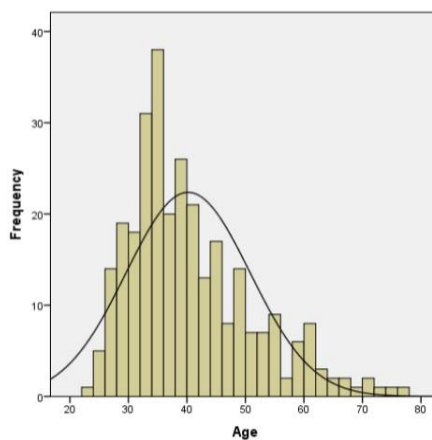
Sixty respondents who agreed to be screened were screened out and were not offered the opportunity to complete the questionnaire. Of the screened-out respondents, 41 answered “no” to having worked with clients 45 minutes weekly in a psychotherapeutic, counseling, or case

management position (35 where this was the only failed screening question). Ten respondents answered “no” to whether their clients had worked on their traumatic experiences during their time with the practitioner (five where this was the only failed screening question). Seventeen respondents answered “no” to whether or not their experiences happened in a professional (paid) setting (thirteen where this was the only failed screening question). Six respondents answered no to two of the screening questions, and one respondent answered “no” to all three screening questions.

## Age

### Figure 2:

#### *Age Distribution of Sample*



Of the total of 304 successfully screened respondents, 302 subsequently answered “yes” when asked to provide their informed consent to participate in the research and form the core sample utilized in this dissertation.

A total of 297 respondents reported their age, with the mean age of respondents being 40.20 years old ( $SD = 10.591$ ), and the median age, 38. The youngest respondent who reported his or her age was 23, and the oldest was 76.



**Gender****Table 2***Sample Population by Gender*

Gender	Frequency	Percent
Cisgender Female	254	84.9%
Cisgender Male	26	8.8
Transgender Male	1	.3
Genderqueer/Nonbinary	9	3.0
Prefer not to answer	9	3.0
Total	299	100.0%

A total of 299 respondents reported their gender: 254 (84.9%) cisgender women, 26 (8.8%) cisgender men, 1 transgender male, and 9 (3.0%) genderqueer/nonbinary respondents. Nine respondents indicated a preference not to share their gender.

**Race****Table 3***Racial Categories (+ mixed/multiracial identity)*

Race	Number	Percentage
American Indian or Alaskan Native	1	0.3%
+White	1	
Black or African American	16	5.3%
+White	3	
+Hispanic, Latino, Spanish	1	
Middle Eastern or North African	8	2.7%
+White & Hispanic, Latino, Spanish	1	
+White	2	
White	232	77.3%
+Asian	2	
+Hispanic, Latino, Spanish	6	
+Other	4	
Asian	16	5.3%
Hispanic, Latino, or Spanish Origin	28	9.3%
Native Hawaiian or Other Pacific Islander	2	0.7%
Other	17	5.7%

*Note: respondents were allowed to choose multiple categories and so the table percentages do not total 100%.*

The survey population was particularly white-identified. These data are not entirely dissimilar to racial and ethnic distribution within the general population according to 2018 census estimates (“U.S. Census Bureau QuickFacts,” n.d.), but further exploration into the demographics of specific practitioner populations could help support an assertion that this sample is racially representative of the target population of practitioners.

## Highest Educational Level

**Table 4**

*Sample Population by Highest Educational Level*

Highest educational level completed	Frequency	Percent
Some college	1	.3%
Bachelor's degree (e.g. BA, BS)	13	4.3
Professional Degree (e.g. MD, DDS)	3	1.0
Master's degree (e.g. MA, MS, MSW, MEd)	263	87.7
Doctorate (e.g. PhD, EdD)	20	6.7
Total	300	100.0%

The vast majority of respondents in the sample population reported having a master's-level education, which does correspond with current practice standards that the bulk of psychotherapy is being conducted by practitioners at the master's level (Craig & Sprang, 2010b; Dagan, Itzhaky, & Ben-Porat, 2015). The next highest group, those respondents with a doctorate was more than ten times smaller, with only 20 respondents.

## Profession/Professional Role

**Table 5**

*Sample Population by Profession/Professional Role*

Profession/Professional Role	Frequency	Percent
Case Manager	12	4.0%
Creative Arts Therapist	74	24.7
Mental Health Counselor (e.g. LMHC, LPC)	60	20.1
Substance Abuse Counselor (e.g. CASAC)	5	1.7
Psychiatrist	1	.3
Clinical Psychologist	9	3.0
Marriage and Family Therapist (e.g., LMFT)	18	6.0
Social Worker (e.g. MSW, LMSW, LCSW)	110	36.9
Other Role (please specify)	10	3.3
Total	299	100.0

The majority of practitioners (81.6%) who participated in the survey identified themselves within three professions/professional roles: social workers (36.8%), creative arts therapists (24.7%), and mental health counselors (20.1%). This matches the statistics for educational level as these professions are predominately regulated at the master's degree level, and do represent the strong preponderance of social workers in the provision of mental health care across a variety of settings (Craig & Sprang, 2010b).

## Agency Category

**Table 6**

*Sample Population by Agency Category*

Agency category	Frequency	Percent
Child Welfare	8	2.7%
Homeless Services/Housing	5	1.7
Mental Health	217	72.6
Trauma-Specific/Victims' Services	36	12.0
Veterans' Services	7	2.3
Other (Please specify)	13	4.3
Substance Abuse	5	1.7
Physical Health/Hospital	8	2.7
Total	299	100.0

The largest proportion of respondents reported working in primary mental health settings (72.6%), with the second most represented setting being trauma-specific services. While this proportion of respondents may be representative of where people struggling with their responses to traumatic events receive services, it does present some challenges in terms of examining how VR might present itself across a wider variety of settings.

## Length of Time Working with Clients who Have Experienced Trauma

**Table 7**

*Length of Service*

Length of service	Frequency	Percent
Less than a year	6	2.0%
One to five years	113	38.0
Six to ten years	81	27.3
Eleven to fifteen years	41	13.8
Sixteen or more years	56	18.9
Total	297	100.0%

Length of time working with clients who have experienced traumatic events was one of the variables where the distribution within the population was more evenly spread across the spectrum of responses. Though the largest group – almost 40% – consisted of professionals early in their career with clients who had experienced traumatic events (working with this population for one to five years), there was substantial representation from almost all ranges of length of practice, with the exception of the very shortest length, with only six respondents (2.0%) indicating they had worked with this population for less than a year.

### **Percentage of Caseload Having Experienced Trauma**

Most practitioners reported that a substantial portion of their caseload were dealing with issues related to their experiences of trauma. A total of 295 respondents answered queries about the percentage of their caseload who had experienced trauma, with a mean score of 69.08% ( $M = 69.8$ ,  $SD = 26.65$ ) and a median value of 74%. Interestingly, the modal answer was 100%, with 53 respondents (18%) reporting that 100% of their caseload was made up of clients working on issues related to their traumatic experiences. Only 22 respondents (7.5%) indicated that fewer than 25% of their clients were working on issues related to trauma.

### **Personal History of Traumatic Events**

**Table 8**

*Personal History of Trauma*

Personal history of trauma	Frequency	Valid Percent
Yes	221	74.4%
No	63	21.2
Prefer not to say	13	4.4
Total	297	100.0%

A sizeable majority (74.4%) of respondents indicated having personal experiences of trauma. Only 21.2% (n=63) respondents indicated they did not have a personal history of trauma, while 13 individuals chose not to answer the question.

### **Personal Spiritual Practice**

**Table 9**

*Personal Spiritual Practice*

Personal spiritual practice	Frequency	Valid Percent
Yes	156	52.6%
No	129	43.4
Prefer not to say	12	4.0
Total	297	100.0

Overall, 156 participants, a little more than half (52.5%), identified as having a personal spiritual practice, with 129 respondents indicating they did not so identify (43.4%), and 12 individuals preferring not to answer the question.

Respondents were asked to report whether they were exposed to three situational factors suggested by the literature as possibly related to the development of VR: education about working with survivors of traumatic events (Berger & Quiros, 2016), encouragement to explore trauma-related content in supervision (Berger & Quiros, 2014; Neswald-Potter & Simmons, 2016), and the ability to connect with peer practitioners in relation to trauma-related work (Frey et al., 2017; Manning-Jones et al., 2017).

## Education/Training about Trauma

**Table 10**

### *Education/Training About Trauma*

Education/training about trauma	Frequency	Percent
No, I have not received education/training	5	1.7%
Yes, I have received some education/training	145	50.0
Yes, I have received extensive education/training	140	48.3
Total	290	100.0

Gratifyingly, 98.3% of the respondents indicate having received training about dealing with individuals who have experienced trauma.

## Trauma-Informed Supervision

Respondents were asked about specific qualities with respect to their clinical supervision in relation to work with individuals who had experienced traumatic events, utilizing the supervisor's willingness to engage with practitioners on trauma-related content as an indicator of more trauma-informed supervisory stances within the range of supervisory dynamics.

**Table 11**

### *Trauma-Informed Supervision*

Trauma-informed supervision	Frequency	Percent
I do not receive supervision	64	21.9%
I am not encouraged to share and supported around trauma-related content with my supervisor/in my supervision	26	8.9
I am encouraged to share and supported around trauma-related content with my supervisor/in my supervision	202	69.2
Total	292	100.0

Results were more mixed in reporting the presence trauma-informed supervision, with 21.9% of respondents not receiving supervision, and 8.9% reporting that they are not encouraged



to share trauma related content in supervision. Significantly, many state licensure boards do not require practitioners to receive supervision at certain levels of licensure/experience, which means that the sub-group receiving no supervision may include certain long-term professionals who have received supervision in the past but are now working independently, in addition to other professionals in settings where supervision is simply not provided.

### **Engagement with Peers**

**Table 12**

*Engagement with Peers*

Engagement with peers	Frequency	Percent
I am not able to connect with and receive support from peers about trauma-related content in my work.	31	10.7%
I am able to connect with and receive support from peers about trauma-related content in my work.	260	89.3
Total	291	100.0

Almost 90% of the respondents indicated that they were able to connect with peers and receive support from them in relation to trauma-related dynamics within their work.

### **Reliability of Measures**

#### **Vicarious Resilience Scale (VRS)**

The Vicarious Resilience Scale (VRS) is a relatively new scale developed by the group of researchers who have done most of the investigation into this phenomenon over the past decade (Killian et al., 2016). The exploratory factor analysis conducted by this group had an internal consistency reliability of .92, with a mean of 113 (SD = 19.56), a median of 114, and a mode of 110 – suggesting a normal distribution within the sample population. Overall the VRS had a Chronbach’s alpha of .94, with the subscales broken down as follows: Increased Resourcefulness (6 items,  $\alpha = .86$ ); Changes In Life Goals and Perspectives (6 items,  $\alpha = .88$ ); Increased Self-

awareness and Self-care Practices (4 items,  $\alpha = .83$ ); Client-inspired Hope (3 items,  $\alpha = .80$ ); Increased recognition of Spirituality as a Client Resource (3 items,  $\alpha = .79$ ); Increased Consciousness around Social Location and Power (2 items,  $\alpha = .84$ ); and Increased Capacity to Remain Present During Trauma Narratives (3 items,  $\alpha = .65$ ). The average intercorrelation among the factors was .455 (Killian et al., 2016, p. 5).

In the research for this dissertation Chronbach's alpha was used as a measure of reliability, and for this sample population the result for the scale was .920, with no reliability improvement to be gained by removing any question (Shoukri, 2011).

### **Professional Quality of Life Scale (PQOL)**

Since its development in the late 1980s the Professional Quality of Life Scale (ProQOL) has become the most commonly used measure to examine the positive and negative effects of working with people who have experienced exceptional stress. More than 200 published papers refer to or utilize the ProQOL and a large proportion of the published literature on PTSD utilizes this scale (Stamm, 2010). It consists of three subscales that measure compassion fatigue, burnout and secondary traumatic stress. Compassion fatigue is the most distinct of the constructs, sharing 2% shared variance with secondary traumatic stress and 5% shared variance with burnout. Shared variance between burnout and secondary traumatic stress is 34%, which the developers relate to distress experienced by individuals with these conditions (Stamm, 2010, p. 13). For this project, this measure has the added benefit of measuring a positive effect construct (compassion satisfaction) that is not related to clients' experiences of trauma, which can lend greater validity to observations of VR as an independent construct/experience.

In this research, the ProQOL scale reliability for the measure was adequate, with a Chronbach's alpha of .736 (Shoukri, 2011).

## Data Analysis

### Statistical Procedures

Initial use of the VRS within a population of trauma-focused , practitioners demonstrated a narrow distribution of central tendency measurements, implying a relatively normal distribution of results throughout the study population (Killian et al., 2016). Given that the desired sample within this project reflects a similar population, I presumed a normal distribution, and therefore used Pearson's  $r$  as an analytical procedure to determine correlation for hypothesis 1b, which predicted that there is no association between practitioners' scores on the VRS and negative effects (as demonstrated by results of the two negative subscales of the ProQOL) (Manning-Jones et al., 2017; Weinbach, 2015). In determining correlation values for hypothesis 1c – that practitioners' VR scores would be positively correlated with how prevalent trauma was within their client population – Pearson's  $r$  was again utilized to analyze the correlation between the two scores (Hall, Ferreira, Maher, Latimer, & Ferreira, 2010; Weinbach, 2015).

Given the initial data provided by the first study utilizing the VRS (Killian et al., 2016), I determined the regression line for an analysis of respondents' VR scores would likely best be suited to a stepwise regression analysis utilizing the demographic variables collected, in order to test hypothesis 2a, namely that certain demographic and situational factors could be predictive of variance in practitioners' vicarious resilience scores. This form of analysis has previously been used to examine the effectiveness of interventions aimed at reducing secondary trauma in practitioners (Bober & Regehr, 2006).

In addition, to better understand the emerging phenomenon of vicarious resilience, a series of bivariate analyses was conducted to illustrate additional associations that exist between demographic and situational variables and the VRS (and subscales). The analyses used were

determined by the level of measurement of the variable, with ratio variables evaluated via a Pearson's  $r$  correlation (age, percentage of caseload with traumatic experiences), ordinal variables being evaluated via Spearman's  $\rho$  (length of time working with this population), and dichotomous variables utilizing an independent samples  $t$ -test (practitioner reporting history of trauma, spiritual practice, or ability to engage with peers). The remaining variables, measured at the nominal level, were analyzed utilizing an analysis of variance (ANOVA) – gender, race, educational level, professional role, agency category, education relating to working with individuals with trauma, and the presence of trauma-informed supervision (Thompson, 1984).

### **Sufficient Statistical Power and Effect Size**

When generating a power analysis for the correlation tests related to hypotheses 1b (that vicarious resilience would not be correlated with negative effects) and 1c (that vicarious resilience would be correlated with the prevalence of trauma in a practitioners' caseload), with an  $\alpha$  (two-tailed) of 0.05 and a  $\beta$  of 0.200 and an expected correlation coefficient ( $r$ ) of 0.215, the required total sample size would be 168 respondents in order to provide significant evidence for hypotheses 1b and 1c (Fritz, Morris, & Richler, 2012). The sample size of 302 surpassed this requirement.

Given the specificity of the questions being asked and the reliability of the instruments being used, a medium effect size was utilized to determine the proposed number of subjects that would provide predictive power for the regression analysis. With a medium effect size (0.15) and a probability level of 0.05, in order to achieve results with a statistical power of 0.8 a minimum sample size of 122 subjects would be necessary to include all eleven possible demographic and environmental variables within a regression in order to satisfy hypothesis 2a (that demographic

and situational variables would prove predictive of variance in vicarious resilience) (Fritz et al., 2012). I was able to surpass the desired number of respondents to meet this target.

## **CHAPTER VI: RESULTS**

This chapter begins with descriptive results of the sample population's scores on the primary outcome measures, the Vicarious Resilience Scale (VRS) and the Professional Quality of Life Scale (ProQOL). These scales measure the amount of positive effects (VRS) and negative effects (ProQOL) that practitioners experience as a result of their work with individuals who have experienced trauma. Correlations between the two measures are also reported here.

Subsequently the results of these measures are interpreted according to the research hypotheses. In identifying the presence of VR within the sample, the significant relationships between vicarious resilience and prevalence of trauma within client caseload and with negative effects, as well as situational and demographic factors proved significantly predictive of variance within VR scores.

Lastly, significant associations identified between demographic and situational factors and practitioners' experiences of vicarious resilience will be reported in order to provide further understanding of the VR phenomenon and provide a wider context in relation to factors that might promote the experience and expression of vicarious resilience.

### **Descriptive Results**

#### **Vicarious Resilience Scale**

A total of 268 respondents provided sufficient answers to score on the full Vicarious Resilience Scale, with a mean score of 95.5 (SD 17.93) out of a possible total of 135. More than half of the respondents scored above the 70<sup>th</sup> percentile on the scale, indicating a high prevalence of VR experiences within the sample population.

**Table 13***Vicarious Resilience Scores*

Vicarious Resilience/Scale/Subscale	#	Min	Max	Mean	SD	Median	Mode
<u>Vicarious Resilience Total</u>	268	32	134	95.5	17.93	97	90, 99
<i>Increased Resourcefulness</i>	277	6	30	21.3	4.57	22	24
<i>Changes in Life Goals</i>	277	2	30	20.6	5.48	21	21, 24
<i>Increased Self-awareness</i>	283	0	20	12.3	4.23	13	16
<i>Client-inspired Hope</i>	282	1	15	12.2	2.51	12	15
<i>Increased Recognition of Spirituality</i>	281	0	15	9.7	3.75	10	9
<i>Increased Recognition of Power and Privilege</i>	281	0	10	8.0	2.03	8	10
<i>Increased Capacity to Remain Present</i>	279	0	15	11.2	2.44	11	12

**Professional Quality of Life**

On the ProQOL Compassion Satisfaction scale, the mean score was 55.57 (SD 6.86); for Burnout the mean score was 53.17 (SD 7.33); and for Secondary Traumatic Stress the mean was 61.59 (SD 9.82). The first two scores represent average scores on the measure (with compassion satisfaction close to a ‘high’ value), and this mean score reported would categorize a respondent as experiencing high levels of secondary traumatic stress (Stamm, 2010).

**Table 14***ProQOL Scores*

ProQOL Subscale	#	Min	Max	Mean	SD	Median	Mode(s)
Compassion Satisfaction	278	35	68	55.57	6.86	56	53
Burnout	276	35	74	53.17	7.33	53	53
Secondary Traumatic Stress	276	42	78	61.59	9.82	62	42, 60, 61

## Correlations Between Primary Measures

Both the VRS and the ProQOL demonstrated consistency in their constructs, with all subscales correlating significantly internally to a moderate or high degree. The two scales were highly correlated overall across both positive and negative measures, with compassion satisfaction scores exhibiting significant moderate positive correlations to VR in total as well as all the VR subscales with the exception of increased consciousness of power and privilege subscale. In the negative measures, burnout scores showed slightly lower but still significant negative correlations to VR in total and all VR subscales other than increased consciousness of power. The secondary traumatic stress scale (STSS) negatively correlated on fewer VR subscales (only resourcefulness, self-awareness, and Capacity to Remain Present). The STSS demonstrated a small negative correlation with the VR total that was slightly less significant than the other ProQOL measures (Thompson, 1984).

**Table 15**

*Correlations between Primary Measures*

	Vicarious Resilience	Compassion Satisfaction	Burnout
Compassion Satisfaction	.460**	—	—
Burnout	-.382**	-.678**	—
Secondary Traumatic Stress	-.160**	-.174*	.412**

\*\* Correlation is significant at < .001 level (2-tailed).

\* Correlation is significant at < .05 level (2-tailed).



## **Results by Hypothesis**

### **Does this Population Report Experiencing Vicarious Resilience? (H1A)**

The respondents to this survey did report positive levels of VR. Indeed, only one respondent scored in the bottom quartile on the measure (0.4%), while 5.2% scored ‘moderately’ (second quartile), 54.1% in the ‘high’ range (third quartile), and 40.3% in the ‘very high’ range (fourth quartile). It should be pointed out that the creators of the scale do not define these specific levels, merely noting that a higher score represents ‘more’ vicarious resilience (Killian et al., 2016). For the total vicarious resilience score, as well as all subscales, the distribution curve is significantly skewed to the left, indicating a preponderance of higher values within the distribution across this sample than would be present if the quality were distributed normally (Rose, Spinks, & Canhoto, 2014).

### **How is Vicarious Resilience Associated with Other Positive and Negative Effects of Working with Individuals Who Have Experienced Traumatic Effects? (H1B)**

In this dissertation, there were significant correlations between VR, compassion satisfaction, burnout, and secondary traumatic stress. The positive correlation between VR and the positive effect compassion satisfaction ( $r = .460, p < .001$ ) was larger than the negative correlations between VR and the negative effects of burnout ( $r = -.382, p < .001$ ) or secondary traumatic stress ( $r = -.176, p = .004$ ) (Thompson, 1984).

### **A Greater Prevalence of Clients with Traumatic Experiences on a Practitioner’s Caseload Would Be Associated with Greater Vicarious Resilience. (H1C)**

There was no significant correlation between the practitioners’ indication of what percentage of their caseload was made up of clients who had experienced trauma and respondents’ scores in VR. There were small but significant positive correlations between the

reported prevalence of trauma in a practitioner's caseload and the two negative measures of burnout ( $r = .172, p = .004$ ) and secondary traumatic stress ( $r = .235, p < .001$ ) but no significant correlation between this prevalence and compassion satisfaction (Thompson, 1984). This could suggest that having a greater prevalence of clients who are processing traumatic experiences is more connected to negative effects than positive ones. A greater prevalence of clients with traumatic experiences was moderately correlated with only one subscale of the VRS: Increased Recognition of Power and Privilege ( $r = .210, p < .001$ ) (Thompson, 1984).

## **What Factors Predict Respondent Variance in Vicarious Resilience Scores? (H2)**

### ***Regression Model***

While there were significant associations between many of the studied variables (environmental and demographic) and the outcome measures, only two factors – length of professional practice and the presence of trauma-informed supervision, were significantly predictive of variance in overall VR scores. These factors together were able to account for approximately 7.9% of the variance within the VR scores at a high level of significance ( $F(2,265) = 12.260, p < .001$ ) (Bray, 1985).

### ***Other factors that significantly affect Vicarious Resilience Scores***

In addition to the components of the regression model described above, respondents endorsing a personal spiritual practice, or endorsing a personal history of experience with trauma were also associated with higher overall scores in VR. Given the exploratory nature of this dissertation, these results could indicate other factors that contribute to the overall experience of this phenomenon.

### **Significant Demographic and Situational Associations**

Within the sample, a number of associations and relationships between demographic and situational variables were revealed in connection with the primary outcome measures in the study. To better understand the factors that may be in play in understanding VR's expression in the population, several significant associations and relationships are identified here among the primary variables.

#### **Highest Educational Level**

A one-way analysis of variance (ANOVA) indicates that education is a significant factor in variance for the Changes in Life Goals ( $F(3,273) = 3.510, p = .016$ ), Recognition of Power and Privilege ( $F(3,277) = 4.683, p = .003$ ), and Capacity to Remain Present ( $F(3,275) = 4.520, p = .004$ ) subscales of the VR scale, as well as (to a lesser extent) for the total VR score ( $F(3,264) = 2.750, p = .043$ ). However, this does not explain any variance related to the ProQOL scale. The small number of respondents in several of the groups (other than master's level practitioners) may complicate identifying trends in or between these groups. Where post hoc analysis was able to identify significant subgroup comparisons (in Recognition of Power and Privilege and Capacity to Remain Present subscales) the distinction between education was only significant between master's level practitioners and those respondents with a doctorate (mean scores for doctorate-level respondents were slightly higher on both subscales), which were the two most numerous subgroups (Bray, 1985).

#### **Length of Time Working with Clients Who Have Experienced Trauma**

Length of time working with this population revealed the highest number of correlations between the independent and demographic variables, and generally in a "protective" direction being negatively correlated with negative measures: there was a small negative correlation with

burnout ( $rh = -.164, p = .006$ ), and small positive correlations with the positive measures of compassion satisfaction ( $rh = .156, p = .009$ ), as well as overall VR scores ( $rh = .176, p = .004$ ). In five of the seven VR subscales, length of time working with this population was positively correlated. It was moderately correlated with the Increased Resourcefulness subscale ( $rh = .206, p = .001$ ) and Capacity to Remain Present subscales ( $rh = .213, p < .001$ ); and weakly correlated to the Changes in Life Goals ( $rh = .158, p = .009$ ), Client-Inspired Hope ( $rh = .120, p = .044$ ), and Increased Recognition of Power and Privilege ( $rh = .129, p = .031$ ) subscales (Thompson, 1984).

### **Personal History of Traumatic Events**

Based on an independent t-test, reporting a personal history of trauma is significantly associated with higher mean scores of total Vicarious Resilience ( $t = 2.073, p = .039$ ), as well as on three subscales: the Changes in Life Goals subscale ( $t = 2.179, p = .030$ ), the Increased Self-awareness subscale ( $t = 2.853, p = .005$ ), and the Recognition of Power and Privilege subscale ( $t = 2.017, p = .045$ ) (Wilcox, 2017). There is also a positive association between reporting a personal history of trauma and higher mean scores on the ProQOL Secondary Traumatic Stress scale ( $t = .2843, p = .005$ ), implying that a personal history of trauma could be associated with a greater experience of both positive and negative impact from working with clients who have also experienced trauma (Thompson, 1984).

### **Personal Spiritual Practice**

Based on the results of an independent samples t-test, self-identifying as a person with a spiritual practice was associated with higher mean scores on VR as a whole ( $t = 2.20, p = .028$ ) as well as on two VR subscales: namely the VR Increased Self-awareness subscale ( $t = 2.109, p = .036$ ) and to a larger degree the Increased Recognition of Clients' Spirituality subscale

( $t = 4.498, p < .001$ ). Having a personal spiritual practice was associated with a lower mean score on the ProQOL Burnout sub scale ( $t = -2.366, p = .019$ ) (Bray, 1985).

### **Education/Training about Trauma**

Gratifyingly, 98.3% of the respondents indicate having received training about dealing with individuals who had experienced trauma. This variable has no associations with the ProQOL measures, but the one-way ANOVA reveals that education accounts for significant variation in two of the VR subscales, namely Increased Resourcefulness ( $F(2,272) = 4.651, p = .010$ ), and Increased Capacity to Remain Present ( $F(2,274) = 5.472, p = .005$ ). In both cases, post hoc analysis (Tukey) indicated that respondents who described the training in working with individuals who had experienced traumatic events as “extensive” as against merely “some training” had significantly higher mean scores on both subscales (Bray, 1985).

### **Trauma-Informed Supervision**

Utilizing a one-way ANOVA, respondents’ characterization of supervision was significant in determining score variance among the Changes in Life Goals ( $F(2,274) = 3.214, p = .042$ ), Increased Self-Awareness ( $F(2,280) = 6.178, p = .002$ ), and Client-inspired Hope subscales ( $F(2,279) = 3.461, p = .033$ ); as well as the VR scale total ( $F(2,265) = 4.332, p = .014$ ). Across these measures, respondents who indicate they have no supervision generally have slightly better scores than individuals who reported that their supervisor does not encourage engagement with traumatic content, while those with trauma-informed supervision scored higher (Bray, 1985).

Supervision is associated with variance between all of the ProQOL measures, with a one-way ANOVA demonstrating significance in variance in relation to respondents’ experiences of trauma-informed supervision on the Compassion ( $F(2,275) = 6.58, p = .002$ ), Burnout

( $F(2,273) = 6.62, p = .002$ ), and Secondary Traumatic Stress ( $F(2,273) = 3.75, p = .025$ ) scales.

Mean scores in these groups follow the same patterns, with respondents reporting trauma-informed supervision and those receiving no supervision having significantly better mean scores (higher on compassion satisfaction, lower on burnout and secondary traumatic stress) than respondents who report having supervision that did not welcome engagement around traumatic content (Bray, 1985).

## **CHAPTER VII: DISCUSSION AND CONCLUSIONS**

This discussion chapter begins with a summary of the three primary areas of investigation of this research: the existence and prevalence of vicarious resilience within the respondent population; the relationship between the positive effects of vicarious resilience and the negative effects of burnout and secondary traumatic stress; and factors within the practitioner population that are associated with or predictive of vicarious resilience. Next, I explore certain associations between demographic factors and outcome variables that, while not predictive, nonetheless present points of interest in relation to the topic of this dissertation. Lastly, I examine certain identified limitations of this research, which connects directly to the final section on suggestions for further research, which concludes the dissertation.

### **Summary**

#### **Existence and Prevalence of Vicarious Resilience among Dissertation Sample**

The results of this dissertation demonstrate that respondents self-report experiences related to their work with individuals who have survived traumatic events in a manner that is consistent with the current understanding of the phenomenon of vicarious resilience. The mean scores for total vicarious resilience, as well as across all seven sub-scales, are higher than 50% of the scale maximums; indicating that a majority of respondents endorse experiences consistent with vicarious resilience across all measured domains. The distribution of these total vicarious resilience scores (as well as on all subscales) is skewed significantly to the left, demonstrating a preponderance of higher scores within the sample population. This indicates that this quality is not normally distributed among this population, but at a higher density of reporting (Rose et al., 2014).

Although the VRS has only recently been developed/published, it demonstrated reliability and consistency in the sample population that remains high with all subscales and totals highly correlated and having a Chronbach's Alpha of .920 (Shoukri, 2011). Similarly, scores in VR were significantly associated with the ProQOL positive measure of compassion satisfaction, with a moderate positive correlation ( $r = .460, p < .001$ ). Given these convergent factors, it can be determined that vicarious resilience is experienced by the practitioners in this sample. Moreover, it can be further surmised that the experience of vicarious resilience reported here is broadly comparable to that of clinicians in prior studies (Hernandez-Wolfe, 2018, p.; Killian et al., 2016). In the light of prior qualitative research into the phenomenon, it is likely that the experience and expression of this vicarious resilience is experienced and expressed idiosyncratically by individual practitioners (Hernandez-Wolfe, 2018; Hernandez-Wolfe et al., 2015).

The presence of this phenomenon within a wide population of practitioners represents a novel finding within the domain of VR literature. While most practitioners receive some education about negative effects of working with clients who have experienced trauma, it is rarer to receive education regarding experiences of positive effects or impact. This can contribute to the perceptions of individuals who have survived trauma that they face stigma when seeking services (Kantor, Knefel, & Lueger-Schuster, 2017). A greater awareness of the prevalence of this positive phenomenon can support practitioners and increase their own resilience in the face of work that is often challenging. At present there are no other published examples of the Vicarious Resilience Scale being used with such a heterogenous group of practitioners across multiple settings and professional roles. This also supports the notion that vicarious resilience may be more commonly experienced among practitioners, but is not experienced as a distinct



phenomenon in the course of regular practice. Prior research, focusing on practitioners who worked with clients who had experienced exceptionally intense traumas (torture survivors), generated the hypothesis that there was a dose-response effect related to this exposure, or that working within a trauma-specific site could foster greater VR in practitioners than working in another type of agency or practice setting. This study does not support these hypotheses. Rather, it posits that the phenomenon can be generated within the therapeutic encounter across a wide variety of settings, and is not associated with the perceived proportion of practitioners' clients who have experienced traumatic events.

### **Relationship Between Positive and Negative Effects**

In contrast to prior quantitative research involving the VRS, there were significant associations between measures of vicarious resilience and negative measures, with total vicarious resilience scores being moderately negatively correlated with ProQOL's Burnout subscale ( $r = -.352, p < .001$ ), and mildly negatively correlated with the ProQOL's STSS ( $r = -.176, p = .004$ ). These associations alone can neither confirm nor disprove the theories articulated by prior vicarious resilience researchers that the two phenomena are fundamentally different processes (Killian et al., 2016). However, this could be regarded as further evidence suggesting that working with individuals who have survived traumatic events can expose practitioners to the risk of experiencing both positive *and* negative effects as a result of the ongoing therapeutic relationship. Given the varying relationships found between the positive and negative scales and subscales in this study, it seems likely that the relationship between positive and negative impact on practitioners is not a simple dichotomy in which the presence of positive effects relates directly to the absence of negative effects and vice versa. As our understanding of this empathic process develops, it could provide practitioners and supervisors with more skills to utilize to

foster positive effects and hopefully provide protective factors to assist practitioners to resist or reduce negative effects.

### *Differences in the Relationship between Vicarious Resilience and the Two Negative Effects*

Of the two negative effects measured by the ProQOL scale, secondary traumatic stress would be presumed to be more connected to the phenomenon of vicarious resilience since both experiences are presumed to be generated primarily from elements of the interpersonal encounter between practitioner and client (burnout being more understood as relating to practitioners' relationship to work environment and responsibilities). Despite this, respondents' scores on the VRS are more strongly correlated with their scores on the burnout measure than on the secondary traumatic stress measure; and while burnout correlates with six of the seven subscales of the VRS (all but the Increased Recognition of Power and Privilege subscale), secondary traumatic stress correlates with only three VR subscales (Increased Resourcefulness, Changes in Life Goals, and Increased Self-awareness). Similar to the scores for the core measure, these subscale correlations between secondary traumatic stress and VR are weaker than those between VR and the burnout measure. This greater difference between VR and secondary traumatic stress (in contrast to burnout) does seem to suggest a need to further explore the possibility that there could be significantly differing pathways for generating positive vs. negative effects in the practitioner as a result of the therapeutic relationship (Cieslak et al., 2014). Conversely, this could also suggest that work environment is a more salient factor that could affect experiences of vicarious resilience in practitioners; for example, that interventions to reduce burnout might be more useful for promoting VR than interventions targeted at preventing secondary traumatic stress in practitioners.

### ***Unique Responses on the Increased Awareness of Power and Privilege Subscale***

In the VRS, respondents' scores on the Awareness of Power and Privilege subscale seem to have a different relationship with the ProQOL measures than any other subscale. While all of the other VR subscales are significantly and positively correlated to compassion satisfaction, and most are significantly and negatively correlated to burnout; this subscale fails to rise to significance on either measure. Of interest is that alone among all the vicarious resilience subscales, the Awareness of Power and Privilege subscale has an exceptionally weak positive correlation with compassion satisfaction, and a *positive* correlation with burnout. The lack of associations common to the other subscales and the contrasting trends of the scores in this subscale inspires further questions about this component of vicarious resilience and its relationship to other phenomena such as burnout and secondary traumatic stress. It could be hypothesized that, in contrast to the other subscales in the VRS, an awareness of inequities in power and privilege – particularly if the practitioner were unable to assist the client in addressing them – could contribute to feelings of burnout and stress on the part of the practitioner.

### **Factors Contributing to Vicarious Resilience among Practitioners**

When considering overall Vicarious Resilience scores, three demographic factors (length of practice with individuals who have experienced traumatic events, reporting a personal history of trauma, and having a personal spiritual practice) and one environmental factor (the presence of trauma-informed supervision) were associated with higher overall scores on the VRS. A multiple regression analysis was conducted to determine which traits were predictive of higher scores of vicarious resilience, with two predictors found to account for 7.5% of the overall variance in the measure ( $R^2=.085$ ,  $F(2,265)=12.260$ ,  $p < .001$ ). Both length of practice ( $\beta = .258$ ,  $p < .001$ ) and trauma-informed supervision ( $\beta = .228$ ,  $p < .001$ ) were significant contributors to

the model. While this might represent a relatively small fraction of the overall variance, the significance level seems to indicate that the relationship is particularly strong. In particular, the role of supervision in working with individuals who have experienced trauma is highlighted, as it is also associated with higher scores in compassion satisfaction and lower scores in burnout and secondary traumatic stress, representing both a contributing factor to vicarious resilience and a potential protective factor against the measured negative effects. In the light of the multifactorial nature of resilience, the fact that there are clear predictors within a diverse practitioner sample highlights the importance of these factors in explaining variance in this phenomenon.

Of the three factors explored in this dissertation, it is perhaps unsurprising that supervision emerged as the positive contributor towards the experience of VR. While it is certainly beneficial to seek out educational resources related to trauma, positive-effects phenomena such as vicarious post-traumatic growth or vicarious resilience, are often not included or centralized within clinical education programs. Many professional settings do not provide time or space for practitioners to meet and share trauma-related clinical content. However, professional requirements in most clinical settings require some form of regular, ongoing supervision which presents the opportunity for feedback, reflection, and meaning-making in relation to practitioners' experiences with clients who have had traumatic experiences. As length of practice is included in the predictive model, it could be surmised that supervisors (who have more experience) are more implicitly aware of this phenomena and better able to articulate their experiences and provide support in practitioners' efforts to learn and grow within their work with individuals who have experienced trauma.

## **Discussion of Significant Nonpredictive Associations**

### **Practitioners' Personal History of Trauma**

There is no prior research consensus on the impact of a history of trauma on the part of the practitioner and how it might contribute to experiences of vicarious resilience. The results of this dissertation study indicate that a practitioner who endorses a personal experience of trauma is associated with higher VR scores as well as higher reported secondary traumatic stress. In general, this supports the hypothesis that the therapeutic encounter creates the capacity for both positive and negative impact to be generated, and that a personal experience of trauma could heighten this relationship for practitioners who are working with individuals who have experienced traumatic events. A personal history of trauma could heighten the clinician's vulnerability to experiences of secondary trauma. Conversely, greater experience with processing and dealing with traumatic events could foster a greater capacity for VR. To develop a more meaningful understanding of how this history of traumatic experiences impacts vicarious resilience future studies might benefit from a more targeted operational definition of traumatic events, since as in this study the practitioner's ability to define trauma and traumatic events (for themselves and for clients) was deliberately left very broad, and the outcome measures were defined quite specifically.

### **Practitioners' Spiritual Practice**

Though there are increasing incentives within mental health systems to better reflect clients' spiritual beliefs and practices, particularly as a means of encouraging positive coping skills (Corry, Lewis, & Mallett, 2014), there is a lack of a consensus on how to incorporate an individual's spiritual beliefs and practices into trauma-informed practices (Blanch, 2007). In this study, practitioners who identified that they had a personal spiritual practice were significantly

associated with having higher scores in VR overall, as well as higher scores on the Self-awareness and Recognition of Clients' Spirituality subscales. While this latter association may seem more direct (having one's own spiritual practice highlights one's ability to recognize another's) the contribution of a practitioner's spiritual practice to overall development of vicarious resilience and self-awareness deserves more exploration together with the variable's association with lower scores on the ProQOL burnout measure. Spiritual practice may contribute to trauma-informed practices in connection with its capacity to provide meaning, meaning-making being a component of several approaches to trauma treatment (Želeskov-Đorić et al., 2012).

## **Limitations**

### **General Limitations Related to Convenience Sampling**

The use of a convenience sample in this study makes it impossible to generalize from these results to a larger or specific population of practitioners. However, the sample population demonstrated a lack of variation across certain dimensions which is discussed here, specifically demographic trends related to gender, race, and highest level of educational attainment.

### ***Gender***

Though gender did not prove to have a significant impact on the respondents' results on the outcome measures of the study, it is interesting to note that the prevalence of female respondents (84.9%) was exceptionally high. Though women generally tend to be overrepresented in master's-level therapeutic practice (for example, in 2008, almost 70% of social workers were female) (Pease, 2011), it would require further study to determine whether a sampling factor was responsible for the heightened predominance of woman in the sample population. This is in line with prior studies related to VR in which samples ranged from 70%

(Killian et al., 2016) to 90% women (Engstrom et al., 2008). Gender was not associated with any outcome measure, which matches earlier research indicating that practitioner gender has not been associated with changes in practice related to the practitioner.

### ***Race***

The sample population was overwhelmingly white-identified, with 232 respondents (77.3%) identifying as White, and 14 respondents identifying as White in conjunction with some other racial or ethnic identity. (The survey platform allowed respondents to select one or more racial groups to define their identity.) The preponderance of White respondents presents a challenge for surfacing any racial differences within the outcome measures or subscales. There has been some evidence that practitioner race can have impact on the therapeutic relationship, particularly with clients of color (Hayes, Owen, & Bieschke, 2015; Morales, Keum, Kivlighan, Hill, & Gelso, 2018), which could potentially have an impact on the vicarious resilience phenomenon. This could suggest that future research in this arena should seek to ensure a larger and more diverse sample in order to better explore any interactions between race and VR.

### ***Highest Level of Education***

There was a significant amount of graduate level education present within the dissertation sample, with 94.4% of the sample having a master's degree or higher, and fully 87.7% being master's-level practitioners. This connects to responses from the sample population with respect to specific education working with trauma, which was also quite high, with 98% of respondents indicating they had such training. In the case of practitioners working in non-trauma-specific settings in particular, it could be the case that a higher level of professional education, in addition to the training on trauma, could help practitioners better identify trauma-related responses both in clients and in their own responses to the clinical work. Practitioner education also emphasizes

the importance of ongoing clinical supervision, which was demonstrated to enhance the likelihood that the practitioner would experience VR. As with the other demographic factors described here, the preponderance of master's level practitioners within the study – while perhaps implying that respondents could be more capable of reflection on their clinical practice – also challenges the sample's ability to surface relationships between groups of varying educational levels.

### **Absence of Comparison Values for Vicarious Resilience**

Chief among the limitations of this exploratory dissertation is the absence of comparison values for the core measure utilized, the VRS. Not studies using this scale exist to provide comparison values which means the data have limited capacity to interpret relative levels of VR or evaluate this sample in terms of other sample populations. Over time, as this scale is used in other settings, it will allow for comparison between studies and a better understanding of what constitutes 'average,' or 'high' VR. Given this limitation, the results of this dissertation's are only practical in determining overall prevalence within the sample, as well as vicarious resilience's relationship to other factors within the sample, and cannot be generalized.

### **Limited Number of Settings and Roles Addressed within the Sample**

Despite having respondents from roughly eight different setting categories, the vast majority of respondents (84.6%) came exclusively from mental-health and trauma-specific settings. Since one of the primary goals of the research was to explore the phenomenon in a broader range of settings and because these varied settings are expected to have a strong impact on the environmental factors addressed in the survey instrument, this focus on a particular cross-section of psychotherapists diminishes the research's generalizability across multiple domains of practitioners, particularly if the phenomenon is seen to be multifactorial. During the recruitment



process, there was some resistance from settings to engaging in in-person partnerships for recruitment, and future iterations of research in this model could emphasize recruitment and engagement with research partners identified with settings that were under-represented in the sample.

Less problematic but still a limitation of the sample is the preponderance of a small subset of professional roles, with social workers, creative arts therapists, and mental health counselors representing 81.6% of respondents. Since these professions are generally licensed at master's level, this also creates an overwhelming majority of respondents who identify as having master's level education (87.1%). This issue is less problematic for generalization as informal exploration of the population of practitioners indicates that most psychotherapists working with individuals who have experienced trauma are licensed and educated at the master's level (Dagan et al., 2015). However, this discrepancy highlights how the sample is not well representative of the experiences of practitioners who only have bachelor's degrees or a doctoral-level education.

### **Variations in Conceptualization of Trauma**

Given the number of respondents who indicated that 100% of their caseload of clients deal with traumatic events in their work (53 respondents, or 18%) it can be inferred that there was significant variation within the population regarding individualized definitions of trauma, which would affect our understanding of prevalence of trauma-related work within any particular respondent's caseload. There is no specific definition of trauma that is associated with the phenomenon of VR, despite the fact that much of the preliminary research has taken place with practitioners working with political survivors of torture, which is a particularly severe form of physical and psychological abuse (Hernandez-Wolfe, 2018; Hernandez-Wolfe et al., 2015). While this is not a critical limitation for a project that aims to explore the phenomenon across a

broader respondent population, creating a more uniform definition of trauma and utilizing it in screening and framing questions could provide a subset of information more tailored to a specific population of practitioners. This, in turn could provide us with further details about how the type or quality of traumatic experience a client was processing affected the practitioner's experience of VR. If research on VR in mental health and trauma-specific settings continues, it could be beneficial to include a more specific lens through which to examine and interpret trauma.

### **Lack of a Qualitative Component**

While the VRS represents an important resource in determining whether practitioners have experienced the phenomenon as a result of their practice, as a purely quantitative measure it cannot capture the complexity and idiosyncrasies of the individual interaction between practitioner and client. As the empathic relationship that fosters vicarious resilience is surmised to be deeply intersubjective, there are qualities of the phenomenon experienced by this sample that have gone unexamined and could benefit from future study.

### **Suggestions for Future Research**

#### **Focus on Setting-Specific Projects**

While this dissertation supports the notion that practitioners across a variety of settings experience the phenomenon of VR, it is less successful at demonstrating how or if a practitioner's location within any specific settings (or to a lesser degree their professional roles and educational backgrounds) affects his or her development of vicarious resilience. Continuing to undertake this quantitative approach but attempting to obtain a larger sample from underrepresented settings and groups of practitioners could be very beneficial. Not only could it further develop our understanding of vicarious resilience, but it could also provide more specific strategies and approaches for exploring and promoting VR within different types of settings. This

is especially relevant in the case of domains such as child welfare or homeless support services (to name just two) where the environmental conditions, client presentation, and the expectations and roles for practitioners are at times very different than they are within the domains of mental health or trauma-specific services.

### **Within Mental Health Settings, Explore more Focused Definitions of Trauma**

Exploration of the VR phenomenon and the development of the VRS took place within the professional realm of torture treatment. This created, in effect, a particular definition of what constitutes a traumatic event on the part of the clients working with the practitioner population in question. Utilizing this measure with a broader population of practitioners within mental health and other trauma-specific services (such as domestic violence, victims' services, or veterans' services) could provide information about vicarious resilience that is more closely analogous to prior research. Moreover, it could provide a more nuanced evolution of our understanding of the concept and how it is expressed in settings not related to torture treatment. The positive results of this dissertation could serve as justification for further in-depth research into the broader expression of VR. In addition, utilizing a more specific definition of what constitutes a traumatic experience could be used to control for some variance between settings, while providing potential support to explore the hypothesis that the prevalence or type of trauma experienced by clients within a practitioner's caseload affects the expression of VR.

### **Expand Evaluation of Possible Predictive Factors, Especially Supervisory-Related Factors**

Within this broad inquiry, there was only the opportunity to explore the environmental factors related to vicarious resilience in the most limited and categorical way: essentially asking whether the condition (training about trauma, peer engagement or trauma-informed supervision) was present or not. Since this dissertation did reveal at least one predictive environmental factor

and several demographic factors that are associated with VR, future research could expand on these elements of practitioners' experience in order to provide a better understanding of how/whether they contribute to the development of VR. The formulation of this dissertation's inquiry into supervision, in particular, was shaped exclusively according to the supervisee's perception of the supervisor's willingness to engage with the practitioner around issues related to trauma. Future study could explore other components of the supervisor/practitioner relationship including practical dynamics such as format of supervision and amount of supervision provided. The theoretical identification or trauma training of the supervisor could also be explored.

### **Conclusion**

Ultimately this dissertation was successful in its efforts to explore and identify practitioners' experiences of vicarious resilience across a broader range of settings than those in which it had previously been investigated. While it was not able to conclusively define VR's relationship to the negative effects of burnout and secondary traumatic stress – particularly in terms of gathering evidence for VR's independence from those negative experiences as a construct – it hopefully provides a more textured understanding of how different components of the VR experience may be associated with particular negative or positive outcomes for the practitioner.

Of particular importance is the fact that the analysis was able to identify trauma-informed supervision, especially when considered in conjunction with length of practice with a client population, as a positive predictor of VR, which provides a direction for future inquiry and guidance for practitioners and agencies alike. The latter would recognize the benefits for their practice of supporting and fostering the experiences of vicarious resilience for practitioners across all settings.

## APPENDICES

### The Vicarious Resilience Scale (VRS)

Please reflect on your experience working with persons who have survived severe traumas. Since you began this work, you may have undergone changes in how you view your clients, your approach to this work, and/or your own experience or world view. Please read each of the following statements about your attitudes, experiences, and how your view of life *since you began this work*, and indicate the degree to which you disagree or agree:

For each statement, respondent indicates if they: did not experience this (0), experienced this to a *very small* degree (1), experienced this to a *small* degree (2), experienced this to a *moderate* degree (3), experienced this to a *great* degree (4), experienced this to a *very great* degree (5).

#### (Changes in life goals and perspective)

1. I am better able to reassess dimensions of problems
2. I am better able to keep perspective
3. I see life as more manageable
4. I am better able to cope with uncertainties
5. I am more resourceful
6. I have learned how to deal with difficult situations

#### (increased capacity for resourcefulness)

7. I am more connected to people in life
8. My life goals and priorities have evolved
9. I have more compassion for people
10. I put more time and energy into relationships

11. My ideas about what is important have changed

12. I am more mindful and reflective

(Increased self-awareness and self-care practices)

13. I am more in tune with my body

14. I make more time more meditative, mindful, or spiritual practices

15. I am better able to assess my level of stress

16. I am better at self-care

(Client-inspired hope)

17. I am inspired by people's capacity to persevere

18. I am hopeful about people's capacity to heal and recover from trauma

19. I am more hopeful and engaged when focusing on strengths

(Increased recognition of clients' spirituality as a therapeutic resource)

20. I see my clients' spiritual practices as a source of inspiration

21. I recognize spirituality as a component of clients' survival

22. I highlight clients' spiritual/religious beliefs to promote resilience

(Increased consciousness about power and privilege relative to clients' social location)

23. I am more aware of ethnicity, gender, sexual orientation and religion

24. Race, class, gender, sexual orientation and privilege, access, resources

(Increased capacity for remaining present while listening to trauma narratives)

25. When I experience distressing thoughts I am able to just notice them

26. I am better able to remain present when hearing trauma narratives

27. I notice client trauma narratives without getting lost in them

## Professional Quality of Life Scale (ProQOL)

### Compassion Satisfaction and Compassion Fatigue

#### *ProQOL Version 5 (2009)*

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

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

1. I am happy.
2. I am preoccupied with more than one person I [help].
3. I get satisfaction from being able to [help] people.
4. I feel connected to others.
5. I jump or am startled by unexpected sounds.
6. I feel invigorated after working with those I [help].
7. I find it difficult to separate my personal life from my life as a [helper.]
8. I am not as productive at work because I am losing sleep over traumatic experiences of a person I [help].
9. I think that I might have been affected by the traumatic stress of those I [help].
10. I feel trapped in my job as a [helper].
11. Because of my [helping], I have felt “on edge” about various things.
12. I like my work as a [helper].
13. I feel depressed because of the traumatic experiences of the people I [help].

14. I feel as though I am experiencing the trauma of someone I have [helped].
15. I have beliefs that sustain me.
16. I am pleased with how I am able to keep up with [helping] techniques and protocols.
17. I am the person I always wanted to be.
18. My work makes me feel satisfied.
19. I feel worn out because of my work as a helper.
20. I have happy thoughts because and feelings about those I [help] and how I could help them
21. I feel overwhelmed because my case [work] load seems endless.
22. I believe I can make a difference through my work.
23. I avoid certain activities or situations because they remind me of frightening experiences of the people I [help]
24. I am proud of what I can do to [help].
25. As a result of my [helping], I have intrusive, frightening thoughts.
26. I feel “bogged down” by the system.
27. I have thoughts that I am a “success” as a [helper].
28. I can’t recall important parts of my work with trauma victims.
29. I am a very caring person.
30. I am happy that I chose to do this work.

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## REFERENCES

- Alessi, E. J., & Martin, J. I. (2010). Conducting an Internet-based Survey: Benefits, Pitfalls, and Lessons Learned. *Social Work Research, 34*(2), 122–128.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders: DSM-5*. (5th ed.). Retrieved from <http://dsm.psychiatryonline.org/book.aspx?bookid=556>
- Arnold, D., Calhoun, L. G., Tedeschi, R., & Cann, A. (2005). Vicarious Posttraumatic Growth in Psychotherapy. *Journal of Humanistic Psychology, 45*(2), 239–263. <https://doi.org/10.1177/0022167805274729>
- Barrington, A. J., & Shakespeare-Finch, J. (2013). Working with refugee survivors of torture and trauma: An opportunity for vicarious post-traumatic growth. *Counselling Psychology Quarterly, 26*(1), 89–105. <https://doi.org/10.1080/09515070.2012.727553>
- Beaumont, E., Durkin, M., Martin, C. J. H., & Carson, J. (2016). Measuring relationships between self-compassion, compassion fatigue, burnout and well-being in student counsellors and student cognitive behavioural psychotherapists: A quantitative survey. *Counselling and Psychotherapy Research, 16*(1), 15–23. <https://doi.org/10.1002/capr.12054>
- Bell, S., Hopkin, G., & Forrester, A. (2019). Exposure to Traumatic Events and the Experience of Burnout, Compassion Fatigue and Compassion Satisfaction among Prison Mental Health Staff: An Exploratory Survey. *Issues in Mental Health Nursing, 40*(4), 304–309. <https://doi.org/10.1080/01612840.2018.1534911>
- Berger, R., & Quiros, L. (2014). Supervision for trauma-informed practice. *Traumatology, 20*(4), 296–301. <https://doi.org/10.1037/h0099835>

- Berger, R., & Quiros, L. (2016). Best practices for training trauma-informed practitioners: Supervisors' voice. *Traumatology*, 22(2), 145–154. <https://doi.org/10.1037/trm0000076>
- Bischoff, S. (2014). *Secondary traumatic stress and vicarious traumatization: Protective factors and their utilization* (Ph.D., Ball State University). Retrieved from <http://search.proquest.com.ezproxy.gc.cuny.edu/docview/1531127599/abstract/AD2634918908446APQ/1>
- Blanch, A. (2007). Integrating religion and spirituality in mental health: The promise and the challenge. *Psychiatric Rehabilitation Journal*, 30(4), 251–260. <https://doi.org/10.2975/30.4.2007.251.260>
- Bober, T., & Regehr, C. (2006). Strategies for Reducing Secondary or Vicarious Trauma: Do They Work? *Brief Treatment and Crisis Intervention*, 6(1), 1. <https://doi.org/10.1093/brief-treatment/mhj001>
- Boscarino, J. A., Adams, R. E., & Figley, C. R. (2010). Secondary trauma issues for psychiatrists. *Psychiatric Times*, 27(11), 24–26.
- Braithwaite, D., Emery, J., de Lusignan, S., & Sutton, S. (2003). Using the Internet to conduct surveys of health professionals: A valid alternative? *Family Practice*, 20(5), 545–551. <https://doi.org/10.1093/fampra/cm509>
- Bray, J. H. (1985). *Multivariate analysis of variance* (First printing..). Beverly Hills: Sage Publications.
- Bride, B. E., Radey, M., & Figley, C. R. (2007). Measuring Compassion Fatigue. *Clinical Social Work Journal*, 35(3), 155–163. <https://doi.org/10.1007/s10615-007-0091-7>
- Brockhouse, R., Msetfi, R. M., Cohen, K., & Joseph, S. (2011). Vicarious exposure to trauma and growth in therapists: The moderating effects of sense of coherence, organizational

- support, and empathy. *Journal of Traumatic Stress*, 24(6), 735–742.  
<https://doi.org/10.1002/jts.20704>
- Brown, B. (2006). Shame Resilience Theory: A Grounded Theory Study on Women and Shame. *Families in Society*, 87(1), 43–52. <https://doi.org/10.1606/1044-3894.3483>
- Butler, L. D., Critelli, F. M., & Rinfrette, E. S. (2011). Trauma-informed care and mental health. *Directions in Psychiatry*, 31(3), 197–212.
- Cieslak, R., Shoji, K., Douglas, A., Melville, E., Luszczynska, A., & Benight, C. C. (2014). A meta-analysis of the relationship between job burnout and secondary traumatic stress among workers with indirect exposure to trauma. *Psychological Services*, 11(1), 75–86.  
<https://doi.org/10.1037/a0033798>
- Corry, D. A. S., Lewis, C. A., & Mallett, J. (2014). Harnessing the Mental Health Benefits of the Creativity–Spirituality Construct: Introducing the Theory of Transformative Coping. *Journal of Spirituality in Mental Health*, 16(2), 89–110.  
<https://doi.org/10.1080/19349637.2014.896854>
- Cosden, M., Sanford, A., Koch, L. M., & Lepore, C. E. (2016). Vicarious Trauma and Vicarious Posttraumatic Growth among Substance Abuse Treatment Providers. *Substance Abuse*, 0(ja), 00–00. <https://doi.org/10.1080/08897077.2016.1181695>
- Craig, C., & Sprang, G. (2010a). Compassion satisfaction, compassion fatigue, and burnout in a national sample of trauma treatment therapists. *Anxiety, Stress & Coping*, 23(3), 319–339. <https://doi.org/10.1080/10615800903085818>
- Craig, C., & Sprang, G. (2010b). Factors Associated with the Use of Evidence-Based Practices to Treat Psychological Trauma by Psychotherapists with Trauma Treatment Expertise.

*Journal of Evidence-Based Social Work*, 7(5), 488–509.

<https://doi.org/10.1080/15433714.2010.528327>

Dagan, K., Itzhaky, H., & Ben-Porat, A. (2015). Therapists Working With Trauma Victims: The Contribution of Personal, Environmental, and Professional-Organizational Resources to Secondary Traumatization. *Journal of Trauma & Dissociation*, 16(5), 592–606.

<https://doi.org/10.1080/15299732.2015.1037038>

Dattilio, F. M. (2015). The Self-Care of Psychologists and Mental Health Professionals: A Review and Practitioner Guide. *Australian Psychologist*, 50(6), 393–399.

<https://doi.org/10.1111/ap.12157>

Degnan, K. A., & Fox, N. A. (2007). Behavioral inhibition and anxiety disorders: Multiple levels of a resilience process. *Development and Psychopathology*, 19(3), 729–746.

<https://doi.org/10.1017/S0954579407000363>

Deiter, P. J., Nicholls, S. S., & Pearlman, L. A. (2000). Self-injury and self capacities: Assisting an individual in crisis. *Journal of Clinical Psychology*, 56(9), 1173–1191.

[https://doi.org/10.1002/1097-4679\(200009\)56:9<1173::AID-JCLP5>3.0.CO;2-P](https://doi.org/10.1002/1097-4679(200009)56:9<1173::AID-JCLP5>3.0.CO;2-P)

Dekel, R., Nuttman-Shwartz, O., & Lavi, T. (2016). Shared Traumatic Reality and Boundary Theory: How Mental Health Professionals Cope With the Home/Work Conflict During Continuous Security Threats. *Journal of Couple & Relationship Therapy*, 15(2), 121–

134. <https://doi.org/10.1080/15332691.2015.1068251>

DePanfilis, D., & Zlotnik, J. L. (2008). Retention of front-line staff in child welfare: A systematic review of research. *Children and Youth Services Review*, 30(9), 995–1008.

<https://doi.org/10.1016/j.childyouth.2007.12.017>

- Duarte, J., & Pinto-Gouveia, J. (2017). Empathy and feelings of guilt experienced by nurses: A cross-sectional study of their role in burnout and compassion fatigue symptoms. *Applied Nursing Research*, 35, 42–47. <https://doi.org/10.1016/j.apnr.2017.02.006>
- Edelkott, N., Engstrom, D. W., Hernandez-Wolfe, P., & Gangsei, D. (2016). Vicarious Resilience: Complexities and Variations. *American Journal of Orthopsychiatry*. <https://doi.org/10.1037/ort0000180>
- Engstrom, D., Hernandez, P., & Gangsei, D. (2008). Vicarious resilience: A qualitative investigation into its description. *Traumatology*, 14(3), 13–21. <https://doi.org/10.1177/1534765608319323>
- Esaki, N., Benamati, J., Yanosy, S., Middleton, J., Hopson, L., Hummer, V., & Bloom, S. (2013). The Sanctuary Model: Theoretical Framework. *Families in Society: The Journal of Contemporary Social Services*, 94(2), 87–95. <https://doi.org/10.1606/1044-3894.4287>
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4. <https://doi.org/10.11648/j.ajtas.20160501.11>
- Faust, D. S., Black, F. W., Abrahams, J. P., Warner, M. S., & Bellando, B. J. (2008). After the storm: Katrina's impact on psychological practice in New Orleans. *Professional Psychology: Research and Practice*, 39(1), 1–6. <https://doi.org/10.1037/0735-7028.39.1.1>
- Figley, C. R. (Ed.). (1995). *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized*. New York: Brunner/Mazel.
- Finklestein, M., Stein, E., Greene, T., Bronstein, I., & Solomon, Z. (2015). Posttraumatic Stress Disorder and Vicarious Trauma in Mental Health Professionals. *Health & Social Work*, 40(2), e25–e31. <https://doi.org/10.1093/hsw/hlv026>

- Frey, L. L., Beesley, D., Abbott, D., & Kendrick, E. (2017). Vicarious resilience in sexual assault and domestic violence advocates. *Psychological Trauma: Theory, Research, Practice, and Policy*, *9*(1), 44–51. <https://doi.org/10.1037/tra0000159>
- Fritz, C. O., Morris, P. E., & Richler, J. J. (2012). Effect size estimates: Current use, calculations, and interpretation. *Journal of Experimental Psychology: General*, *141*(1), 2–18. <https://doi.org/10.1037/a0024338>
- Hall, A. M., Ferreira, P. H., Maher, C. G., Latimer, J., & Ferreira, M. L. (2010). The influence of the therapist-patient relationship on treatment outcome in physical rehabilitation: A systematic review.(Research Report)(Clinical report). *Physical Therapy*, *90*(8), 1099–1110. <https://doi.org/10.2522/ptj.20090245>
- Harrison, R. L., & Westwood, M. J. (2009). Preventing vicarious traumatization of mental health therapists: Identifying protective practices. *Psychotherapy: Theory, Research, Practice, Training*, *46*(2), 203–219. <https://doi.org/10.1037/a0016081>
- Harvey, M. R. (2007). Towards an Ecological Understanding of Resilience in Trauma Survivors. *Journal of Aggression, Maltreatment & Trauma*, *14*(1–2), 9–32. [https://doi.org/10.1300/J146v14n01\\_02](https://doi.org/10.1300/J146v14n01_02)
- Hayes, J. A., Owen, J., & Bieschke, K. J. (2015). Therapist differences in symptom change with racial/ethnic minority clients. *Psychotherapy*, *52*(3), 308–314. <https://doi.org/10.1037/a0037957>
- Hernández, P., Engstrom, D., & Gangsei, D. (2010). Exploring the Impact of Trauma on Therapists: Vicarious Resilience and Related Concepts in Training. *Journal of Systemic Therapies*, *29*(1), 67–83.

- Hernández, P., Gangsei, D., & Engstrom, D. (2007). Vicarious Resilience: A New Concept in Work With Those Who Survive Trauma. *Family Process, 46*(2), 229–241.  
<https://doi.org/10.1111/j.1545-5300.2007.00206.x>
- Hernandez-Wolfe, P. (2018). Vicarious Resilience: A Comprehensive Review\*. *Revista de Estudios Sociales*. Retrieved from  
<https://revistas.uniandes.edu.co/doi/full/10.7440/res66.2018.02>
- Hernandez-Wolfe, P., Killian, K., Engstrom, D., & Gangsei, D. (2015). Vicarious Resilience, Vicarious Trauma, and Awareness of Equity in Trauma Work. *Journal of Humanistic Psychology, 55*(2), 153–172. <https://doi.org/10.1177/0022167814534322>
- Hunt, T. (2018). Professionals' Perceptions of Vicarious Trauma From Working With Victims of Sexual Trauma. *Walden Dissertations and Doctoral Studies*. Retrieved from  
<https://scholarworks.waldenu.edu/dissertations/5879>
- Hunter, S. V. (2012). Walking in Sacred Spaces in the Therapeutic Bond: Therapists' Experiences of Compassion Satisfaction Coupled with the Potential for Vicarious Traumatization. *Family Process, 51*(2), 179–192. <https://doi.org/10.1111/j.1545-5300.2012.01393.x>
- Hurley, D. J., Alvarez, L., & Buckley, H. (2015). From the zone of risk to the zone of resilience: Protecting the resilience of children and practitioners in Argentina, Canada, and Ireland. *International Journal of Child, Youth and Family Studies, 6*(1), 17–51.
- Hyatt-Burkhart, D. (2014). The Experience of Vicarious Posttraumatic Growth in Mental Health Workers. *Journal of Loss and Trauma, 19*(5), 452–461.  
<https://doi.org/10.1080/15325024.2013.797268>

- Kantor, V., Knefel, M., & Lueger-Schuster, B. (2017). Perceived barriers and facilitators of mental health service utilization in adult trauma survivors: A systematic review. *Clinical Psychology Review, 52*, 52–68. <https://doi.org/10.1016/j.cpr.2016.12.001>
- Kennedy, C., Mercer, A., Keeter, S., Hatley, N., McGeeney, K., & Gimenez, A. (2016). Evaluating Online Nonprobability Surveys. *Pew Research Center, 61*.
- Killian, K., Hernandez-Wolfe, P., Engstrom, D., & Gangsei, D. (2016). Development of the Vicarious Resilience Scale (VRS): A Measure of Positive Effects of Working With Trauma Survivors. *Psychological Trauma: Theory, Research, Practice, and Policy*. <https://doi.org/10.1037/tra0000199>
- Koch, N. F., & Emrey, J. (2002). The Internet and Opinion Measurement: Surveying Marginalized Populations. *Social Science Quarterly, 82*(1), 131–138. <https://doi.org/10.1111/0038-4941.00012>
- Labott, S. M., Johnson, T. P., Fendrich, M., & Feeny, N. C. (2013). Emotional Risks to Respondents in Survey Research: Some Empirical Evidence. *Journal of Empirical Research on Human Research Ethics: An International Journal, 8*(4), 53–66. <https://doi.org/10.1525/jer.2013.8.4.53>
- Levine, S. Z., Laufer, A., Stein, E., Hamama-Raz, Y., & Solomon, Z. (2009). Examining the relationship between resilience and posttraumatic growth. *Journal of Traumatic Stress, 22*(4), 282–286.
- Liebling, H., Davidson, L., Akello, G. F., & Ochola, G. (2016). The experiences of survivors and trauma counselling service providers in northern Uganda: Implications for mental health policy and legislation. *International Journal of Law and Psychiatry, 49*, 84–92. <https://doi.org/10.1016/j.ijlp.2016.06.012>



- Luthar, S. S. (2015). Resilience in Development: A Synthesis of Research across Five Decades. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental Psychopathology* (pp. 739–795). Retrieved from <http://onlinelibrary.wiley.com/doi/10.1002/9780470939406.ch20/summary>
- Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The Construct of Resilience: A Critical Evaluation and Guidelines for Future Work. *Child Development*, *71*(3), 543–562.
- Măirean, C., cornelia.mairean@psih.uaic.ro. (2016). Secondary traumatic stress and posttraumatic growth: Social support as a moderator. *Social Science Journal*, *53*(1), 14–21. <https://doi.org/10.1016/j.soscij.2015.11.007>
- Mairean, C., & Turliuc, M. N. (2013). Predictors of Vicarious Trauma Beliefs Among Medical Staff. *Journal of Loss & Trauma*, *18*(5), 414–428. <https://doi.org/10.1080/15325024.2012.714200>
- Manning-Jones, S., de Terte, I., & Stephens, C. (2016). Secondary traumatic stress, vicarious posttraumatic growth, and coping among health professionals; A comparison study. *New Zealand Journal of Psychology*, *45*(1), 20–29.
- Manning-Jones, S., de Terte, I., & Stephens, C. (2017). The relationship between vicarious posttraumatic growth and secondary traumatic stress among health professionals. *Journal of Loss and Trauma*, *22*(3), 256–270. <https://doi.org/10.1080/15325024.2017.1284516>
- Matz, D., Vogel, E. B., Mattar, S., & Montenegro, H. (2015). Interrupting Intergenerational Trauma: Children of Holocaust Survivors and the Third Reich. *Journal of Phenomenological Psychology*, *46*(2), 185–205. <https://doi.org/10.1163/15691624-12341295>

- McCann, I. L., & Pearlman, L. A. (1990). Vicarious Traumatization: A Framework for Understanding the Psychological Effects of Working with Victims. *Journal of Traumatic Stress, 3*(1), 131–149.
- McCann, I. L., & Pearlman, L. A. (1992). Constructivist Self-Development Theory: A Theoretical Framework for Assessing and Treating Traumatized College Students. *Journal of American College Health, 40*(4), 189–196.  
<https://doi.org/10.1080/07448481.1992.9936281>
- Menzies, P. (2010). *Intergenerational Trauma from a Mental Health Perspective*. Retrieved from <https://zone.biblio.laurentian.ca/handle/10219/384>
- Miller, M. K., Flores, D. M., & Pitcher, B. J. (2010). Using Constructivist Self-Development Theory to Understand Judges' Reactions to a Courthouse Shooting: An Exploratory Study. *Psychiatry, Psychology & Law, 17*(1), 121–138.  
<https://doi.org/10.1080/13218710902930309>
- Morales, K., Keum, B. T., Kivlighan, D. M. Jr., Hill, C. E., & Gelso, C. J. (2018). Therapist effects due to client racial/ethnic status when examining linear growth for client- and therapist-rated working alliance and real relationship. *Psychotherapy, 55*(1), 9–19.  
<https://doi.org/10.1037/pst0000135>
- Neswald-Potter, R., rneswald@unm. edu, & Simmons, R. T. (2016). Regenerative Supervision: A Restorative Approach for Counsellors Impacted by Vicarious Trauma. *Supervision Régénérative: Une Approche Rétablissante Pour Les Conseillers Affectés Par Traumatisme Vicariant.*, 50(1), 75–90.

- Newell, J. M., Nelson-Gardell, D., & MacNeil, G. (2016). Clinician responses to client traumas: A chronological review of constructs and terminology. *Trauma, Violence, & Abuse, 17*(3), 306–313.
- Nishi, D., Kawashima, Y., Noguchi, H., Usuki, M., Yamashita, A., Koido, Y., & Matsuoka, Y. J. (2016). Resilience, post-traumatic growth, and work engagement among health care professionals after the Great East Japan Earthquake: A 4-year prospective follow-up study. *Journal of Occupational Health, 58*(4), 347–353. <https://doi.org/10.1539/joh.16-0002-OA>
- Nuttman-Shwartz, O. (2015). Shared Resilience in a Traumatic Reality A New Concept for Trauma Workers Exposed Personally and Professionally to Collective Disaster. *Trauma, Violence, & Abuse, 16*(4), 466–475. <https://doi.org/10.1177/1524838014557287>
- Nuttman-Shwartz, O., & Sternberg, R. (2017). Social work in the context of an ongoing security threat: Role description, personal experiences and conceptualisation. *British Journal of Social Work, 47*(3), 903–918. (2017-30604-013).
- O’Sullivan, J., & Whelan, T. A. (2011). Adversarial growth in telephone counsellors: Psychological and environmental influences. *British Journal of Guidance & Counselling, 39*(4), 307–323. <https://doi.org/10.1080/03069885.2011.567326>
- Pack, M. (2014). Vicarious Resilience A Multilayered Model of Stress and Trauma. *Affilia, 29*(1), 18–29. <https://doi.org/10.1177/0886109913510088>
- Pearlman. (2013). Restoring Self in Community: Collective Approaches to Psychological Trauma after Genocide. *Journal of Social Issues, 69*(1), 111–124. <https://doi.org/10.1111/josi.12006>

- Pearlman, L. A. (1995). Treating therapists with vicarious traumatization and secondary traumatic stress disorders. In Figley, Charles R (ed.), *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized* (p. pp 150-177.).
- Pearlman, L. A., & Saakvitne, K. W. (1995). *Trauma and the therapist: Countertransference and vicarious traumatization in psychotherapy with incest survivors* (1st ed.). New York: Norton.
- Pease, B. (2011). Men in Social Work: Challenging or Reproducing an Unequal Gender Regime? *Affilia*, 26(4), 406–418. <https://doi.org/10.1177/0886109911428207>
- Piaget, J. (1971). *The language and thought of the child*. (3d. ed. [rev. and enl.]). London, New York, New York, London, London : New York: Routledge & Kegan Paul; Humanities Press, Humanities Press, Routledge & KPaul ; New York, Humanities Press, Routledge & Kegan Paul Ltd, Humanities Press.
- Possick, C., Waisbrod, N., & Buchbinder, E. (2015). The Dialectic of Chaos and Control in the Experience of Therapists Who Work With Sexually Abused Children. *Journal of Child Sexual Abuse*, 24(7), 816–836. <https://doi.org/10.1080/10538712.2015.1057667>
- Prager, J. (2015). Danger and Deformation: A Social Theory of Trauma Part II: Disrupting the Intergenerational Transmission of Trauma, Recovering Humanity, and Repairing Generations. *American Imago*, 72(2), 133–155. <https://doi.org/10.1353/aim.2015.0008>
- Puvimanasinghe, T., Denson, L. A., Augoustinos, M., & Somasundaram, D. (2015). Vicarious resilience and vicarious traumatization: Experiences of working with refugees and asylum seekers in South Australia. *Transcultural Psychiatry*, 52(6), 743–765. <https://doi.org/10.1177/1363461515577289>
- Qualtrics. (2017). *Qualtrics Security White Paper Lite* (pp. 1–26).

- Rajan-Rankin, S. (2014). Self-Identity, Embodiment and the Development of Emotional Resilience. *The British Journal of Social Work, 44*(8), 2426–2442.  
<https://doi.org/10.1093/bjsw/bct083>
- Reeves, E. (2015). A Synthesis of the Literature on Trauma-Informed Care. *Issues in Mental Health Nursing, 36*(9), 698–709. <https://doi.org/10.3109/01612840.2015.1025319>
- Rhee, Y. S., Ko, Y. B., & Han, I. Y. (2013). Posttraumatic growth and related factors of child protective service workers. *Annals of Occupational and Environmental Medicine, 25*(1), 6. <https://doi.org/10.1186/2052-4374-25-6>
- Rogers, K. C., Bobich, M., & Heppell, P. (2016). Further Consideration of Systems, Stigma, Trauma, and Access to Care. *Pragmatic Case Studies in Psychotherapy, 12*(2), 139–157.
- Rose, S., Spinks, N., & Canhoto, A. I. (2014). *Management Research: Applying the Principles*. <https://doi.org/10.4324/9781315819198>
- Salloum, A., Kondrat, D. C., Johnco, C., & Olson, K. R. (2015). The role of self-care on compassion satisfaction, burnout and secondary trauma among child welfare workers. *Children and Youth Services Review, 49*, 54–61.
- Sangalang, C. C., & Vang, C. (2017). Intergenerational Trauma in Refugee Families: A Systematic Review. *Journal of Immigrant and Minority Health, 19*(3), 745–754.  
<https://doi.org/10.1007/s10903-016-0499-7>
- Selm, M. V., & Jankowski, N. W. (2006). Conducting Online Surveys. *Quality and Quantity, 40*(3), 435–456. <https://doi.org/10.1007/s11135-005-8081-8>
- Shoukri, M. M. (2011). *Measures of interobserver agreement and reliability*. CRC Press.

- Sil Jin. (2016). Giving and Gaining: Experiences of Three Music Facilitators on Working and Musicking with Asylum Seekers in Australia. *Australian Journal of Music Therapy*, 27, 13–26.
- Silveira, F. S., & Boyer, W. (2015). Vicarious Resilience in Counselors of Child and Youth Victims of Interpersonal Trauma. *Qualitative Health Research*, 25(4), 513–526.  
<https://doi.org/10.1177/1049732314552284>
- Splevins, K. A., Cohen, K., Joseph, S., Murray, C., & Bowley, J. (2010). Vicarious Posttraumatic Growth Among Interpreters. *Qualitative Health Research*, 20(12), 1705–1716.  
<https://doi.org/10.1177/1049732310377457>
- Stamm, B. H. (2010). *The concise ProQOL manual*. Retrieved from  
[https://nbpsa.org/images/PRP/ProQOL\\_Concise\\_2ndEd\\_12-2010.pdf](https://nbpsa.org/images/PRP/ProQOL_Concise_2ndEd_12-2010.pdf)
- Sterzing, P. R., Gartner, R. E., & McGeough, B. L. (2018). Conducting Anonymous, Incentivized, Online Surveys With Sexual and Gender Minority Adolescents: Lessons Learned From a National Polyvictimization Study. *Journal of Interpersonal Violence*, 33(5), 740–761. <https://doi.org/10.1177/0886260517744845>
- Sue, V. M., & Ritter, L. A. (2007). *Conducting online surveys*. Los Angeles: Sage Publications.
- Tassie, A. K. (2015). Vicarious resilience from attachment trauma: Reflections of long-term therapy with marginalized young people. *Journal of Social Work Practice*, 29(2), 191–204. <https://doi.org/10.1080/02650533.2014.933406>
- Tedeschi, R. G., & Calhoun, L. G. (1996). The Posttraumatic Growth Inventory: Measuring the Positive Legacy of Trauma. *Journal of Traumatic Stress*, 9(3), 455–471.

- Tedeschi, R. G., Calhoun, L. G., & Cann, A. (2007). Evaluating Resource Gain: Understanding and Misunderstanding Posttraumatic Growth. *Applied Psychology: An International Review*, *56*(3), 396–406. <https://doi.org/10.1111/j.1464-0597.2007.00299.x>
- Thompson, B. (1984). *Canonical correlation analysis: Uses and interpretation*. Beverly Hills, Calif., Beverly Hills: Sage, Sage Publications.
- Tosone, C. (2011). The legacy of September 11: Shared trauma, therapeutic intimacy, and professional posttraumatic growth. *Traumatology*, *17*(3), 25–29. <https://doi.org/10.1177/1534765611421963>
- Tosone, C., Nuttman-Shwartz, O., & Stephens, T. (2012). Shared Trauma: When the Professional is Personal. *Clinical Social Work Journal*, *40*(2), 231–239. <https://doi.org/10.1007/s10615-012-0395-0>
- Ungar, M. (2011). *Social Ecology of Resilience: A Handbook of Theory and Practice*. New York: Springer.
- Ungar, M. (2013). Resilience, Trauma, Context, and Culture. *Trauma, Violence, & Abuse*, *14*(3), 255–266. <https://doi.org/10.1177/1524838013487805>
- U.S. Census Bureau QuickFacts: UNITED STATES. (n.d.). Retrieved March 30, 2019, from <https://www.census.gov/quickfacts/fact/table/US/PST045218>
- Van der Kolk, B. A. (2014). *The body keeps the score: Brain, mind, and body in the healing of trauma*. New York, New York: Viking.
- van der Kolk, B., Roth, S., Pelcovitz, D., Sunday, S., & Spinazzola, J. (2005). Disorders of extreme stress: The empirical foundation of a complex adaptation to trauma. *Journal of Traumatic Stress*, *18*(5), 389–399.

- Volkas, A. (2014). Drama Therapy in the Repair of Collective Trauma. In N. Sajnani & D. Johnson (Eds.), *Trauma-Informed Drama Therapy: Transforming clinics, classrooms, and communities*. Springfield, IL: Charles C. Thomas.
- Waxman, H. C., Gray, J. P., & Padron, Y. N. (2003). *Review of Research on Educational Resilience*. Retrieved from <https://escholarship.org/uc/item/7x695885>
- Weinbach, R. W. (2015). *Statistics for social workers* (Ninth edition..). Boston: Pearson.
- Weingarten, K. (2003). *Common shock: Witnessing violence every day*. New York: Dutton.
- Wilcox, R. R. (2017). *Modern statistics for the social and behavioral sciences: A practical introduction* (Second edition..). Boca Raton, FL: CRC Press, Taylor & Francis Group.
- Yates, T. M., & Masten, A. S. (2012). Fostering the Future: Resilience Theory and the Practice of Positive Psychology. In P. A. Linley & S. Joseph (Eds.), *Positive Psychology in Practice* (pp. 521–539). <https://doi.org/10.1002/9780470939338.ch32>
- Yeater, E., Miller, G., Rinehart, J., & Nason, E. (2012). Trauma and Sex Surveys Meet Minimal Risk Standards: Implications for Institutional Review Boards. *Psychological Science*, 23(7), 780–787. <https://doi.org/10.1177/0956797611435131>
- Yehuda, R., & Lehrner, A. (2018). Intergenerational transmission of trauma effects: Putative role of epigenetic mechanisms. *World Psychiatry*, 17(3), 243–257. <https://doi.org/10.1002/wps.20568>
- Yehuda, R., Lehrner, A., & Bierer, L. M. (2018). The public reception of putative epigenetic mechanisms in the transgenerational effects of trauma. *Environmental Epigenetics*, 4(2). <https://doi.org/10.1093/eep/dvy018>



Želeskov-Đorić, J., Hedrih, V., & Đorić, P. (2012). Relations of resilience and personal meaning with vicarious traumatization in psychotherapists. *International Journal of Psychotherapy*, *16*(3), 44–55. (2014-35967-004).