PROMOTING RESILIENCY: VICARIOUS POSTTRAUMATIC GROWTH IN TRAUMA CLINICIANS

A dissertation submitted

by

CHRISTOPHER J. HOWARD

to

ANTIOCH UNIVERSITY SANTA BARBARA

in partial fulfillment of the requirements for the degree of

DOCTOR OF PSYCHOLOGY in CLINICAL PSYCHOLOGY

_________________________________
Michele Harway, Ph.D., Dissertation Chair

_________________________________
Peter Claydon, Ph.D.
Faculty

_________________________________
Ryan Smith
Student Reviewer

_________________________________
Alex P. Linley,
Expert Consultant
# TABLE OF CONTENTS

**DEDICATION** .................................................................................................................................

**ACKNOWLEDGEMENTS** ......................................................................................................................

**ABSTRACT** ........................................................................................................................................

**CHAPTER ONE: INTRODUCTION** ........................................................................................................
  - Problem Statement ......................................................................................................................... 10
  - Significance ...................................................................................................................................... 11
  - Research Questions and Hypotheses ............................................................................................ 14
  - Definition of Key Terms ................................................................................................................ 18

**CHAPTER TWO: REVIEW OF THE LITERATURE** ................................................................................
  - Vicarious Posttraumatic Growth .................................................................................................. 20
  - Spirituality ....................................................................................................................................... 27
  - Self-Care ......................................................................................................................................... 37

**CHAPTER THREE: METHODOLOGY** 
  - Design ............................................................................................................................................ 45
  - Population and Sample .................................................................................................................. 46
  - Data Collection Procedures ......................................................................................................... 47
  - Instrumentation .............................................................................................................................. 49
  - Data Analysis ................................................................................................................................. 53

**CHAPTER FOUR: RESULTS** 
  - Preliminary Analysis .................................................................................................................... 55
  - Investigation of Research Questions and Hypotheses ................................................................ 58
Summary of Findings Related to Research Hypotheses………………66

CHAPTER FIVE: DISCUSSION.................................................................69

Limitations....................................................................................75

Recommendations for Research..................................................76

Recommendations for Practice.....................................................77

APPENDICES....................................................................................

A) Informed Consent.................................................................79

B) Demographic Questionnaire...................................................82

C) The Assessment of Self-Care...................................................83

D) The Posttraumatic Growth Inventory.......................................87

E) The Spiritual Involvement and Beliefs Scale-Revised..............89

F) The Trauma Symptom Inventory .............................................91

G) IRB Forms...............................................................................92

H) Ethnic Origin: Frequency and Percent..................................95

REFERENCES................................................................................96
LIST OF TABLES

Table 1: Intercorrelations among study variables
Table 2: Regression predicting Vicarious Posttraumatic Growth
Table 3: Regression predicting Anxious Arousal
Table 4: Regression predicting Depression
Table 5: Regression predicting Anger/Irritability
Table 6: Regression predicting Intrusive Experiences
Table 7: Regression predicting Defensive Avoidance
Table 8: Regression predicting Dissociation
Table 9: Regression predicting Impaired Self-Reference
Table 10: Regression predicting Tension Reduction Behavior
Dedication

This work is dedicated to Jozefa Kulakowski, my babcia (great-grandmother) without whose pilgrimage and fortitude none of this would be possible. Also, to my heroes Ronald D. Howard and Peter G. Rossi who served dutifully as both warriors and fathers. And finally to Edgar Marquez whose legacy continues.
Acknowledgements

I would like to personally thank the many others who have supported me throughout my journey, including my wife, Naomi Howard, mother Joanne Rossi, sensei Allen and sensei Kiyama, whose provision of a “hospital” has enriched my life. And finally, to Jessica whose spirit of sacrifice initiated a deeper search for meaning and purpose in my life.
Abstract

Vicarious Posttraumatic Growth (VPG) and Vicarious Traumatization (VT) are two potential outcomes of clinical work with trauma survivors. The aim of this study was to test a predictive model of these constructs, allowing a fuller understanding of preventive strategies clinicians might employ to inoculate themselves against the potential hazards of service provision and provide the highest quality of clinical care. VPG and VT were investigated in 63 self-identified trauma therapists. The results showed that VPG is facilitated by engagement in successful services subsequent to a traumatic event. Self-Care emerged as a poignant buffer against various indices of vicarious traumatization. Other study variables including spiritual beliefs and practices, and years practicing were correlated with vicarious traumatization but failed to reach significance in a majority of regression models due to the small sample size. Directions for future research and practice are discussed.
Solve et Coagule or “Dissolve and Reform” is an ancient concept, beckoning attention to the phenomenon of growth through adversity. Spiritual traditions worldwide have discussed the vicissitudes of personal transformation, or “trial by fire”. It is in the spirit of this ancient tradition of personal alchemy or turning lead into gold that this study is born. As others can attest (Arnold, Calhoun, Tedeschi & Cann, 2005; Brady, Guy, Poelstra, & Brokaw, 1999; Decker, 1993; Joseph & Linley 2006; Herman 1992; Pearlman & Saakvitne, 1990; Pearlman & Mac Ian, 1995; Schauben & Frazier, 1995; Zoellner & Maercker, 2006), trauma has a pivotal role in both pathology and growth. In fact, these may not be dichotomous outcomes, as trauma leaves an individual transformed on a biological, as well as a psychological level (Christopher, 2004). What is the nature of this transformation?

Traumatic sequelae are multidetermined, based not only on the nature of the stressor, but the response of the individual. The outcome of this transformation can have deleterious as well as growth producing effects. Several recent studies have continued to warn us of the deleterious effects of trauma work or empathic engagement with another’s experience of trauma (Lerias & Byrne, 2003; Mclean, Wade, & Encel, 2003; Collins & Long, 2003; Sabin-Farrell & Turpin, 2003). These effects may include symptoms of PTSD (Brady et al., 1999; Kassam-Adams, 1995; Schaben & Frazier, 1995; Pearlman & MacIan, 1995), burnout (Jenaro, Flores, & Arias, 2007; Johnson & Hunter, 1997; Rupert & Morgan, 2005), general psychological distress (Iliffe & Steed, 2000; Sabin-Farrell & Turpin, 2003; Steed & Downing, 1998) and cognitive changes in beliefs and attitudes (Schauben & Frazier, 1995; Pearlman & MacIan, 1995, Ilife & Steed, 2000; Ortlepp & Friedman, 2002; Steed & Downing, 1998). These experiences are often referred to in the
literature by various names including “vicarious traumatization” (VT), “secondary stress”, “compassion fatigue”, and “burnout”. These terms merit further consideration and will be expounded upon later in this text.

Interestingly, the DSM-IV diagnostic criteria for posttraumatic stress disorder (PTSD) acknowledges that learning about traumatic events experienced by a family member or close friend can lead to the diagnosis (American Psychiatric Association, 1994). The aforementioned authors posit that engaging empathically with trauma survivors can thus result in vicarious traumatization and secondary traumatic stress. Interestingly, empathic work with clients is likely to activate a “sympathetic pain”, which has been demonstrated using functional imaging techniques as activity in the cingulate cortex, but not the somatosensory cortex of the brain (Singer et al., 2004). Further, a recent meta-analytic review by Segerstrom and Miller (2004) concluded that “in the thirty years since work in the field of psychoneuroimmunology began, studies have convincingly established that stressful experiences alter features of the immune response as well as confer vulnerability to adverse medical outcomes that are either mediated by or resisted by the immune system” (p. 619).

Research informed preventative strategies can foster the requisite resilience to ameliorate trauma’s negative effects on client and clinician alike. When clinicians in particular, attend to their own self care, they are reducing the likelihood of not only adverse psychological, but physical effects as well (Norcross, 2007). Further, as clinicians become more mindful of their own care, they can subsequently provide the requisite ecology or safe environment for survivor clients to thrive. Interestingly, the word ecology is derived from the Greek root οἶκος or οικο. This is a concept of home, not
an individual dwelling but a habitat or environment, especially as a factor significantly influencing the mode of life or the course of development (McDaniel, Lusterman, & Philpot, 2001). Thus, it appears that the creation of such a therapeutic environment for clients may be contingent upon clinicians’ creation of a balanced internal environment through the process of self-care.

Problem Statement

According to Ozer (2003) approximately 50%-60% of the U.S. population is exposed to traumatic stress, but only 5%-10% develop PTSD. What explains this finding? Have we underestimated the capacity to thrive despite adversity (Bonanno, 2004)? This question has received attention from several fronts. Literature has burgeoned on this topic with the advent of positive psychology (Seligman & Csikszentmihalyi, 2000) and the concept of posttraumatic growth as originally espoused by Tedeschi and Calhoun (1996), who found positive and adaptive changes in trauma survivors’ self-perceptions, relationships, and philosophy of life.

A more recent study by these authors (Arnold, Calhoun, Tedechi, & Cann, 2005), found that clinicians working with survivor clients’ traumatic material also report positive changes in the areas of self-perception, interpersonal relationships, and philosophy of life. However, there is a paucity of research replicating their findings. In fact, most extant studies have only examined models of posttraumatic growth to explain outcomes in clients, spanning the gamut from individuals confronting illness (Bower et al., 2005; Cordova, 2001; Danoff-Burg & Revenson, 2005; Milam, 2004), bereavement (Cadell, Regeher, & Hemsworth, 2003; Davis, Nolen-Hoekama, & Larson, 1998;
Polatinsky & Esprey, 2000), sexual assault (Frazier, Conlon, & Glasser, 2001), combat (Britt, Adler, & Bartone, 2001; Sledge, Boydstun, & Rabe, 1980), and even terrorist attacks (DeRoma et al., 2003; Woike & Matik, 2004). These studies have converged in explicating that survivors often experience growth and positive changes through their experience of adversity.

For example, Cordova et al. (2001) investigated posttraumatic growth in a group of breast cancer survivors. They compared levels of depression, well-being, and posttraumatic growth among breast cancer survivors with age and education matched healthy women or controls. As predicted, breast cancer survivors reported similar levels of depression and well-being but greater levels of posttraumatic growth. The participants reported experiencing personal growth in how they related to others, in their appreciation of life, and in spirituality. This research, as well as the aforementioned investigations, has led to research informed practices with trauma survivors, and most poignantly offered hope and meaning. Without such attention to protective factors and theoretical models to assist in not only inoculating clinicians, but also fostering vicarious posttraumatic growth, a predilection towards “burnout” and “vicarious traumatization” continues.

**Significance**

Rupert and Morgan’s (2005) national survey of 571 doctoral level psychologists, all members of the American Psychological Association, presented evidence that 44.1% of their respondents fell in the high burnout range, 26.3% in the average range, and only 29.6% in the low range as measured by the Maslach Burnout Inventory (MBI; Maslach & Jackson, 1996). Quality of care may suffer as a result of a depletion of emotional
resources, an adoption of cynicism, and negative self and work perceptions. This process may have repercussions beyond therapeutic relationships with clients. For instance, findings by Kiecolt-Glasser et al. (1987, 1988) suggest that lower marital quality, which may be affected by burnout, was related to a suppressed immune system and, in turn, to poorer cellular immunity.

Why do some clinicians experience burnout and others growth? Most models of posttraumatic growth hypothesize that some type of meaning making or cognitive processing is required to integrate an affront to one’s basic beliefs about the self and world that may be challenged by a highly stressful event or trauma (Janoff-Bulman, 2004; Park & Hegelson, 2006; Taylor, 1983; Tedeschi & Calhoun, 2004). Working with trauma is posited to evoke a similar attack to the basic beliefs of the clinician whose work consists of being the “safe haven” and “secure base”. While victims of trauma engage in treatment, questioning the causes and implications of trauma, a parallel process is likely to be activated in the therapist. It is the depth and breadth of this processing, that is suggested to be an essential correlate of growth (McCullough, Root, & Cohen, 2006; Weinrib, Rorthrock, Johnsen, & Lutgendorf, 2006, Tennen & Affleck, 1998).

This process has also been described as rumination, or “several varieties of recurrent (event related) thinking, including making sense, problem-solving, reminiscence, and anticipation” (Martin & Tesser, 1996, p. 12). In fact, Calhoun and Tedeschi (2000) found direct support for this hypothesis, suggesting that greater amounts of rumination soon after a traumatic event, and the degree of openness to religious change, were indeed significantly related to the degree of posttraumatic growth as measured by the Posttraumatic Growth Inventory (PTGI; Calhoun & Tedeschi, 1996).
However, although evidence abounds on the construct of posttraumatic growth and cognitive processing (Hegelson, Reynolds, & Tomich, 2006; McCullough, Root, & Cohen, 2006; Weinrib, Rothrrock, Johnsen, & Lutgendorf, 2006), no extant models have been specifically promulgated, and tested on clinicians who specialize in trauma work.

The present study sought to understand what propels an individual clinician down a trajectory of growth versus traumatization. More importantly, the study asked, what are the determinants? Understanding these determinants may assist the trauma clinician much like the victim of PTSD in establishing a broader conceptual system, armed with the realization that “although the world is potentially far more dangerous than initially imagined, it still offers the possibility for leading a happy and fulfilling life” (Epstein, 1991, p. 224). We are indeed responsible for “walking our talk”. Current models of posttraumatic growth cannot be assumed to be generalizable to the trauma clinician.

In summary, what is clear is that trauma has a poignant role in the transformation and development of both client and clinician alike. In fact, as systems theorists beginning with Bronfrenbrener (1976) have suggested, therapist and client are a system, mutually influential and interdependent. Understanding only one side of this coin is like driving without headlights, the car is moving yet perilous obstacles remain obfuscated. Thus, elucidating key processes involved in vicarious posttraumatic growth can afford a more balanced perspective on the nature of therapeutic work and assist clinicians in continuing to answer the call of their vocation.
Research Questions and Hypotheses

This research is guided by the assumption that the personal characteristics of the clinician are the most salient determinants of vicarious posttraumatic growth. As has been stated in the burnout literature, “burnout is a multidetermined phenomenon that cannot be predicted on the basis of work-related variables alone (Rupert & Morgan, 2005, p. 550). A very brief introduction to the origin of the research questions and hypotheses will ensue.

The literature on posttraumatic growth has demonstrated that several variables subsumed under the rubric of religious and spiritual coping including: positive religious coping, religious openness, readiness to face existential questions, religious participation, intrinsic religiousness and spiritual beliefs/practices are significantly associated with posttraumatic growth (Calhoun, Caan, Tedeschi, & McMillan, 2000; Decker, 1993; Harrison, Koenig, Hays, Eme-Akwari, and Pargament, 2001; Hill, & Pargament, 2003; Miller, & Thoreson, 2003; Shaw, Joseph, & Linely, 2005; Tedeschi, & Calhoun, 2006). However, these variables had not been investigated as predictors of vicarious posttraumatic growth prior to the current study.

Self-care has received scant attention in the literature, having been subsumed under the rubric of social support and active and avoidant coping strategies. Social support has been found to be a significant mediator of both grief and trauma (Barlow & Coleman, 2003; Goss & Klass, 2005; Stuart, 2004; Tedeschi & Calhoun, 2004). It was posited that the self-care practices of trauma clinicians would also have such a poignant role in mediating traumatic sequelae, and even predicting vicarious posttraumatic growth. As stated by Norcross (2000), “although understandable and explicable on many levels,
the paucity of systematic study on psychotherapists’ self-care is unsettling” (p. 710). Figley (2002) argued that one consequence of a lack of self-care is compassion fatigue, resulting in a reduced capacity or interest in containing clients’ suffering. Fortunately, researchers have begun to develop checklists and assessments of self-care (Norcross, 2007; Pearlman & Saakvitne, 1996; Skovolht, 2001) yet there is a dearth of valid and reliable scales for measuring this important construct.

Interestingly, the debate continues regarding whether or not a history of trauma, and more importantly, successful treatment is a significant predictor or correlate of vicarious traumatization. For instance, McLean, Wade, & Encel (2003) found that therapists with recent direct experience of trauma were no more vulnerable to burnout than those who had not been traumatized; similar findings were also reported by Ortlepp & Friedman (2002), confirming earlier research (Schauben & Frazier, 1995; van Minnen & Keijsers, 2000). However, another body of research suggests that mental health-care workers are at higher risk (Collins & Long, 2003; Cornille & Meyers, 1999; Figley, 1995; Pearlman & Saakvitne, 1995).

More recent work by Linley and Joseph (2007) utilizing a sample of 156 therapists, found therapists who answered yes to the question “Do you have a personal trauma history?” reported greater levels of personal growth (M = 71.61, SD = 17.38) as measured by the Posttraumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996), than did therapists who answered no (M= 61.70, SD = 20.56), F(1,136) = 5.60, p<.05. Further, therapists who had either received personal therapy, or were currently in therapy, reported more personal growth and positive changes (as measured by the PTGI; and
Changes in Outlook Questionnaire, CIOQ-P; Joseph, Williams, & Yule, 1993) and less burnout (as measured by the Professional Quality of Life Scales, ProQOL; Stamm, 2002).

Finally, length of time in the field has demonstrated a potential role as a protective factor from vicarious traumatization. For example, McLean et al. (2003) found that newer therapists were more susceptible to symptoms of intrusion and avoidance, echoing earlier findings by Pearlman & Saakvitne (1995). These researchers found that therapists with a history of trauma who were newer to the work were experiencing the most difficulties as reflected in higher symptom levels and disruption in beliefs. Similar findings emerged from earlier studies on burnout (Ackerley, Burnell, Holder, & Kurdek, 1988; Deutsch, 1984). However, Linley and Joseph (2007) found that therapists who reported a greater length of time working as a therapist reported more negative psychological changes and more compassion fatigue.

As can be gleaned from the aforementioned independent variables, many hypotheses specific to vicarious posttraumatic growth remain uninvestigated. Thus, this study posited the following questions and one-tailed hypotheses:

Research question 1: To what extent does spirituality directly predict vicarious posttraumatic growth in this sample of trauma therapists?

Hypothesis 1a: High spiritual beliefs and practices scores (as measured by the Spiritual Involvement and Beliefs Scale-Revised; Hatch, 2001) will predict high vicarious posttraumatic growth scores (as measured by the Post Traumatic Growth Inventory; PTGI; Tedeschi & Calhoun, 1996).

Hypothesis 1b: High spiritual beliefs and practices scores will predict low vicarious traumatization scores (as measured by the Trauma Symptom Inventory, Briere, 1996).
Research question 2: To what extent does self-care directly predict vicarious posttraumatic growth in this sample of trauma therapists?

Hypothesis 2a: High scores on the Assessment of Self-Care (Saakvitne, 1996) will predict high vicarious posttraumatic growth scores (as measured by the PTGI).

Hypothesis 2b: High scores on the Assessment of Self-Care will predict low vicarious traumatization scores (as measured by the TSI).

Research question 3: To what extent does a previous history of treatment for one’s own trauma directly predict vicarious posttraumatic growth in this sample of trauma therapists?

Hypothesis 3a: Clinicians who have had successful treatment for trauma will experience higher levels of vicarious posttraumatic growth (as measured by the PTGI) than will those who were treated unsuccessfully, not treated, or who were never exposed to their own trauma.

3b: Clinicians who have had successful treatment for trauma will experience lower levels of vicarious traumatization (as measured by the TSI) than those who were treated unsuccessfully, not treated, or who were never exposed to their own trauma.

Research question 4: To what extent does the time practicing as a trauma clinician directly predict vicarious posttraumatic growth in this sample of trauma therapists?

Hypothesis 4a: The longer therapists have been practicing the higher levels of vicarious posttraumatic growth (as measured by the PTGI) they will experience.
Hypothesis 4b: The longer therapists have been practicing the lower levels of vicarious traumatization (as measured by the TSI) they will experience.

*Definition of Key Terms*

*Burnout*- symptoms of emotional exhaustion including negative attitudes and feelings toward coworkers and one’s job role, resulting from job strain, erosion of idealism, and reduced sense of accomplishment and achievement (Ashforth & Lee, 1997; Gil-Monte & Peiro, 1997; Maslach, 1993; Maslach & Johnson, 1986; Schaufeli & Peeters, 2000).

*Compassion fatigue*- a state of tension and preoccupation with traumatized patients as a result of intrusive imagery of the patient’s traumatic material, and numbing or avoidance of efforts to elicit or work with traumatic material from the patient (Collins & Long, 2003; Figley, 2002; Sabin-Farrell & Turpin, 2003).

*Posttraumatic Growth*- positive psychological sequelae as a result of one’s experience of trauma such as an increased appreciation for life, more meaningful interpersonal relationships, an increased sense of personal strength, changed priorities, and a richer existential and spiritual life (Tedeschi & Calhoun, 2004).

*Secondary Stress*- the presence of post-traumatic stress disorder symptoms in trauma workers who have not experienced the traumatic event directly, yet due to their proximal relationship to the client experience psychological distress, cognitive shifts, and relational disturbances (Collins & Long, 2003; Figley, 2002; Sabin-Farrell & Turpin, 2003).
Spirituality- a search for the sacred; a process by which people seek to discover, hold on to, and when necessary, transform whatever they hold sacred in their lives. This search may or may not take place in a traditional religious context (Hill et al., 2000; Hill & Pargament, 2003; Pargament, 1997). A related construct is spiritual, which refers to beliefs in the possibility of some form of transcendent reality which can be directly experienced, yet does not connote beliefs in a specific form the transcendent reality takes, nor a corporate structure, nor is a shared set of beliefs assumed (Koenig, McCullough, & Larson, 2001; Tedeschi & Calhoun, 2006).

Trauma- experiencing, witnessing (including bearing the distress of others who have been traumatized) or confrontation with an event or events that involve actual or threatened death or serious injury; or a threat to the physical integrity of self or others (APA, 2000; Figley, 2002).

Vicarious Traumatization- disrupted cognitive schemas and intrusive trauma imagery, as a result of empathic engagement with clients’ trauma experiences (Pearlman & Mac Ian, 1995).

Vicarious Posttraumatic Growth- Increased recognition of personal strength; gains in self-confidence, sensitivity, and compassion; improved personal relationships; an enhanced appreciation for what is important in life; and spiritual growth, resulting from the provision of therapy to trauma survivors (Arnold, Calhoun, Tedeschi, & Caan, 2005).
Review of the Literature

Vicarious Posttraumatic Growth (VPG):

Maslow (1969) made reference to a “self-determining Self” that is able to focus on what is possible; this fundamental paradigmatic shift in perception that is gleaned may be at the root of vicarious posttraumatic growth. Indeed, bearing witness to the suffering of others affords such an opportunity to the clinician as questions of meaning and purpose arise in the context of the therapeutic encounter. A thread of promise is woven in reports of perceived growth following stressful and traumatic experiences as diverse as illness (Bower et al., 2005; Danoff-Burg & Revenson, 2005; Milam, 2004), bereavement (Cadell, Regeher, & Hemsworth, 2003; Davis, Nolen-Hoeksema, & Larson, 1998; Polatinsky & Esprey, 2000), sexual assault (Frazier, Conlon, & Glasser, 2001), combat (Britt, Adler, & Bartone, 2001; Sledge, Boydstun, & Rabe, 1980), and even terrorist attacks (De Roma et al., 2003; Woike & Matik, 2004). Trauma work, in which empathic engagement with the aforementioned issues is paramount, is posited to evoke a parallel process.

Vicarious Posttraumatic Growth (VPG) as a construct was first espoused by Arnold et al. (2005), who conducted an in depth exploration of the positive consequences of work with trauma survivors. Their sample consisted of 21 psychotherapists who participated in a naturalistic interview, focusing on the exploration of two salient themes: 1) changes in memory systems and schemas about self and the world; and 2) perceived psychological growth. Previous research by Pearlman & Saakvitne (1995) on vicarious traumatization suggested that empathic engagement with clients’ traumatic material can
lead to disruptions in clinicians’ basic schemas about trust, safety, personal control, attachment, and esteem for others, ultimately contributing to impaired personal and professional relationships. However, even Pearlman & Saakvitne (1995) had found a sub-sample of therapists who were hypothesized to have achieved better self-functioning by contributing to the personal development of their clients.

Similar reports of vicarious posttraumatic growth had emerged in the literature, including gains in relationship skills, increased appreciation for the resilience of the human spirit, the satisfaction of observing clients’ growth and being part of the healing process, personal growth, and spiritual well-being (Brady, Guy, Poelstra, & Brokaw, 1999; Herman, 1992, Calhoun & Tedeschi, 1996). These positive sequelae are akin to those reported by many trauma survivors who have experienced growth in the areas of self-perception, interpersonal changes, and philosophy of life (Calhoun & Tedeschi, 1999). Interestingly, all 21 participants in the Arnold et al. (2005) study reported some sort of positive response to trauma work, with the most frequently reported positive consequence related to observing and encouraging clients’ posttraumatic growth.

Although all of the participants in the aforementioned study reported a transient negative response consisting predominantly of symptoms (lasting no more than a few days) of intrusive thoughts and images of clients’ trauma, the perceived benefits were reported to have far outweighed the negative, leading to trait-oriented changes. For instance, 86% of the sample reported believing that their trauma work had led to enduring changes in the self, such as increased levels of sensitivity, compassion, insight, tolerance, and empathy; 76% reported an impact on their spirituality, including an appreciation for different spiritual paths, and a deepening of prior faith; 52% reported a heightened
awareness of gratitude; and 48% reported of the sample reported an enhanced appreciation of the strength and resilience of the human spirit.

Understanding the processes behind these reports of perceived benefits, as contrasted to other reports of enduring negative effects of trauma work (Figley, 1995; McCann & Pearlman, 1990; Pearlman & Saakvitne, 1995) is of paramount significance. Although the data collection procedure utilized in this study, which employed open-ended, naturalistic interviews and qualitative analysis of the data using the constant comparison method (Lincoln & Guba, 1985) provides robust descriptions of perceived growth, the results do not elucidate preexisting explanatory factors. As several generations of trauma clinicians continue to treat victims of trauma, a comprehensive model capable of predicting vicarious posttraumatic growth becomes essential.

Further, sampling through convenience, utilizing the method of “snowball” or reputational sampling may have resulted in clinicians who are not truly representative of the larger population of trauma clinicians. As stated by Arnold et al. (2005), “therapists with diverse caseloads who do not work exclusively with trauma survivors-may be less at risk for the enduring negative effects of trauma work” (p. 256), suggesting that the reported benefits of their sample may be related to clinical work in general and therapists own personal experience with traumatic events. Yet, the decree has been issued, trauma work poses the potential for unique and perhaps enduring, state-oriented changes in self-perception, interpersonal relationships, and philosophy of life.

Brady, Guy, and Poelstra (1999) assessed vicarious traumatization (VT) in a national survey of 1,000 women psychotherapists from the American Professional Society on the Abuse of Children (APSAC) Psychology Division and the American
Psychological Association (APA) who reported a specialty area in psychotherapy and found that therapists with higher levels of exposure to sexual abuse material did report significantly more trauma symptoms, yet no disruption of cognitive schemas, and most relevant to the current investigation, higher levels of spiritual well-being as measured the Spiritual Well-Being Scale (Ellison & Smith, 1993; Paloutzian & Ellison, 1982), an area thought to be damaged by VT. This finding is consistent with the Arnold et al. (2005) study in which 76% of the participants reported a positive impact on their spirituality, akin to the change in philosophy of life reported by many trauma survivors.

Decker (1993) offers support stating “regardless of the presence or absence of trauma-produced personality deterioration there will be an increase in the search for an expanded and more meaningful perspective of existence (i.e. spiritual development) as a result of a traumatic experience (p. 34). Finally, Neuman and Pearlman’s (1996) view of trauma work as a challenge to therapists’ basic faith, leading to a questioning of meaning and hope, has been posited as the kind of cognitive processing predictive of posttraumatic growth (McCullough, Root, & Cohen, 2006; Park & Hegelson, 2006; Taylor, 1983; Tedeschi & Calhoun, 2004; Weinrib, Rothrock, Johnsen, & Lutgendorf, 2006).

Returning to the Brady et al. (1999) study using ANOVA, psychotherapists with greater current and cumulative exposure to sexual abuse clients evidenced significantly higher levels of PTSD-like symptoms, as measured by the Impact of Event Scale (Horowitz, Wilner, & Alvarez, 1979). This scale assesses posttraumatic stress symptomatology as a result of exposure to a life event. However, psychotherapists with greater exposure to sexual abuse clients did not evidence significantly higher levels of disrupted cognitive schemas, as measured the TSI Belief Scale (Pearlman & Saakvitne,
1995a) purported to assess disruption in therapists’ beliefs in the areas of safety, trust, esteem, intimacy, and control; all areas thought to be sensitive to the effects of trauma and vicarious trauma.

Of surprise was that psychotherapists with greater current and cumulative exposure to sexual trauma clients did not receive significantly lower scores on the Spiritual Well-Being Scale, an instrument that assesses subjective and spiritual well-being, in fact, the results suggested that the more exposure to trauma material, the higher the respondent’s spiritual well-being. “Practitioners who treated more abuse survivors reported a more existentially and spiritually satisfying life than those with less exposure to trauma clients (Brady, Guy, & Poelstra, 1999, p. 391). This surprising result replicated the findings of Schauben & Frazier (1995) who demonstrated that therapists who used social support, including activities that promoted physical and spiritual well-being had fewer trauma symptoms. Further, previous reports had found that clinicians witnessing the resiliency of clients’ meaning-making journeys, accompanied by at times, the joy of knowing that one is deliberately engaged in the healing of another, did indeed facilitate the personal growth of the therapist (Guy, 1987; Pearlman & Saakvitne, 1995a).

Other, similar reports abound in the literature, for example, Baird & Jenkins (in press) utilizing the Compassion Fatigue Self-Test for Practitioners (CFST; Figley, 1995a), Maslach Burnout Inventory (MBI; Maslach & Johnson, 1986), Traumatic Stress Institute Belief Scale (TSI; Pearlman, MacIan, Johnson, & Mas, 1992) and Symptom Checklist-90-Revised (SCL-90-R; Derogatis, 1983) found in a sample of 101 sexual assault and domestic violence counselors that workers who saw more clients had fewer
vicarious trauma symptoms, namely less disruption in beliefs. This effect was most pronounced for more educated counselors.

Linley et al. (2007) found that trauma therapists with a greater sense of coherence reported more positive changes and fewer negative changes associated with their work. The results echoed the findings of Antonosky (1987) who had originally defined coherence as a pervasive, enduring though dynamic feeling of confidence that “(1) the stimuli deriving from one’s internal and external environments in the course of living are structured and predictable, and explicable; (2) the resources are available to one to meet the demands posed by these stimuli; and 3) these demands are challenges, worthy of investment and engagement (p. 19). Previous work by Linley and Joseph (2005) had also demonstrated that therapists own personal therapy was a powerful predictive variable of more positive changes and fewer negative changes.

Steed and Downing (1998) utilizing semi-structured interviews with a small sample of 12 female therapists working full time with sexual abuse/assault survivors, also reported both negative as well as positive effects of their participants’ work with traumatized clients. Benatar (2000) using open-ended interviews with twelve trauma therapists with a minimum of seven years of experience observed themes of positive self-transformation including empowerment, wisdom, improving work with other clients, validation and personal healing, and becoming advocate/activist.

The results of the Brady et al. (1999) study await future replication with a sample of male trauma therapists. Perhaps women therapists are more apt to engage a support system as a consequence of traditional gender role socialization. Male trauma therapists may be less inclined to utilize such a support system due to an internalization of rugged
individualism, thus potentially deprived of its ameliorative effects. Indeed social support has emerged as a protective factor repeatedly in the literature. For instance, Jenaro et al. (2007) in a study of child protection workers and in-home caregivers found that social support, planning and active coping, restraint coping, a focus on efforts to solve the situation, personal growth, and positive reinterpretation, were positively and significantly related to personal accomplishment, an area thought to be one of the cardinal symptoms of burnout, a trajectory that can culminate in vicarious traumatization.

Further, Joseph and Linley’s organismic valuing theory (2006) posits that the positive accommodation of new trauma-related information, essential for positive changes in psychological well being is contingent upon the support of the social environment. These authors argue that therapist’s exposure to traumatic material does indeed lead to disruptions in their assumptive world, yet the cognitive-emotional processing involved of this material can lead to growth. Linley & Joseph (2004) state “either the therapist must deny to awareness the relevance of the client’s experiences to themselves, or they must either assimilate the new trauma-related information within their own assumptive world, or accommodate the new trauma-related information by modifying their assumptive world” (p. 11). It is this final step that is postulated to lead to growth. The outcome of growth or a positive accommodation to the challenge on their assumptive worlds is purported to be reliant upon therapists’ having a supportive social environment (clinical supervision, personal therapy, social support). Finally, Almedom (2004) suggested that the type, timing, and level of social support available and/or accessible to affected individuals and groups may determine positive or negative outcomes.
In conclusion, mechanisms of action are not clearly explicated in the Brady et al. study (1999) that can account for the relationship between exposure to traumatic material and spirituality; perhaps a stronger sense of spiritual well-being leads therapists to work with more traumatized clients, and perhaps these therapists have a predilection towards an examination of spiritual matters, setting the stage for spiritual growth. As stated by the authors “in a field that has long discouraged beliefs in transcendent forces and often ignored those who held such beliefs, perhaps it is time to look directly at the role of spirituality and meaning making for the psychotherapist” (p. 392). Beckoned, the present study sought to shed light on this phenomenon.

**Spirituality**

Why spirituality? According to a recent Gallup poll (Gallup & Lindsay, 1999) about 95% of Americans profess a belief in God or a higher power, 9 out of 10 people report engaging in frequent prayer, 65%-75% on a daily basis, and over two thirds or 69% report being members of a church or synagogue, 40 % attending regularly. Are not trauma clinicians Americans? Psychology’s agnosia or lack of knowledge of the predictive relationship between spirituality and posttraumatic growth is succumbing to a plethora of emerging evidence (Shaw, Joseph, & Linley, 2005; Calhoun, Caan, Tedeschi, & McMillan, 2000; Emmons, Colby, & Kaiser, 1998; Fallot, 1997; Hill, & Pargament, 2003; Milam, 2004, 2006; Miller, & Thoreson, 2003; Muskgrave, Allen, & Allen, 2002; Park, 1996; Pargament, Cohen, & Murch, 1996; Pargament, Koenig, & Perez; 2000; Pargament, Koenig, Tarakeshwar, & Hahn, 2004; Siegel, & Schrimshaw, 2000; Tedeschi, & Calhoun, 2006). Empiricism is beginning to heed the wisdom of antiquity, supporting
the claims of most of the world’s great religions in positing suffering as an integral
impetus for personal development, and even more importantly, offering a means of
understanding this relationship in greater depth.

For example, Christianity, Hinduism, and Islam, all view suffering as having a
positive role in the personal development, the development of wisdom (Linley, 2003),
and promoting a relationship with a higher power (Shaw, Joseph, & Linley, 2005;
Tedeschi, & Calhoun, 1995; Woodcock, 2001). Lest we romanticize trauma, we must be
cautioned that one possible outcome of this suffering may ultimately be a loss of one’s
religious or spiritual foundations. The dynamic tension between these two disparate
outcomes may be the creative friction in which a more grounded faith emerges.

Embarking on such a journey naturally casts doubt on one’s previously held convictions
which can culminate in a rejection of religion and one’s spirituality, or conversely, to a
changing or strengthening of those very same beliefs (Cait, 2004; Tedeschi, & Calhoun,
2004). For the purposes of the present study the terms religion and spirituality will be
used interchangeably, defined as a search for the sacred, which may or may not take
place in a larger religious context (Hill, Pargament, Hood, McCullough, Sweyers, Larson,

As Decker (1993) commented “the challenge of trauma is to discover not only our
capacity for greater caring, forgiveness, and compassion, but also, paradoxically, our
capacity to hate, fear, and distrust. When we are attacked by uncaring, violent energy,
whether human or natural, we must attempt to discover that same sense of the unknown
(e.g., fear) within ourselves” (p. 26). In Catholicism this is often referred to as the dark
night of the soul. For many survivors and the clinicians who treat them, this night

Rebuilding this assumptive world is akin to the search for the sacred. For example, Calhoun and Tedeschi (2004) conceptualize posttraumatic growth as a process, characterized by ongoing distress, and a willingness to address existential and spiritual themes that are challenging and sobering that eventually leads to an outcome of posttraumatic growth. Posttraumatic growth has been defined by these authors as an individual’s experience of positive change arising from the struggle with a major life crisis, usually manifested in reports of an increased appreciation for life, more meaningful interpersonal relationships, an increased sense of personal strength, changed priorities, and a richer existential and spiritual life.

However, the question remains, are clinicians who report experiencing vicarious posttraumatic growth those who actively seek out religious and spiritual experiences or do such experiences prime them for religious or spiritual growth? Answering this question involves accurate conceptualization and operationalization. For example, Shaw et al. (2005) argue “religious participation does not necessarily include a spiritual component, and spirituality does not necessarily include a religious participation component” (p. 7), concluding that studies should distinguish between the two. Further, operationalization or measurement relies on an adherence to a basic conceptualization of spirituality and religiousness as complex and multidimensional constructs, calling for equally robust instrumentation.
There are two unique approaches in the measurement of spirituality and religiousness (Miller & Thoreson, 2003). The unique variance approach, typically utilized in conservative epidemiological studies and in studies of posttraumatic growth, considers a new factor such as spirituality important only if it significantly improves prediction of a health outcome (posttraumatic growth) above and beyond already known predictors, thus accounting for additional and unique variance. The causal modeling approach utilizes techniques such as path analysis and structural equation modeling and is recommended when risk or protective factors covary, thus allowing for the disaggregation of direct from indirect effects.

Examples of the first and most prevalent approach include Powell et al.’s (2003) finding that religiousness was an independent and protective factor in predicting all-cause mortality; Pargament et al.’s (2004) finding that certain religious coping methods were unique and significant predictors of psychological, physical and spiritual outcomes in a population of medically ill elderly patients; Calhoun et al.’s (2000) finding that the degree of rumination soon after a traumatic event and the degree of openness to religious change were significant determinants of posttraumatic growth; and McCullough et al.’s (2000) meta-analysis of religious involvement and mortality.

McCullough et al. (2000) examined the relationship between religious involvement and mortality. Analyzing data from more than 126,000 participants revealed that people who scored higher on measures of religious involvement had 29% higher odds of survival than people lower in religious involvement.

In the Calhoun et al. (2000) study direct support for theoretical models of posttraumatic cognitive processing was found (Calhoun, & Tedschi, 1999; Greenberg,
These models have suggested that active rumination soon after a traumatic event is predictive of posttraumatic growth; the more an individual actively thinks about the circumstances of the traumatic event, and ways to make sense of them, the more likely it is that posttraumatic growth will be experienced. However, they cautioned that the ruminations characterized as primarily intrusive, negative, and persistent for unabated periods of time would predict low levels of growth and high levels of distress. An additional hypothesis was also confirmed in this study, namely that greater openness to religious change would be positively associated with higher levels of posttraumatic growth.

The participants were 54 students who had experienced a major traumatic event within the past three years. These events included being the victim of a serious crime, sudden death of a loved one because of accident, homicide, or suicide, motor vehicle accident resulting in serious injury or major property loss from a disaster, home evacuation because of serious hazard, and a large miscellaneous category of events written by participants, that included being in combat, in an earthquake, in the crossfire of a gang related shootout, among others. The participants were selected based on a prescreening of a larger group of 195 students enrolled in an introductory psychology course at a large southeastern university.

Measures utilized included The Traumatic Stress Schedule (Norris, 1990) used to assess the risk of posttraumatic stress disorder, the Quest Scale (Batson, Schoenrade, & Ventis, 1993) to measure an individual’s responsiveness to dialogue with existential questions, self-criticism and perception of religious doubt as positive, and openness to religious change; rumination related to the traumatic event was measured by an
innovative scale that included items reflecting both deliberate and intrusive thinking with half of the items measuring rumination soon after event and the other within the last two weeks (now). Finally, the Posttraumatic Growth Inventory (PTGI; Tedeschi, & Calhoun, 1996) was utilized as the dependent measure, a scale that measures the degree of positive changes experienced in the struggle with major life crises.

The results indicated that two of the measures emerged as significantly associated with posttraumatic growth: the degree of self-reported rumination soon after the event (beta = .47) and the degree of openness to religious change (beta = .29), as measured by the cluster of items from the Quest scale. The overall model yielded a significant Multiple R (R = .66), F (6, 47) = 6.26, p < .001 and adjusted R squared = .37. The significant semi-partial correlations were .32 for self-reported rumination soon after the trauma, and .22 for openness to religious change. The authors concluded that event-related rumination soon after the traumatic event, and openness to religious change were independent predictors of the amount of posttraumatic growth.

Calhoun et al. (2000) took several steps to ensure the validity of their findings. They controlled for multicollinearity or correlations between predictors, by examining the tolerances for all six predictors. The small sample size alerted the researchers to adjust the alpha level to .10 to check for potential smaller effects of the predictors possibly missed by the regression. Further, they indicated that their findings were indeed cross-sectional and correlational pointing to concerns of both direction of effect and durability of effect. Do openness to religious experiences, and event related rumination have long term implications and do they affect posttraumatic growth outcomes? Religious coping and cognitive processing could impact posttraumatic growth, but
religious coping and cognitive processing could also be mobilized or triggered by posttraumatic growth.

Another potential limitation of this study concerns the assumption that the trauma experience of university students is comparable to the general population (Bernat, Ronfeldt, Calhoun, & Arias, 1998). Certain demographic variables such as the participants’ age (M= 22.5 years), level of education and socioeconomic status engender questions of the representativeness of this sample and thus the generalizability of these results to a larger population different in these characteristics. Yet, their contribution to the literature furthers our understanding of the powerful roles of both cognitive and spiritual coping strategies. Indeed, the repertoire of empirically evidenced correlates and predictors of growth include “stress-appraisal, coping and personality variables, with more extraverted, optimistic, and self-efficacious people, who use spiritual, and emotionally focused coping being more likely to experience growth” (Joseph, & Linley, 2006, p. 1042).

Pargament et al. (2004) in a study of 268 medically ill, elderly hospitalized patients found that positive methods of religious coping (seeking spiritual support, benevolent religious reappraisals) were associated with improvements in health, and that negative religious coping (punishing God reappraisal, interpersonal religious discontent) were predictive of declines of health at both baseline and two years later. The sample consisted of individuals aged 55 and older, hospitalized on the medical inpatient services of a southeastern university medical center and VA medical center between January 1996 and March 1997, they were predominantly (> 95 %) of conservative (Baptist) and mainline (Methodist) Protestant denominations.
Religious coping methods were assessed at baseline by the RCOPE (Koenig, Pargament, & Neilson, 1998; Pargament et al., 2000, 2001) and at follow-up by the Brief RCOPE, scales that assess the degree to which patients make use of various religious methods of coping with their current illness. Depressive symptoms were measured with an 11-item scale previously validated in older medical patients against clinician determined diagnoses of major depression (Koenig, Cohen, Blazer, Meador, & Westlund, 1992). Quality of life was assessed using a 5-item interview-rated quality of life index that assesses general activity, functioning, social support, health and psychological functioning (Spitzer, Dobson, Hall et al., 1981). Stress-related growth was assessed with a 15-item measure that assesses positive outcomes of stress such as the attainment of wisdom and empathy (Park, Cohen, & Murch, 1996). A three-item spiritual outcome measure was used to re-assess the degree to which the individual experienced positive spiritual and religious changes over the course of the current illness. Physical functioning was assessed by self-reported ability to do independently perform 12 instrumental and 8 physical activities of daily living (Fillenbaum, 1985; Katz, Ford, Moskowitz, Jackson, & Jaffe, 1963). Cognitive functioning was assessed using an abbreviated version of the Mini-Mental State Exam (MMSE; Folstein, Folstein, & McHugh, 1975). Finally, severity of medical illness was measured by the American Association of Anesthesiologist’s Severity of Illness Scale (ASA, 1963; Charlson, Sax, MacKenzie, Fields, Braham, & Douglas, 1986).

Results indicated that overall, the RCOPE at baseline was predictive of spiritual outcome, stress-related growth, and changes in depressed mood, functional status and cognitive functioning. Interestingly, the negative religious coping subscales (punishing
reappraisals, reappraisals of God’s powers, self-directed religious coping, spiritual discontent and interpersonal religious discontent) were tied to deterioration in one or more measures of physical and mental health. These results were consistent with the longitudinal findings of Fitchett et al. (1999), who demonstrated a link between negative religious coping and declines in physical functioning over a six-month period. Further, the positive religious coping subscales (benevolent reappraisals, collaborative religious coping, seeking spiritual support, seeking support from clergy or members, religious helping to others, active religious surrender, seeking spiritual connection, seeking religious direction and religious distraction) were generally related to increases in stress-related growth, and positive spiritual outcome. Positive religious coping subscales were not consistently associated with changes in physical health.

As noted by the authors of this study, sampling of mainline and conservative Christians in the southeastern United States may have hindered the generalizability of the results. The magnitude of several of the religious coping behaviors resulted in small yet statistically significant effects, suggesting the possibility of more powerful predictors or factors not explored in the investigation. Confounds such as personality, emotionality, social support, and other dimensions of baseline mental health and physical health were not controlled for and might be mediating variables that help explain the results of this study (yet age, gender, race, illness severity, respective baseline health measures, selective attrition, and mortality were). Further, unmeasured changes in religiousness and health status prior to admission to the hospital could have contributed to religious coping, baseline functioning and changes in health status over the two-year period. Finally, the
temporal stability or instability of religious coping and its effects on health awaits further clarification, suggesting the need for multiple measurements over time (more than two).

Taken together, Pargament et al. (2004) have offered a significant contribution to the literature by specifying aspects of religious and spiritual behaviors that are predictive of psychological, physical and spiritual outcomes. The longitudinal design afforded an opportunity to address longer-term implications of religious coping on several different health outcomes. Further, the emphasis on specific religious and spiritual behaviors can inform future studies of posttraumatic and vicarious posttraumatic growth, elucidating key protective and predictive behaviors previously subsumed under a more general religious framework. Further, recommendations for specific interventions such as those designed to build on positive religious coping methods, as well as the necessity of identifying and resolving negative religious coping methods is instrumental in illuminating a path of wellness for medically ill individuals, with larger implications for those who view important benefits provided by their religious framework such as having an enhanced meaning of life, increased social support, acceptance of difficulties and having a structured belief system (Shaw, Joseph, & Linley, 2005).

Additional research on psychosocial mediators of religion-health relationships using the causal modeling approach have offered further support for the aforementioned studies, finding that the shared variance between religiousness and health is not accounted for by potential mediating factors such as stress, social support and health behaviors (Brady, Peterman, Fitchett, Mo, & Cella, 1999; George, Ellison, & Larson, in press; Seeman, Dubin, & Seeman, 2003).
In summary, a consistent theme has emerged in this body of literature, the poignancy and significance of the role of spirituality and religiousness in predicting various physical (George, Ellison, & Larson, 2002; Koenig, McCullough, & Larson, 2001; Larson, Swyers, & McCullough, 1998; Seybold & Hill, 2001) and mental health outcomes (Calhoun, Cann, Tedeschi, & McMillan, 2000; George, Larson, Koenig, & McCullough, 2001; Koenig, 1998; Larson, & Milano, 1997; Pargament, Koenig, Tarakeshwar, & Hahn, 2004). Regarding psychotherapists and spirituality, limited empirical literature exists. For instance, Radeke and Mahoney (2000) reported on differences between practitioners and researchers in the field of psychology, with practitioners reporting that the impact of their work had made them better, wiser, more aware; accelerated their psychological development; increased their capacity to enjoy life; and felt like a spiritual service.

Further investigation of this phenomenon is clearly warranted, and seemingly incumbent upon mental health clinicians who are confronted with the arduous task of metabolizing the traumatic material presented by their survivor clients. Perhaps, spirituality may serve as a balm for both client and clinician alike. Yet, the predictive and protective role of spirituality as applicable to the trauma clinician has not hitherto been investigated. The present study sought to expound on such a phenomenon.

Self-Care

We must never forget that we may also find meaning in life even when confronted with a hopeless situation, when facing a fate that cannot be changed. For what then matters is to bear witness to the uniquely human potential at its best, which is
to transform a personal tragedy into a triumph, to turn one’s predicament into a human achievement. When we are no longer able to change a situation…we are challenged to change ourselves (Frankl, 1985; p. 135).

We cannot change our clients’ history, yet we can bear testimony as they invent a new, more cohesive narrative. This meaning-making journey that we are privy to has an immense beauty and danger, the task daunting and inspiring. Bearing witness can indeed reap immense rewards and costs. In fact, the possibility of experiencing both positive (vicarious posttraumatic growth) and negative outcomes (burnout, vicarious traumatization, compassion fatigue) including deleterious physical health outcomes associated with a chronic lack of self-care poses a unique challenge to the psychotherapist, and trauma therapist in particular (Figley, 2002; Jenaro, Flores, & Arias, 2007; Norcross, 2001, 2007; Pearlman & Mac Ian, 1995; Rupert & Morgan, 2005; Sabin-Farrell & Turpin, 2003).

Pearlman and Mac Ian (1995) were among the first to draw attention to the phenomenon of vicarious traumatization among trauma therapists, recommending that “trauma therapists should pay attention to their own self-care in the service of providing high-quality, ethical services and of protecting themselves and their nonprofessional lives. Other quantitative studies supported Pearlman and Mac Ian’s dictum. For example, Schauben and Frazier (1995) found significant correlations between the percentage of sexual violence survivors in counselors’ caseloads and symptoms of PTSD, self-reported VT, and disruption in beliefs. Chrestman (1995) reported that secondary exposure to trauma in trauma therapists was associated with increased scores on the IES (Impact of Events Scale; Horowitz, Wilner, & Alvarez, 1988), and increased dissociation
and sleep disturbance on the Trauma Symptom Checklist. Kassam-Adams (1995) found that scores on the IES correlated with percentage of sexual trauma in the caseload of trauma therapists for both recent exposure and for exposure during the whole of the career. Johnson (1997) found that sexual assault counselors scored higher than other counselors on emotional exhaustion, one of the core features of burnout, as measured by the Maslach Burnout Inventory (MBI; Maslach & Jackson, 1996). Brady et al. (1999) found evidence of higher PTSD symptoms in workers with more exposure to sexual abuse clients, as measured by the IES. Ortlepp and Friedman (2002) reported evidence of symptoms of secondary traumatic stress in lay trauma counselors; secondary traumatic stress defined as “a syndrome with symptoms nearly identical to PTSD, except that exposure to knowledge about the traumatizing event experienced by the significant other is associated with the set of STSD symptoms (Figley, 2002). Finally, a study by Meldrum, King, and Spooner (2002) found that 27% of professionals working with the traumatized experienced extreme distress from this work.

It behooves the conscientious clinician to cultivate an awareness of the potential costs of trauma work, and most importantly, to develop an effective self-care regimen. As decreed by the American Counseling Association (1994) clinicians should adhere to the ethical imperative of engaging in self-care activities to maintain and promote emotional, physical, mental, and spiritual well-being to best meet their professional responsibilities.

Several researchers (Brady, Healy, Norcross, & Guy, 1995; Brady, Norcross, & Guy, 1995; Guy, Freudenberger, Farber, & Norcross, 1990; Norcross & Aboyoun, 1994; Norcross & Guy, 1989; Norcross, Strausser, & Missar, 1988; Prochaska, Norcross, &
DiClemente, 1995) have devoted considerable effort to understanding what the self-care and self-change strategies employed by psychotherapists are, and formulated practitioner-tested, research-informed strategies for the amelioration of the unique costs associated with the provision of clinical services. Investigation into the personal struggles and salvations of clinicians as they practice their craft were germane to this effort. For example, Norcross (2007) developed an extensive Self-Care Checklist, challenging therapists to abide by the ethical imperative of self-care as promulgated by the American Counseling Association (1994).

Recommendations from The Self-Care Checklist include strategies such as: valuing the person of the psychotherapist, refocusing on the rewards, recognizing the hazards, minding the body, nurturing relationships, setting boundaries, restructuring cognitions, sustaining healthy escapes, creating a flourishing environment, undergoing personal therapy, cultivating spirituality and mission, and finally, fostering creativity and growth. Specific examples will follow to assist the individual clinician in planning and implementing a customized self-care plan; and to elucidate current research-informed strategies. The following list is by no means exhaustive, and examples have been chosen by the author of the current investigation as representative of the domain of interest.

For instance, valuing the person of the psychotherapist include prioritizing one’s own self care by making specific times in one’s schedule to do such; developing self-empathy by noticing, valuing, and responding to one’s own needs as generously as one attends to the needs of clients; and practicing what one preaches to clients about nourishing the self. Refocusing on the rewards includes suggestions to build into one’s weekly schedule a concrete method such as an imagery exercise or a gratitude schedule;
to attend to the profound satisfaction of helping others by recalling previous participation in life-transforming psychotherapies; and remembrance of the fact that there are indeed many more benefits than hazards associated with psychotherapy. Recognizing the hazards, includes an emphasis on the identification of the impact of clinical practice on oneself and one’s loves ones; adoption of a team approach in dealing with high-stress clinical situations; and consideration of the balance between empathic connection and self-preservation in clinical work. Minding the body includes suggestions for regular exercise; monitoring of the quality and quantity of sleep; and the necessity of adequate hydration as well as balanced, nutritious meals.

In the domain of nurturing relationships, suggestions for identification and utilization of one’s support system is of paramount significance; in the arena of setting boundaries: being explicit with clients regarding professional expectations and limitations; crafting one’s own professional bill of rights; and procurement of collaboration from clients in goal-setting. Restructuring cognitions includes advisements to balance the amount of time dwelling on successful and frustrating cases; and using self-insight, empathy; anxiety management, and conceptualizing ability when experiencing countertransference reactions. Sustaining healthy escapes admonishes clinicians to make relaxation a part of the workday; and balancing socialization and alone time.

Creating a flourishing environment, involves creating a work space characterized by comfort and appeal; and creating a self-care village with other like-minded colleagues. In the domain of undergoing personal therapy encouragement is offered suggesting that it is an emotionally vital and professionally nourishing experience. Cultivating spirituality
and mission reminds clinicians to embrace one’s sense of calling to be a clinician, for example, what are the spiritual antecedents to your career choice?; confront one’s own yearnings for a sense of transcendence and meaning is of the utmost importance; and creation of a hope-protecting philosophy of life. Finally, in the arena of fostering creativity and growth clinicians are challenged to provide innovative treatments, valuable metaphors, therapeutic irony, and involvement in diverse professional activities.

However, scales inclusive of the aforementioned items, with adequate normative data, including reliability and validity information are lacking. The development and utilization of more precise measurement techniques to assist clinicians in self-monitoring and self-care is surprising given the plethora of evidence suggesting the possibility of negative implications of work with survivor clients. Models incorporating self-care as a predictor of vicarious posttraumatic growth are non-extant.

Further, the prudent supervisor, concerned with employee retention, satisfaction and quality of clinical services must be mindful of promoting self-care, for the benefit of not only the organization, but also the larger community to which he or she belongs. For instance, secondary traumatic stress theory predicts that personal, professional and organizational support may provide protective factors to mediate some of the risks relating to the development of secondary traumatic stress and burnout (Collins & Long, 2003).

For example, Rupert and Morgan (2005) conducted a national survey examining burnout among professional psychologists. Burnout was defined as “a syndrome of emotional exhaustion and cynicism” (Maslach & Jackson, 1981). Burnout was further elaborated as depletion of emotional resources (emotional exhaustion); negative, cynical
attitudes towards one’s clients (depersonalization); and a tendency to evaluate oneself and one’s work negatively (personal accomplishment). Participants were five hundred and seventy one psychologists, all members of the American Psychological Association, randomly selected who also met the following criteria: having a doctoral degree in clinical or counseling psychology, licensed as a psychologist, and identification of a clinical setting as their primary place of employment. Measurements of burnout were obtained utilizing several scales which assessed years of experience, total hours worked, attitudes toward workload, satisfaction with income, sources of satisfaction and stress (Farber & Heifetz, 1981); additional measures included the Psychologist’s Burnout Inventory-Revised (PBI-R; Ackerly, Burnell, Holder, & Kurdek, 1988) and the Maslach Burnout Inventory (MBI; Maslach & Jackson, 1996).

Several correlates of burnout were found. For instance, level of emotional exhaustion was positively related to total hours worked, administrative/paperwork hours, managed care client percentage, negative client behaviors, and overinvolvement with clients and was negatively related to direct pay percentage and perception of work setting control. Similarly, depersonalization of clients was positively related to administrative/paperwork hours, negative client behaviors, and overinvolvement with clients and was negatively related to direct pay client percentage and perception of work setting control. Finally, sense of personal accomplishment was positively related to therapy hours, direct play client percentage, perception of work setting control, and overinvolvement with clients but was negatively related to testing and administrative paperwork hours.
Most salient to this discussion, is the finding that psychologists were at greatest risk for emotional exhaustion. According to Leiter (1989) emotional exhaustion is a critical initial sign of burnout. Workers respond to this state of emotional depletion by depersonalizing clients, resulting in less commitment to clients, and a loss of personal accomplishment. Further, as measured by the Maslach Burnout Inventory (MBI; Maslach & Jackson, 1996), an instrument designed to assess emotional exhaustion, depersonalization, and personal accomplishment, 44.1% of respondents fell in the high burnout range, 26.3 % in the average range, with only 29.6% in the low range.

Heeding the advice of Socrates ("know thyself"; "heal thyself"), especially in light of the aforementioned risks and benefits, a model of vicarious posttraumatic growth that integrates self-care is both timely and born of necessity. Veterans continue to arrive daily from Iraq and Afghanistan requiring the care of competent and balanced clinicians. The epidemic of domestic violence continues, as is the constant loss of loved ones, calling into question the tenacity of the trauma clinicians’ claims of hope and an ability to foster meaning.
Design

This study employed an ex post facto design to investigate the following research questions in a population of trauma therapists: 1) To what extent does spirituality directly predict vicarious posttraumatic growth and vicarious traumatization? 2) To what extent does self-care directly predict vicarious posttraumatic growth and vicarious traumatization? 3) To what extent does a previous history of treatment for one’s own trauma directly predict vicarious posttraumatic growth and vicarious traumatization? 4) To what extent does the time length of time practicing as a trauma therapist directly predict vicarious posttraumatic growth and vicarious traumatization? In this model, the predictor variables are spirituality, self-care, history and treatment of one’s own trauma and length of time practicing. The criterion variables are level of vicarious posttraumatic growth and level of vicarious traumatization.

A limitation of this study is its cross-sectional design. There was not a pretest and control group, which precludes consideration of causal inferences. For instance, it may be that spirituality does indeed impact the level of vicarious posttraumatic growth, but spirituality might also be mobilized or triggered by the current level of vicarious posttraumatic growth.

The strengths of this study, such as the inclusion of spirituality as a predictor variable, an often neglected variable in health and well-being studies, the import of self-care, and an investigation of salient personality characteristics of trauma clinicians, provide a vehicle for understanding protective and predictive factors in a somewhat neglected population. As Seligman and Csikszentmihalyi (2000) professed, psychology
will learn how to build the qualities that help individuals and communities, not just to endure and survive, but also to flourish. The present investigation heeds the challenge.

**Population and Sample**

A total of 63 (10 male, 53 female; aged 24-85 years, mean = 46.56) self-identified trauma therapists working in Santa Barbara, and San Luis Obispo County, California volunteered to participate in a “Therapist Experiences Survey” regarding working with their clients and how this work may have influenced them.

**Sample Description**

Clinicians working with trauma survivors were invited to take part in a “Therapist Experiences Survey” either by telephone or subsequent to a brief presentation by the principal investigator or their supervisor. Of those who were informed, a total of 63 clinicians completed and returned the instruments for this study. No respondents were excluded from the sample due to missing data. However, one responded failed to complete several items of the Trauma Symptom Inventory and was assigned the mean value for the missing responses.

Of the final sample, 53 participants (84.1%) were female, and 10 participants (15.9%) were male. The age of the final sample ranged from 24 to 85 (M = 46.56, SD = 12.43). The majority of participants (71.4%) described their ethnicity as White/Caucasian, followed by Latino (12.7%), African-American (4.8%) and Other (11.1%). Appendix Table H1 presents the frequency and percent of the ethnic origin of the final sample. The majority of providers held Master’s Degrees (57.1%), followed by
college degrees (22.2%) and doctoral degrees (6.3%). They had been working as therapists for between one and forty years (M = 10.65, SD = 9.42).

The majority of participants (79.4%) endorsed having experienced a traumatic event. Appendix H1 presents a summary of the prevalence of traumatic events in the final sample. Of those participants who had experienced a traumatic event the majority (66.7%) had received services. The majority (66.7%) of these participants reported that services were successful in ameliorating the effects of the traumatic experience(s).

In regards to the final sample of 63, 21 clinicians (33.3%) were from the Victims of Crime Program, 11 (17.5%) from the Women’s Shelter, 9 (14.3%) from CALM (Child Abuse Listening and Mediation), 8 (12.7%) from Hospice, 4 (6.3%) from the Santa Barbara Rape Crisis Center, 4 (6.3%) from Hospice Partners, 3 (4.8%) from the North County Women’s Resource Center, 2 (3.2%) from Abused Children Treatment Services of San Luis Obispo County, and one participant (1.6%) was from the Veterans Center.

The above information was be obtained by the demographic questionnaire presented in appendix B. For the purposes of this study, a trauma therapist is defined as a therapist who works in a psychotherapeutic capacity with trauma survivors. All respondents were currently engaged in trauma work, and spoke English as their primary or secondary language.

\textit{Data Collection}

All participants were treated in accordance with Antioch University’s ethical standards of treatment of human subjects. Participation was voluntary, and participants were informed of their right not to participate in the study, as well as their right to
discontinue participation at any time, without this withdrawal affecting their employment status. Participants were assured of the confidentiality of their responses, and provided informed consent (See appendix A). Consent forms were numbered and filed separately from completed questionnaires, to ensure the anonymity of each participant.

Questionnaires were mailed to program supervisors at the various sites. They discussed during a general staffing meeting the purpose and voluntary nature of the study. Questionnaires enclosed within a manila envelope were left at the adjournment of the meeting. Participants returned the questionnaire through mail, using the stamped, self-addressed envelope provided for this purpose. Responses were anonymous, although participants were invited to include their details separately for entry into a prize draw for a $100 gift card to the Coffee Bean and Tea Leaf.

In addition to the above, the principal investigator attended general staff meetings at Hospice of San Luis Obispo County and the Women’s Shelter of San Luis Obispo to discuss the purpose and voluntary nature of the study. Also, clinicians from the Victims of Crime Program were randomly selected (every third, followed by every second clinician on the list) and telephoned directly by the principal investigator. Packets were subsequently mailed directly to these participants and returned using the stamped, self-addressed envelopes.

126 questionnaires were either mailed or left at general staff meetings and 63 were returned completed, yielding a response rate of 50%. This compares with previous studies of therapists that have reported response rates ranging from 32% (Pearlman & Maclan, 1995) to 58% (Pope & Feldman-Summers, 1992). However, given that the 50%
of therapists who responded are likely not representative of all trauma therapists, any
generalizations of findings should be made with caution.

*Instrumentation*

**The Assessment of Self-Care**

The Assessment of Self-Care (Saakvitne, 1996) is a 65 item self-report measure of self-care activities, scored using a 5-point Likert formal scale (1= “It never occurred to me”; 5 = “Frequently”). There were no published reliability and validity data on this instrument. Split-half and internal consistency coefficients were computed, Cronbach’s alpha was .93 and Guttman’s split half reliability coefficient was .84. The items of the Assessment of Self-Care are presented in Appendix C.

**The Posttraumatic Growth Inventory**

The Posttraumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996) is a 21-item self-report measure of personal growth, scored using a 6-point Likert format scale (0 = “I did not experience this change as a result of my trauma work”; 5 = “I experienced this change to a very great degree as a result of my trauma work”). Sample items include “I changed my priorities about what is important in life” and “I have a greater sense of closeness with others”. All 21 items are positively scored, yielding a potential range of 0 to 105, with higher scores reflecting greater levels of growth.

The PTGI consists of five subscales, Relating to Others (“more acceptance of needing others”), New Possibilities (“more appreciation for each day”), Personal Strength (“greater faith in handling difficulties”), Spiritual Change (“increased understanding of spiritual matters”) and Appreciation of Life (“more appreciation for each day”).
Tedeschi and Calhoun (1996) reported that the internal consistency coefficient of the PTGI to be .90. Test-retest reliability over two months was reported at \( r = .71 \) (Tedeschi & Calhoun, 1996), and at \( r = .53 \) over six months (Linley & Joseph, 2006).

Each of the five subscales also demonstrates adequate internal consistency: New Possibilities .84, Relating to Others .85, Personal Strength .72, Spiritual Change .85, Appreciation of Life .67. The discriminant validity of the PTGI subscales was supported by their differential relationships with other constructs (e.g. spiritual growth was the only subscale that correlated with a measure of religious participation). This analysis of separate scales allows for an examination of personal growth in various areas (Cohen, 1998). Thus, the PTGI demonstrates good internal consistency, acceptable test-retest reliability, and established discriminant validity. In this study it was conceptualized as a measure of personal growth. The items of the PTGI are presented in Appendix D.

**Spiritual Involvement and Beliefs Scale-Revised (SIBS-R)**

The SIBS-R (Hatch, Burg, Naberhaus, & Hallmich, 2001) is a 22-item self-report measure of spiritual involvement and beliefs. The first 21 items use a seven-point Likert scale, ranging from strongly agree, to strongly disagree. The final item asks respondents to rate their level of spirituality on a seven-point Likert scale, with seven being “the most spiritual”. The SIBS-R consists of four factors (Core Spirituality, Spiritual Perspective/Existential, Personal Application/Humility, and Acceptance/Insight). Examples of content areas covered by the SIBS-R include: ability to find meaning, acceptance, belief in something greater than oneself, meditation, connection to nature, prayer, service, and spiritual experiences.
Pilot testing of the instrument (Hatch et al., 2001) utilized a sample of recovering alcoholics (N = 193). Test-retest reliability for the SIBS-R was .93 after one week. The SIBS-R coefficient alpha was .92. The scale has not been formally published. It is being utilized in the present study due to the conceptualization of spirituality as comprising beliefs and practices that may occur separately from one’s involvement in organized religion as other researchers have argued (Miller & Thoreson, 2003; Shaw, Joseph, & Linley; 2005; Tedeschi & Calhoun, 2006). Further, extant instruments such as the RCOPE, a scale for measuring religious coping methods (Koenig, Pargament, & Neilson, 2000; 20001) have been criticized for being too narrowly focused on Judeo-Christian religious beliefs and practices (Hatch et al., 1998).

In conclusion, the SIBS-R thus has good internal consistency (.92), good test-retest reliability (.93), yet does not have established validity. This is a potential confound to the internal validity of the current investigation. Future studies should seek to validate and cross-validate the utility of this instrument. A sample of ten items from the SIBS-R is presented in Appendix E.

The Trauma Symptom Inventory

The TSI (Briere, 1995) is a 100-item measure of trauma-related symptoms that are rated on a 4-point scale of frequency of occurrence over the preceding 6 months. Ten symptom domains are assessed: Anxious Arousal, Depression, Anger/Irritability, Intrusive Experiences, Defensive Avoidance, Dissociation, Sexual Concerns, Dysfunctional Sexual Behavior, Impaired Self-Reference, and Tension Reduction.
Behavior. The TSI possesses built-in validity scales to detect underendorsement, overendorsement, and inconsistent responding to items.

In constructing the TSI, a sample of \((N = 279)\) university students was conducted to refine the original 182 item pool. A second study utilized the resulting 100 items in a sample of 404 females and 66 males from clinical setting, as well as a third study involving 3,659 Navy recruits. These three studies demonstrated that mean clinical scale internal consistency reliability reliability estimates of .84, .87, and .85 respectively. A final stratified random sample of 836 subjects representing all geographical units of the U.S. was used to generate norms. Scores are adjusted based on age and sex, with T scores greater than 65 on the ten clinical scales considered clinically significant. TSI scores have demonstrated concurrent validity with similar scales from the Brief Symptom Inventory (Derogatis & Spencer, 1982) and the PTSD scale of the Symptom Checklist-90-Revised (Saunders, Arata, & Kilpatrick).

The alternate 86-item version (TSI-A) is identical to the TSI, except that it does not contain the Sexual Concerns scale and Dysfunctional Sexual Behavior scale, and 2 Critical Items with sexual content. All other TSI-A scales, including the three validity scales, and the remaining Critical Items are identical to the TSI.

In accord with previous research on Secondary Traumatic Stress (Figley, 1995; Pearlman & Saakvitne, 1995; Stamm, 1995), which is defined as the presence of post-traumatic stress disorder symptoms in caregivers resulting from helping or wanting to help a traumatized or suffering person, and research on vicarious traumatization, which encompasses the concept of secondary traumatic stress (Sabin-Farell & Turpin, 2003) the
TSI-A was utilized as a dependent measure in the current investigation. A sample of 5 items of the TSI is presented in Appendix F.

Appendix G includes Institutional Review Board (IRB) materials ensuring protection of the research participants and APA standards for ethical research.

Data Analysis

Data from the present study was analyzed using the Statistical Package for Social Sciences (SPSS) version 18.0. Initial analyses provided descriptive statistics of the sample and intercorrelations between the six variables: spirituality (SIBS-R score), self-care (Assessment of Self-Care score), previous history of treatment for one’s own trauma, time practicing as a trauma clinician, Vicarious Posttraumatic Growth (PTGI score), and Vicarious Traumatization (TSI-score).

Subsequent analyses utilized several multiple regressions to investigate the predictive relationship of each independent variable to each dependent variable. Nine separate multiple linear regressions were conducted to investigate the research hypotheses. The first multiple regression analysis examined the extent to which the four independent variables (Spiritual Involvement and Beliefs, Self-Care, Previous History of Trauma, and Years Practicing) directly predicted Vicarious Posttraumatic Growth (VPG). Regressions two through nine used the same independent variables and predicted VT scores on separate subscales of the Trauma Symptom Inventory.

The normality of the data was plotted, and data that were skewed were transformed. Several variables were log transformed due to their skewed distributions. These variables were years practicing, anxious arousal, depression, anger/irritability,
intrusive experiences, defensive avoidance, impaired self-reference, and tension reduction behavior.

An alpha level of 0.05 and a medium effect size was established for all statistical procedures. A power analysis (Cohen, 1992) was conducted with an alpha level of 0.05, power of 0.80, four predictors, and a medium effect size, yielded a recommended sample size of approximately eighty participants. Because of difficulties of recruiting, only 63 participants comprised the final sample.
### Table 1: Intercorrelations Among Study Variables

<table>
<thead>
<tr>
<th></th>
<th>PT</th>
<th>SC</th>
<th>YR</th>
<th>SI</th>
<th>TX</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT</td>
<td>-</td>
<td>-.04</td>
<td>.06</td>
<td>.14</td>
<td>.25*</td>
</tr>
<tr>
<td>SC</td>
<td>-</td>
<td>-</td>
<td>.16</td>
<td>.32**</td>
<td>.18+</td>
</tr>
<tr>
<td>YR</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>.00</td>
<td>-.09</td>
</tr>
<tr>
<td>SI</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>.46**</td>
</tr>
<tr>
<td>AA</td>
<td>-</td>
<td>-.22*</td>
<td>.00</td>
<td>.01</td>
<td>.08</td>
</tr>
<tr>
<td>DE</td>
<td>-</td>
<td>.18</td>
<td>-.23*</td>
<td>.10</td>
<td>.13</td>
</tr>
<tr>
<td>AI</td>
<td>-</td>
<td>-.16</td>
<td>.19+</td>
<td>.04</td>
<td>.10</td>
</tr>
<tr>
<td>IE</td>
<td>-</td>
<td>.15</td>
<td>-.12</td>
<td>.02</td>
<td>.06</td>
</tr>
<tr>
<td>DA</td>
<td>-</td>
<td>.22*</td>
<td>.19+</td>
<td>.18+</td>
<td>.11</td>
</tr>
<tr>
<td>DI</td>
<td>-</td>
<td>-.34*</td>
<td>-.10</td>
<td>.17</td>
<td>.01</td>
</tr>
<tr>
<td>IS</td>
<td>-</td>
<td>-.33*</td>
<td>.10</td>
<td>-.20+</td>
<td>.01</td>
</tr>
<tr>
<td>TR</td>
<td>-</td>
<td>.33*</td>
<td>-.08</td>
<td>.24*</td>
<td>.11</td>
</tr>
</tbody>
</table>

Note: **p<.01; *p<.05; +p= approached significance

Note: PT= Posttraumatic Growth Inventory; SC= Self-Care Assessment; YR= Years Practicing; SI= Spiritual Involvement and Beliefs Scale; TX= Treatment was successful in ameliorating the impact of previous trauma; AA= Anxious Arousal; DE= Depression; AI= Anger/Irritability; IE= Intrusive Experiences; DA= Defensive Avoidance; DI= Dissociation; IS= Impaired Self-Reference; TR= Tension Reduction Behavior.

As can be seen from the table 1 having engaged in successful treatment for one’s own experience of trauma was significantly related to vicarious posttraumatic growth. Increases in spiritual beliefs and practices were associated with higher levels of self-care.
There was a strong relationship between having engaged in successful treatment and an increase in one’s spiritual involvement and beliefs.

Self-care was negatively related to anxious arousal, suggesting that those who take better care of themselves experience less anxious arousal as a result of their clinical work with trauma survivors. There was a negative relationship between depression and years practicing, suggesting that trauma clinicians who had been in practice less years were more vulnerable to symptoms of depression. There were no significant relationships between anger/irritability and the other study variables. However, anger/irritability and years practicing approached significance (p = .07). There were no significant relationships among intrusive experiences and the other study variables.

There was a significant relationship between defensive avoidance and self-care, indicating that those who engage in more self-care may be doing so as a means of avoiding aversive internal experiences. There is some indication that therapists with less experience, experience higher levels of defensive avoidance, r = -.19, p = .07. There is also some suggestion that those clinicians who report higher levels of spiritual beliefs and practices may employ them as a conscious, intentional process of cognitive and behavioral avoidance as a way of managing vicarious traumatization, however this could be due to chance, r = .18, p = .08.

Increased engagement in self-care was associated with decreases in dissociative experiences, including cognitive disengagement, depersonalization and derealization, out-of-body experiences, and emotional numbing. Higher levels of difficulties associated with an inadequate sense of self and personal identity were associated with lower levels of self-care. There was a trend towards lower levels of spiritual beliefs and practices and
increased difficulties with impaired self-reference, $r = -.20, p = .06$. Finally, increases in self-care and higher levels of spiritual involvement and beliefs were positively associated with active efforts to modulate, interrupt, avoid or soothe negative internal states.
PREDICTING VICARIOUS POSTTRAUMATIC GROWTH

Table 1: Regression Predicting Vicarious Posttraumatic Growth; $R^2 = .08$

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC</td>
<td>-.12</td>
<td>-.04</td>
</tr>
<tr>
<td>YRS</td>
<td>.11</td>
<td>.06</td>
</tr>
<tr>
<td>SIBS</td>
<td>.06</td>
<td>.14</td>
</tr>
<tr>
<td>TX</td>
<td>.25+</td>
<td>.25**</td>
</tr>
</tbody>
</table>

Note: Rsquare = .08, F (4, 58) = 1.28, p>.05; **p<.01; *p<.05; +p=.08

Note: SC= Self-Care Assessment; YRS = Years Practicing; SIBS = Spiritual Involvement and Beliefs Scale; TX = Treatment was successful in ameliorating the impact of previous trauma.

As can be seen from table 5, the overall model accounted for 8% of the variance and was not significant. Self-Care did not directly predict vicarious posttraumatic growth in this sample of trauma therapists, Beta = -.12, t(58) = -.912, p>.05. Nor did the time practicing as a trauma clinician, Beta = .11, t(58), .82, p>.05. High spiritual beliefs and practices scores were not predictive of high vicarious posttraumatic growth scores, Beta = .06, t(58), .41, p>.05. Finally, having engaged in successful services for one’s own trauma approached significance Beta = .25, t(58), 1.76, p = .08.
PREDICTING VICARIOUS TRAUMATIZATION: Each subscale of the Trauma Symptom Inventory was utilized in predicting Vicarious Traumatization.

Table 2: Regression Predicting Anxious Arousal

\[ R^2 = .07 \]

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC</td>
<td>-.26*</td>
<td>-.22*</td>
</tr>
<tr>
<td>YRS</td>
<td>.06</td>
<td>.00</td>
</tr>
<tr>
<td>SIBS</td>
<td>.04</td>
<td>.01</td>
</tr>
<tr>
<td>TX</td>
<td>.11</td>
<td>.08</td>
</tr>
</tbody>
</table>

Note: Rsquare = .07, F(4,59) = 1.026, p>.05  
** p<.01, * p<.05; +p=.06

Note: AA = Anxious Arousal; SC = Self-Care Assessment; YRS = Years Practicing; SIBS = Spiritual Involvement and Beliefs Scale; TX = Treatment was successful in helping to ameliorate the impact of previous trauma.

Predicting Anxious Arousal from the various study variables including Self-Care yielded a non-significant \( R^2 \) of .07. None of the variables were statistically significant, but, Self-Care approached significance: Beta = -.26, t(59) = -1.9, p = .06. The hypothesis that high scores on the Assessment of Self-Care predict low vicarious traumatization scores was not supported.
Table 3: Regression Predicting Vicarious Traumatization (Depression);

\[ R^2 = .11 \]

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC</td>
<td>.21</td>
<td>.18+</td>
</tr>
<tr>
<td>YRS</td>
<td>-.25*</td>
<td>-.23*</td>
</tr>
<tr>
<td>SIBS</td>
<td>.00</td>
<td>.10</td>
</tr>
<tr>
<td>TX</td>
<td>.07</td>
<td>.13</td>
</tr>
</tbody>
</table>

Note: Rsquare = .11; F(4, 59), = 1.71, p>.05

**p <.01; *p<.05

Note: SC = Self-Care Assessment; YRS = Years Practicing; SIBS = Spiritual Involvement and Beliefs Scale; TX = Treatment was successful in helping to ameliorate the impact of previous trauma

Although the model as a whole is not statistically significant it is clear that years practicing as a trauma clinician plays a role in predicting depression: Beta = -.25, t(58) = -2.0, p = .05. The hypothesis that the longer therapists have been practicing the lower levels of vicarious traumatization they will experience was supported as it relates to the development of depression.
Table 4: Regression Predicting Anger/Irritability;

$R^2 = .10$

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC</td>
<td>-.24+</td>
<td>-.16</td>
</tr>
<tr>
<td>YRS</td>
<td>.24+</td>
<td>.19+</td>
</tr>
<tr>
<td>SIBS</td>
<td>.05</td>
<td>.04</td>
</tr>
<tr>
<td>TX</td>
<td>.14</td>
<td>.10</td>
</tr>
</tbody>
</table>

Note: Rsquare = .10, F(4,58) = 1.66, p>.05; **p<.01; *p<.05; +p= approached significance

Note: SC = Self-Care; YRS = Years Practicing; SIBS = Spiritual Involvement and Beliefs; TX = Having engaged in successful treatment for one’s own trauma.

Although all variables are not statistically significant due to the small sample size, it is likely that both self-care, Beta = -.24, t(58) = -.183, p = .07; and years practicing, Beta = .24, t(58) = 1.9, p = .06 play roles in predicting anger/irritability.
Table 4: Regression Predicting Intrusive Experiences

\[ R^2 = .05 \]

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC</td>
<td>.18</td>
<td>.15</td>
</tr>
<tr>
<td>YRS</td>
<td>-.15</td>
<td>-.12</td>
</tr>
<tr>
<td>SIBS</td>
<td>-.05</td>
<td>.02</td>
</tr>
<tr>
<td>TX</td>
<td>.03</td>
<td>.06</td>
</tr>
</tbody>
</table>

Note: R square = .05, F(4,58) = .69, p>.05

**p<.01; *p<.05**

Note: SC = Self-Care; YRS = Years Practicing; SIBS = Spiritual Involvement and Beliefs; TX = Having Engaged in Successful Treatment for One’s Own Trauma

Only 5% of the variability in intrusive experiences can be explained by reference to self-care, years practicing, spiritual involvement and beliefs, and having engaged in successful treatment, but this is not significant; R square = .05, F(4,58) = .69, p>.05.
Table 5: Regression Predicting Defensive Avoidance

\[ R^2 = .11 \]

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC</td>
<td>.22</td>
<td>.22*</td>
</tr>
<tr>
<td>YRS</td>
<td>-.22+</td>
<td>-.19+</td>
</tr>
<tr>
<td>SIBS</td>
<td>.11</td>
<td>.18+</td>
</tr>
<tr>
<td>TX</td>
<td>-.00</td>
<td>.11</td>
</tr>
</tbody>
</table>

Note: R square = .11, F(4,58) = 1.76, p>.05
**p<.05; *p<.05; +p = approached significance

Note: SC = Self-Care, Years = Years Practicing, SIBS = Spiritual Involvement and Beliefs, TX = Having Engaged in Successful Treatment for One’s Own Trauma

All variables were not statistically significant, however, it is likely that years practicing plays a role in predicting defensive avoidance yet was not statistically significant due to the small sample size: Beta = -.22, t(59) = -1.75, p = .09.
Table 6: Regression Predicting Dissociation

\[ R^2 = .18 \]

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC</td>
<td>-.38*</td>
<td>-.34*</td>
</tr>
<tr>
<td>YRS</td>
<td>.23</td>
<td>.17</td>
</tr>
<tr>
<td>SIBS</td>
<td>-.07</td>
<td>-.10</td>
</tr>
<tr>
<td>TX</td>
<td>.16</td>
<td>.01</td>
</tr>
</tbody>
</table>

Note. R square = .18, F (4, 30) = 1.63, p>.05

**p<.01; *p<.05; +p = approached significance

Note: SC = Self Care; YRS = Years Practicing; SIBS = Spiritual Involvement and Beliefs; TX = Successful Treatment for One’s Own Trauma

Self-Care plays a role in predicting cognitive disengagement, depersonalization and derealization, out-of-body experiences, and emotional numbing: Beta = -.38*, t(-2.17), p<.05. Since none of the other variables were significant, it appears that 18% of the variability in dissociation can be explained by reference to self-care alone.
Table 7: Regression Predicting Impaired Self-Reference

\[ R^2 = .16 \]

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC</td>
<td>-.33**</td>
<td>-.33**</td>
</tr>
<tr>
<td>YRS</td>
<td>.17</td>
<td>.10</td>
</tr>
<tr>
<td>SIBS</td>
<td>-.17</td>
<td>-.20+</td>
</tr>
<tr>
<td>TX</td>
<td>.16</td>
<td>.01</td>
</tr>
</tbody>
</table>

Note: R square = .16, F(4,58) = 2.75, p<.05

**p<.01; *p<.05; +p = approached significance (p =.06)

Note: SC = Self Care; YRS = Years Practicing; SIBS = Spiritual Involvement and Beliefs; TX = Successful Treatment for One’s Own

Trauma

16% of the variability in impaired self-reference can be explained by reference to self-care alone. R square = .16, F(4,58) = 2.75, p<.05. As can be seen none of the other variables were statistically significant.
Table 8: Regression Predicting Tension Reduction Behavior

\[ R^2 = .14 \]

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC</td>
<td>.30*</td>
<td>.33**</td>
</tr>
<tr>
<td>YRS</td>
<td>-.13</td>
<td>-.08</td>
</tr>
<tr>
<td>SIBS</td>
<td>.16</td>
<td>.24*</td>
</tr>
<tr>
<td>TX</td>
<td>-.03</td>
<td>.11</td>
</tr>
</tbody>
</table>

Note: R square = .14, F(4,58) = 2.41, p = .06

**p<.01; *p<.05

Note: SC = Self Care, YRS = Years Practicing; SIBS = Spiritual Involvement and Beliefs, TX = Successful Treatment for One’s Own Trauma

Self-Care plays a role in predicting active engagement in activities to self-regulate negative internal states: Beta = .30, t(2.32), p<.05. Since none of the other variables were significant, it appears that 14% of the variability in tension reduction behaviors can be explained by reference to self-care alone.

Summary of findings related to the research hypotheses:

H 1a: High spiritual beliefs and practices scores will predict high vicarious posttraumatic growth scores. There was not a significant bivariate correlation between one’s spiritual involvement and beliefs and vicarious posttraumatic growth, and this variable was not significant in the regression model, therefore this hypothesis was not supported.

H 1b: High spiritual beliefs and practices scores will predict low vicarious traumatization scores. This hypothesis was not fully supported, although the correlations between
spiritual involvement and beliefs and vicarious traumatization (Defensive Avoidance, .08; and Impaired Self-Reference, .06) approached significance, and spiritual involvement and beliefs were significantly associated with active efforts to modulate, interrupt, avoid, or soothe negative internal states (tension reduction behavior) leading to partial support for this hypothesis.

H 2a: High scores on the Assessment of Self-Care will predict high vicarious posttraumatic growth scores. This hypothesis was not supported.

H 2b: High scores on the Assessment of Self-Care will predict low vicarious traumatization scores. This hypothesis was supported in several regressions and approached significance in several others. For instance, Self-Care explained 18% of the variability in Dissociation, 16% of the variability in Impaired Self-Reference (difficulties associated with an inadequate sense of self and personal identity), and 14% of the variability in activities to self-regulate negative internal states (Tension Reduction Behavior). Self-Care approached significance in predicting Anxious Arousal and in the prediction of Anger/Irritability, with p values of .06, and .07 respectively. It should be noted that there were significant correlations between self-care and Anxious Arousal (-.22), Defensive Avoidance (.22), Dissociation (-.34), Impaired Self-Reference (-.33), and Tension Reduction Behavior (.33). Clearly, Self-Care is an important construct in predicting several symptoms of vicarious traumatization.

H 3a: Clinicians who have had successful treatment for trauma will experience higher levels of vicarious posttraumatic growth than those who were treated unsuccessfully, not
treated, or who were never exposed to their own trauma. This hypothesis was not supported, although having engaged in successful services approached significance in predicting vicarious posttraumatic growth with a p value of .08. It was also significantly correlated with this criterion variable, \( r = .25, \ p = <.01 \).

H 3b: Clinicians who have had successful treatment for trauma will experience lower levels of vicarious traumatization than those who were treated unsuccessfully, not treated, or who were never exposed to their own trauma. This hypothesis was not supported.

H 4a: The longer therapists have been practicing the higher levels of vicarious posttraumatic growth they will experience. This hypothesis was not supported.

H 4b: The longer therapists have been practicing the lower levels of vicarious traumatization they will experience. This hypothesis was partially supported. Years practicing explained 11% of the variance in depression, and approached significance in predicting Anger/Irritability, and Defensive Avoidance. There were also correlations between years practicing and both Anger/Irritability (.07) and Defensive Avoidance (.07) that approached significance.
Discussion

This study analyzed several personal characteristics and psychological factors that influence resiliency in trauma clinicians. The historical emphasis on the deleterious effects of working with trauma survivors limits our understanding of the potential myriad benefits associated with bearing witness and facilitating growth. Indeed, there is a dire need to investigate protective factors and what instigates vicarious posttraumatic growth (Linley & Joseph, 2007; Seligman & Csikszentmihayli, 2000).

The power analysis employed for this study suggested a sample size of 80 to detect moderate effects, but due to difficulties in recruitment, the final sample was comprised of only 63 participants. This explains why in many of the analyses, several of the independent variables of interest approached but did not reach significance, which they would likely have done with the proper sample size. At the same time, even with such a small sample size, some of the variables were nonetheless significant, attesting to their importance as predictor variables in relation to Vicarious Posttraumatic Growth and Vicarious Traumatization.

Four factors were investigated, and one in particular, Self-Care was found to be related to various indices of vicarious traumatization, suggesting that engagement in Self-Care was a significant part of clinician’s armamentarium in coping with the panoply of difficulties associated with their work. Specifically, Self-Care emerged as a means to stave off cognitive disengagement, depersonalization, derealization, out-of-body experiences, and emotional numbing, and threats to clinicians’ sense of self and personal identity. In addition, Self-Care was employed as a means to self-regulate negative internal states.
Self-Care has already been established as a vital link between both mental and physical health outcomes for trauma therapists (Figley, 2002; Jenaro, Flores, & Arias, 2007; Norcross, 2001, 2007; Pearlman & Mac Ian, 1995; Sabin-Farrel & Turpin, 2003) and the current results dovetail into existing theories. Given the support for the centrality of this construct, and admonitions dating back over fifteen years, when Pearlman and Mac Ian (1995) first recommended that “trauma therapists should pay attention to their own self-care in the service of providing high-quality, ethical services and of protecting themselves and their nonprofessional lives”, the dearth of available instruments to adequately assess this construct is surprising. Although reliability, validity, and factor analyses were conducted on the experimental measure used in the current investigation, further development of an instrument with improved psychometrics is essential.

Rupert and Morgan’s (2005) national survey of burnout among professional psychologists, echoes these concerns. These authors found evidence that the majority of respondents fell within the high burnout range, characterized by emotional exhaustion, depersonalization, and lack of personal accomplishment. Self-Care thus offers promise in ameliorating some of these unintended effects of empathic engagement with another’s suffering. Heeding the advice of Socrates (“know thyself”; “heal thyself”), has never been more paramount.

79.4% of the current sample had reported experiencing a traumatic event. The majority of the sample (66.7%) also reported having engaged in therapeutic services to ameliorate its impact. These efforts were germane in facilitating personal growth. Indeed, the current results suggest that having engaged in successful treatment for one’s own trauma was significantly correlated with vicarious posttraumatic growth, and approached significance
as a predictor. There was an even stronger correlation between having engaged in successful treatment and an increase in one’s spiritual involvement and beliefs, or what Tedeschi and Calhoun ((1996) referred to as changes in philosophy of life, one of the central facets of posttraumatic growth.

The current findings are also consistent with Linley and Joseph (2007). They found that therapists with a personal trauma history reported greater levels of personal growth, and more importantly, that therapists who had either received personal therapy, or were currently in therapy, reported more personal growth and positive changes and less burnout. Other investigators have explored the positive and negative sequelae of trauma work (Collins & Long, 2003; Cornille & Meyers, 1999; Figley, 1995;; McLean, Wade, & Encel, 2003; Ortlepp & Friedman, 2002; Pearlman & Saakvitne, 1995; Schauben & Frazier, 1995; van Minnen & Keijsers, 2000). In tandem with previous findings, the current results offer preliminary support for an emergent theory of vicarious posttraumatic growth.

In terms of practical application, the salutatory effects of personal psychotherapy should be considered by graduate training programs and practicing clinicians alike. Stress inoculation at all stages of professional development has never been so important, particularly in light of Segerstrom and Miller’s (2004) recent meta-analysis concluding that “in the thirty years since work in the field of psychoneuroimmunology began, studies have convincingly established that stressful experiences alter features of the immune response as well as confer vulnerability to adverse medical outcomes that are either mediated by or resisted by the immune system.” Conferring protection through self-care,
and personal psychotherapy are posited to hold promise in increasing parasympathetic tone, and enhancing stress resilience.

There was a significant relationship between years practicing and symptoms of depression. This suggests that trauma clinicians who had been in practice less years were more vulnerable to symptoms of depression. Years practicing also played a role in predicting anger/irritability, and defensive avoidance yet due to the small sample size and lack of power was non-significant with p values of .06, and .09 respectively.

The current results mirror those of McLean et al. (2003) and Pearlman & Saakvitne (1995) who demonstrated that new therapists were more susceptible to symptoms of intrusion, avoidance, disrupted beliefs and other symptoms of vicarious traumatization, and are in contrast to those of Linley and Joseph (2007) who found that therapists who had reported a greater length of time working as a therapist reported more negative psychological changes. It should be noted that Linley and Joseph (2007) utilized a UK sample and demonstrated a cumulative effect with regards to trauma work. Future research should consider combining samples from both the USA and UK to determine the potential impacts of this demographic variable and the tenacity of vicarious posttraumatic growth with other international samples of trauma clinicians.

In light of the present results it behooves graduate training programs and clinical supervisors to discuss the inherent “dangers” associated with trauma work. To normalize the experience and create an atmosphere of trust where countertransferential material may be discussed, reference to recent neuroscientific findings may be apropos. For example, it has been demonstrated with functional imaging that empathic engagement activates a “sympathetic pain” in the cingulate cortex, but not the somatosensory cortex.
of the brain (Singer et al., 2004). With such prescience a fledgling clinician can begin the parallel meaning making journey or cognitive processing that has been suggested to be an essential correlate of growth (Janoff-Bulman, 2004; McCullough, Root, & Cohen, 2006; Park & Hegelson, 2006; Taylor, 1983; Tedeschi & Calhoun, 2004; Weinrib, Rothrock, Johnsen, & Lutgendorf, 2006; Tennen & Affleck, 1998). As traumatic material is metabolized, the “self-determining Self” (Maslow, 1969) that is able to focus on what is possible, can emerge.

Higher levels of spiritual involvement and beliefs were positively associated with active efforts to modulate, interrupt, avoid or soothe negative internal states. Thus there is some evidence to support Decker’s (1993) claim that trauma, acts to increase spiritual development if that development is defined as an increase in the search for purpose of meaning. In fact, Neuman and Pearlman’s (1996) initial view of trauma work was as a challenge to therapists’ basic faith, leading to a questioning of meaning and hope, the requisite cognitive processing predictive of posttraumatic growth (McCullough, Root, & Cohen, 2006; Park & Hegelson; 2006; Taylor, 1983; Tedeschi & Calhoun, 2004; Weinrib, Rothrock, Johnsen & Lutgendorf).

Despite recent evidence that suggests that psychologists are far less religious than the clients they serve, the vast majority still regard religion as beneficial (82%) rather than harmful (7%) to mental health (Delaney, Miller, & Bīsono, 2007). Indeed, most psychologists ascribed importance to spirituality and believed it to be relevant to treatment. This finding is particularly encouraging given that in the US population, most adults profess belief in God (95%), claim a religious affiliation (94%), and say that religion is very or fairly important in their lives (85%), (Gallup & Lindsay, 1999).
Taken together, the extant evidence suggests that most psychologists are poised to engage and competently treat religiously oriented clients. Encouraging further cultural competency should continue to be encouraged, lest we as a profession dismiss the pivotal role that religious and spiritual issues play in our own lives and in the lives of those we serve. Studies have consistently shown positive correlations between religious involvement and mental health (Gartner, Larson, & Allen, 1991; Hackney & Sanders, 2003; Miller & Thorensen, 2003; Koenig & Larson, 2001; Koenig, McCullough, & Larson, 2001; Larson et al., 1992; Payne, Bergin, Bielema, & Jenkins, 1991; Seybold & Hill, date). In fact, a recent meta-analysis of 49 studies clearly demonstrated a moderate but consistent link of positive religious coping with better psychological adjustment to distress (Ano & Vasconelles, 2005).

Existing support for religion and spirituality as a balm has also been supported by research in psychoneuroimmunology. For instance, Creswell et al. (2005) found that affirmation and reflection of personal values can keep neuroendocrine and psychological stress at low levels, mirroring work by Olff, Langeland, & Gersons (2005) and Charney (2004) who concluded that highly resilient children, adolescents, and adults have exceptional abilities to form supportive social attachments and are altruistic toward others, central tenets common to most of the world’s religious spiritual traditions.

A word of caution is in order. Religion and spirituality can be not only a beacon but an albatross, as negative religious coping or spiritual struggle has been linked with distress, inflammation, poorer recovery from medical illnesses and even mortality (Ai et al., 2003; Ai, Lemieux, et al., 2009; Ai, Park, et al., 2007; Fitchett, Rybarczyck, Demarco, & Nicholas, 1999; Pargament et al., 1999; Sherman, Simonton, Latif, Spohn, & Tricot,
2005). Thus, although most studies have coalesced and found consistent salutatory effects, attention to an individual’s specific beliefs and practices is necessary. Serlin (2004) asserted that religious and spiritual competency include a familiarity with differences between spirituality and religion, ability to differentiate between a healthy and pathological religious or spiritual experience, and an understanding of how spirituality can be both a problem and a helpful dimension to psychotherapy. Encouraging self-awareness in supervision and graduate training can inform religious-spiritual disclosure between client and therapist and afford a vital link in the confluence of posttraumatic and vicarious posttraumatic growth.

**Limitations**

This study utilized a cross-sectional design, precluding causal inferences. Although this investigation suggests that therapists with their own trauma history and engagement in successful treatment instigated vicarious posttraumatic growth, an equally plausible explanation is that their direct experience of a traumatic event initiated such growth. Further although spirituality was correlated with various indices of vicarious traumatization the direction of this relationship remains unclear. For instance, Radeke and Mahoney (2000) found that practitioners as opposed to researchers in the field of psychology, reported that the impact of their work had made them better, wiser, more aware; accelerated their psychological development; increased their capacity to enjoy life, and felt like a spiritual service. It may also be the case that other factors prompted the decision to become a clinician instead of a researcher, and thus influenced Vicarious
Traumatization. The exact sequence of cause and effect, and the separation of direct and indirect effects will require future longitudinal investigations.

Another limitation should be noted. The current investigation did not utilize a random sample of trauma clinicians. Thus, the current findings may not generalize to the larger population of trauma clinicians. Further, the small sample size precluded several of the independent variables from reaching significance which they would have likely done with the proper sample size. However, some of the variables were nonetheless significant, attesting to their importance in understanding the phenomena of Vicarious Posttraumatic Growth and Vicarious Traumatization.

The strengths of the study, such as the inclusion of spirituality as a predictor variable, an often neglected variable in health and well-being studies, the import of Self-Care, and an investigation of salient personality characteristics of trauma clinicians, provide a vehicle for understanding protective and predictive factors in a somewhat neglected population. As Seligman and Csikszentmihalyi (2000) professed, psychology will learn how to build the qualities that help individuals and communities, not just endure and survive, but also to flourish. Several qualities were identified in this investigation and have clear implications for research and practice.

Recommenations for Research

The current investigation revealed that Self-Care is an important construct in predicting several components of Vicarious Traumatization. Thus, a more psychometrically robust instrument to assess Self-Care directly is clearly warranted and would enhance the internal validity of future investigations. The physiological mechanism of Vicarious
Traumatization has yet to be investigated and concurrent measurement of proinflammatory cytokines, which have already been linked with adverse health outcomes and negative emotions, could improve the validity of this construct.

Future research should also consider a causal modeling approach utilizing techniques such as path analysis and structural equation modeling, allowing disaggregation of direct, from indirect effects. Such an approach can delineate the most poignant aspects of Self-Care and spiritual beliefs and involvement. Finally, cross-validation of the current results with randomly selected participants, using international samples is highly recommended.

**Recommendations for Practice**

As suggested by Brady, Guy, and Poelstra (1999) “in a field that has long discouraged beliefs in transcendent forces and often ignored those who held such beliefs, perhaps it is time to look directly at the role of spirituality and meaning-making for the psychotherapist. The current investigation has demonstrated a significant relationship between spiritual involvement and beliefs and Vicarious Traumatization. Continuing to elucidate this phenomenon is consistent with the ethical imperative of Self-Care, promulgated as early as 1994 by the American Counseling Association.

Graduate training programs and supervision should encourage regular discussion and integration of religious spiritual issues in clinical care, particularly in light of findings linking negative religious coping with distress and poor health outcomes (Ai et al., 2003; Ai, Knonfol, Seymour, Tice, & Boling, 2009; Ai, Lemieux, et al., 2009; Ai, Park, et al., 2007; Pargament et al., 2001; Sherman, Simonton, Latif, Spohn, & Tricot, 2005). More importantly, positive religious coping has shown a moderate but consistent link with
better psychological adjustment to distress, as found in a recent meta-analysis of 49 studies with a total of 105 effect sizes (Ano & Vasconcelles, 2005).

Self-Care emerged as a consistent means to cope with threats to clinicians’ cognitive disengagement, depersonalization, derealization, emotional numbing, sense of self and personal identity, and was also employed as a means to self-regulate negative internal states. Normalization of the deleterious effects of trauma work and regular conversations regarding the development and implementation of Self-Care strategies should begin in graduate training programs, continue in supervision, and be considered as a requisite for continuing education units. These recommendations are further supported by the fact that in the current sample the majority of participants (79.4%) had experienced a traumatic event, and having engaged in successful treatment for one’s own trauma was significantly related to Vicarious Posttraumatic Growth. Finally, Self-Care for fledgling therapists appears even more salient, as the current findings demonstrated that who had been practicing fewer years were more vulnerable to symptoms of depression.

In conclusion, ethical practice mandates that as clinicians, with the privilege of serving those in dire suffering, we “walk our talk”. Trauma work, through empathic engagement with another, can be a crucible. In this alchemy, the dissolution and transformation of both client and clinician are possible.
Appendix A Consent Form

Antioch University

Department of Clinical Psychology

801 Garden Street, Suite 101, Santa Barbara, CA 93101

(805) 962-8179

Promoting Resiliency: Vicarious Posttraumatic Growth in Trauma Clinicians

Christopher J. Howard, Principal Investigator

Telephone: (805) 674-2252

Email: chris_howard@antichsb.edu

Michele Harway, Ph.D., Dissertation Chair

Introduction:

You are cordially invited to participate in the current research study. The principal investigator will be available to answer any questions. You will be asked to sign this consent form, agreeing to voluntarily participate in the current investigation. You may withdraw your participation at any time without consequence.

Purpose:

The purpose of the present study is to explore protective factors that inoculate or shield clinicians from experiencing the deleterious effects of trauma work, and further elucidate resiliency factors. Understanding the beliefs and practices of clinicians can assist in preventive efforts allowing trauma clinicians to continue to answer the call of their vocation.
Procedures:

You will be asked to fill out the six questionnaires in this packet. They will take approximately 30 to 45 minutes. You will then return the completed questionnaires in the stamped, addressed envelope provided (or leave in a confidential location for pickup by this investigator). Your records will be kept confidential unless you authorize release of your records, or as stipulated by a court order. The signed informed consent form will be kept separately from the other questionnaires and all identifying data will be destroyed upon completion of the study. Your responses will remain anonymous, unless you choose to enter your details separately for entry into a prize draw of a $100 gift card to the Coffee Bean and Tea Leaf.

Possible Risks and Benefits:

Your participation will have no more risk than you would experience in everyday life, however some of the questions in the questionnaires may be upsetting. If this is the case, you may contact the principal investigator for a referral to appropriate services. Further, although your participation may offer no direct benefits to you in the present, it is anticipated that the results may indeed offer benefits in the immediate future through practitioner informed, research based strategies for preventing Vicarious Traumatization and facilitating Vicarious Posttraumatic growth. In addition benefit for others newly engaged, or planning to begin work in the field of trauma work is anticipated.

Signature

By signing this consent form, you are agreeing to voluntarily participate in the study, that the nature and purpose of the study has been explained to you, and that you have had an opportunity to ask questions.
Participant (Please print)

________________________

Signature

_____________________

Date

_____________________

The undersigned has fully explained the purpose, procedures, possible risks and benefits involved with participation in this study. Participants have had the opportunity to ask questions and answered to their satisfaction.

Investigator

Christopher J. Howard

Signature

_____________________

Date

_____________________

Appendix B

Demographic Questionnaire

The information requested is completely confidential, and will be kept separate from the rest of the questionnaires in the packet.

1. Gender: Male/ Female/ Trans (Circle your response).

2. Age ____

3. Ethnicity____________

4. Level of education____________

5. Occupation___________________(Psychiatrist, Psychologist, Licensed Marriage and Family Therapist, Domestic Violence Counselor, etc.)

6. Years practicing____

7. Have you ever experienced a traumatic event(s)? ____ (life-threatening illness, accident; victim of violent crime, including physical, sexual, psychological abuse; knowledge of family member, partner, or very close friend subject to aforementioned abuses; traumatic bereavement; combat exposure, etc.)

8. Have you received services for any of the above experiences? ____ (medication, psychotherapy, support group involvement, pastoral counseling, etc.)

9. Please list the type of service received __________________

10. Were those services successful in ameliorating the effects of the traumatic experience(s)? ____
Appendix C

Assessment of Self-Care

(Saakvitne, 1996)

Rate the following areas in frequency

(5 = frequently; 4 = occasionally; 3 = rarely; 2 = never; 1 = it never occurred to me)

Physical Self Care:

___ Eat regularly (e.g. breakfast and lunch)

___ Eat healthily

___ Exercise

___ Get regular medical care for prevention

___ Get medical care when needed

___ Take time off when you’re sick

___ Get massages

___ Dance, swim, walk, run, play sports, sing or do some other physical activity that is fun for you

___ Take time to be sexual (with yourself, with a partner)

___ Get enough sleep

___ Wear clothes you like

___ Take vacations

___ Take day trips, or mini-vacations

___ Make time away from telephones

Other:
**Psychological Self-Care:**

___ Make time for self-reflection

___ Have your own personal psychotherapy

___ Write in a journal

___ Read literature that is unrelated to work

___ Do something at which you are not expert or in charge

___ Decrease stress in your life

___ Notice your inner experience- listen to your thoughts, judgments, beliefs, attitudes and feelings

___ Let others know different aspects of you

___ Engage your intelligence in a new area- go to an art museum, history exhibit, sports event, auction, theater performance

___ Practice receiving from others

___ Be curious

___ Say no to extra responsibilities

**Other:**

**Emotional Self-Care:**

___ Spend time with others whose company you enjoy

___ Stay in contact with important people in your life

___ Give yourself affirmations, praise yourself

___ Love yourself

___ Reread favorite books, review favorite movies
___ Identify comforting activities, objects, people, relationships, places and seek them out

___ Allow yourself to cry

___ Find things that make you laugh

___ Express your outrage in social action, letters, donations, marches, protests

___ Play with children

Other:

**Spiritual Self-Care:**

___ Make time for reflection

___ Spend time with nature

___ Find a spiritual connection or community

___ Be open to inspiration

___ Cherish your optimism and hope

___ Be aware of nonmaterial aspects of life

___ Try at times not to be in charge or the expert

___ Be open to not knowing

___ Identify what is meaningful to you and notice its place in your life

___ Meditate

___ Pray

___ Sing

___ Spend time with children
Have experiences of awe
Contribute to causes in which you believe
Read inspirational literature (talks, music, etc.)

Other:

Workplace or Professional Self-Care:

Take time to eat lunch
Take time to chat with co-workers
Make quiet time to complete tasks
Identify projects, or tasks that are exciting and rewarding
Set limits with clients and colleagues
Balance your caseload so no one day or part of a day is “too much”
Arrange your work space so it is comfortable and comforting
Get regular supervision or consultation
Negotiate for your needs (benefits, pay raise)
Have a peer support group
Develop a non-trauma area of professional interest

Other:

Balance:

Strive for balance within your work, life and workday
Strive for balance among work, family, relationships, play, and rest

Other areas of self-care that are relevant to you:
Appendix D

Posttraumatic Growth Inventory

(Tedeschi & Calhoun, 1996)

Indicate for each of the statements below the degree to which this change occurred in your life as a result of trauma work using the following scale (Note: Your clinical work with trauma survivors).

0 = I did not experience this change as a result of my trauma work.
1 = I experienced this change to a very small degree as a result of my trauma work.
2 = I experienced this change to a small degree as a result of my trauma work.
3 = I experienced this change to a moderate degree as a result of my trauma work.
4 = I experienced this change to a great degree as a result of my trauma work.
5 = I experienced this change to a very great degree as a result of my trauma work.

1. I changed my priorities about what is important in life. 0 1 2 3 4 5
2. I have a greater appreciation for the value of my own life. 0 1 2 3 4 5
3. I developed new interests. 0 1 2 3 4 5
4. I have a greater feeling of self-reliance. 0 1 2 3 4 5
5. I have a better understanding of spiritual matters. 0 1 2 3 4 5
6. I more clearly see that I can count on people in times of trouble. 0 1 2 3 4 5
7. I established a new path for my life. 0 1 2 3 4 5
8. I have a greater sense of closeness with others. 0 1 2 3 4 5
9. I am more willing to express my emotions. 0 1 2 3 4 5
10. I know better than I can handle difficulties. 0 1 2 3 4 5
11. I am able to do better things with my life. 0 1 2 3 4 5
12. I am better able to accept the way things work out. 0 1 2 3 4 5
13. I can better appreciate each day. 0 1 2 3 4 5
14. New opportunities are available which wouldn’t have been otherwise. 0 1 2 3 4 5
15. I have more compassion for others. 0 1 2 3 4 5
16. I put more effort into my relationships. 0 1 2 3 4 5
17. I am more likely to try to change things which need changing. 0 1 2 3 4 5
18. I have a stronger religious faith. 0 1 2 3 4 5
19. I discovered that I’m stronger than I thought I was. 0 1 2 3 4 5
20. I learned a great deal about how wonderful people are. 0 1 2 3 4 5
21. I better accept needing others. 0 1 2 3 4 5
Appendix E

Spiritual Involvement and Beliefs Scale – Revised

(Hatch, Burg, Naberhaus, & Hellmich, 2001)

How strongly do you agree with the following statements? Please circle your response.
(7 = strongly agree; 6 = agree; 5 = mildly agree; 4 = neutral; 3 = mildly disagree; 2 = disagree; 1 = strongly disagree).

1. I set aside time for meditation and/or self-reflection. 7 6 5 4 3 2 1
2. I can find meaning in times of hardship. 7 6 5 4 3 2 1
3. A person can be fulfilled without pursuing an active spiritual life. 7 6 5 4 3 2 1
4. I find serenity by accepting things as they are. 7 6 5 4 3 2 1
5. I have a relationship with someone I can turn to for spiritual guidance. 7 6 5 4 3 2 1
6. Prayers do not really change what happens. 7 6 5 4 3 2 1
7. In times of despair, I can find little reason to hope. 7 6 5 4 3 2 1
8. I have a personal relationship with a power greater than myself. 7 6 5 4 3 2 1
9. I have had a spiritual experience that greatly changed my life. 7 6 5 4 3 2 1
10. When I help others, I expect nothing in return. 7 6 5 4 3 2 1
11. I don’t take time to appreciate nature. 7 6 5 4 3 2 1
12. I have joy in my life because of my spirituality. 7 6 5 4 3 2 1
13. My relationship to a higher power helps me love others more completely 7 6 5 4 3 2 1
14. Spiritual writings enrich my life. 7 6 5 4 3 2 1
15. I have experienced healing after prayer. 7 6 5 4 3 2 1
16. My spiritual understanding continues to grow. 7 6 5 4 3 2 1

17. I focus on what needs to be changed in me, not what needs to be changed in others. 7 6 5 4 3 2 1

18. In difficult times, I am still grateful. 7 6 5 4 3 2 1

19. I have been through a time of suffering that led to spiritual growth. 7 6 5 4 3 2 1

20. I solve my problems without using spiritual resources. 7 6 5 4 3 2 1

21. I examine my actions to see if they reflect my values. 7 6 5 4 3 2 1
Appendix F

The Trauma Symptom Inventory

(Briere, 1995)

A sample of ten items from the TSI is presented here.

**Anxious Arousal (AA)**

Being startled or frightened by sudden noises.

High anxiety.

**Anger/Irritability (AI)**

Being easily annoyed by other people.

Feeling mad or angry inside.

**Intrusive Experiences (IE)**

Nightmares or bad dreams.

Flashbacks (sudden memories or images of intrusive things).

**Defensive Avoidance (DA)**

Pushing painful memories out of your mind.

Trying not to think or talk about things in your life that were painful.

Reproduced by special permission of the Publisher, Psychological Assessment Resources, Inc., 16204 N. Florida Avenue, Lutz, Florida 33549, from the Trauma Symptom Inventory, by John Briere, Copyright 1995 by PAR, Inc. Further reproduction is prohibited without permission of PAR, Inc.
Appendix G: IRB Forms

Are your proposed participants capable of giving informed consent? Are the persons in your research population in a free-choice situation?...or are they constrained by age or other factors that limit their capacity to choose? For example, are they adults, or students who might be beholden to the institution in which they are enrolled, or prisoners, or children, or mentally or emotionally disabled? How will they be recruited? Does the inducement to participate significantly reduce their ability to choose freely or not to participate?

Participation will be voluntary, and participants informed of their right not to participate in the study, as well as their right to discontinue participation at any time, without this withdrawal affecting their employment status. Questionnaires will be mailed to program supervisors at the various sites, thus purposive sampling methodology will be utilized. They will discuss during a general staffing the purpose and voluntary nature of the study. Questionnaires enclosed within a manila envelope will be left at the adjournment of the meeting. Program supervisors will leave the room, and participation will be unbeknownst to them, thus circumventing undue influence. Participants will return the questionnaire through mail, using the stamped, addressed envelope provided for this purpose.

How are your participants to be involved in the study?

Participants will complete six questionnaires, taking approximately sixty minutes to complete. They will then return the completed questionnaires in the stamped, addressed envelope provided.
What are the potential risks—physical, psychological, social, legal, or other? If you feel participants will experience “no known risks” of any kind, indicate why you believe this is so. If your methods do create potential risks, say why other methods you have considered were rejected in favor of the method chosen.

It is believed that there will be no more risk than experienced in everyday life. However some of the questions may be emotionally distressing, and as the principal investigator I will be available to provide referrals for services if necessary. Obtaining data on predictors of vicarious traumatization and vicarious posttraumatic growth might e obtained through qualitative analysis, yet this too promises to potentially evoke perhaps some upsetting responses. Without self-report, observations of trauma clinicians’ behavior appear quite limited, as say in a naturalistic or participant observational study.

What procedures, including procedures to safeguard confidentiality, are you using to protect against or minimize potential risks, and how will you assess the effectiveness of those procedures?

The provision of informed consent, specifically regarding the obtaining, handling, and storage of data will be instrumental. Participants will be aware that their records will be kept confidential unless they authorize a release, or as stipulated by a court order. The signed consent form will be kept separately from the other questionnaires and all identifying data will be destroyed upon completion of the study. Responses will remain anonymous, unless participants choose to enter their details separately for entry into a prize draw of a $100.00 gift card to the Coffee Bean and Tea Leaf.
Have you obtained (or will you obtain) consent from your participants in writing?

(Attach a copy of the form).

Yes, see Appendix A.

What are the benefits to society, and to your participants that will accrue from your investigation?

Participants will benefit from the preventive strategies developed from the empirically tested model. Protective factors instrumental in fostering resiliency will be elucidated. Trauma clinicians will be more knowledgeable of what conditions will allow them to thrive, not just survive in their clinical work. Society will benefit from clinicians who understand the import of self-care, without which quality of clinical care is likely to suffer. Employers may gain an enhanced appreciation of “burnout” and reinforce adaptive behaviors within organizations. Finally, counselor education programs may adopt, and perhaps even promulgate the practitioner informed, research based inoculation strategies for clinicians in training.

Do you judge that the benefits justify the risk in your proposed research? Indicate why.

An essential reframe may very well entail the proviso that indeed the wisdom of antiquity regarding the transformative potential of engagement with suffering is just as salient today, as it was in the past. Offering clinicians the opportunity to embrace a larger perspective of the potential of empathic engagement with clients’ traumatic material affords an opportunity to welcome, perhaps unbidden grace.
### Appendix H: Ethnic Origin: Frequency and Percent

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian</td>
<td>45</td>
<td>71.4</td>
</tr>
<tr>
<td>Latino/a</td>
<td>8</td>
<td>12.7</td>
</tr>
<tr>
<td>African American</td>
<td>3</td>
<td>4.8</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>11.1</td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
<td>100</td>
</tr>
</tbody>
</table>
References


