THE IMPACT OF POETRY THERAPY ON SYMPTOMS OF SECONDARY POSTTRAUMATIC STRESS DISORDER IN DOMESTIC VIOLENCE COUNSELORS

A Dissertation
by
BETH CAROL BOONE

Submitted to the Office of Graduate Studies of Texas A&M University in partial fulfillment of the requirements for the degree of
DOCTOR OF PHILOSOPHY

December 2006

Major Subject: Counseling Psychology
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ABSTRACT

The Impact of Poetry Therapy on Symptoms of Secondary Posttraumatic Stress Disorder in Domestic Violence Counselors. (December 2006)

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Chair of Advisory Committee: Dr. Linda Castillo

This study examines the effectiveness of internet-based poetry therapy on symptoms of secondary posttraumatic stress disorder (SPTSD) in domestic violence counselors, and explores correlations between demographic, workplace and personality variables with SPTSD symptoms in this population. Domestic violence counselors, at risk for SPTSD due to their exposure to the traumatic material of clients, need effective interventions that combat symptoms of SPTSD. Poetry therapy is a form of expressive arts counseling used increasingly by psychologists and mental health counselors. Expressive writing therapies in general have been shown to be effective in reducing symptoms of stress, and in increasing mental and physical health and well-being. In this study, data was collected from 97 participants who participated anonymously by completing some assessments and activities accessed via the website set up for the study. Results of t tests indicate that in this sample, participants in the internet poetry therapy group showed a decrease in symptoms of SPTSD following treatment, though additional analyses also show that there was a decrease in symptoms on post tests for all participants in the study. Regression analyses indicate that openness to experience and years working with trauma significantly predicted symptoms of SPTSD in this sample.
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CHAPTER I

INTRODUCTION

Poetry Therapy

Poetry therapy is a form of expressive arts therapy that is being used increasingly by psychologists and other mental heath workers, perhaps because of the healing value of its emotional expressiveness. The word psychology itself suggests the connection between poetry and emotional healing, with psyche meaning soul, and logos meaning speech or word (Longo, 1996).

Healers and physicians in ancient times used poetry in conjunction with dance and music as a panacea for depression and other emotional problems. In early Egypt, priest-physicians recorded their chant therapies on papyri as prescriptions for healing physical and emotional disorders (Feder, 1981). The Native American tribes of North America, also, used expressive verbal arts in healing rituals; their communal sings were said to cure illnesses with specific patterns of song (Feder, 1981). Estes (1992) documents the inspiring stories of curanderas who have handed down their healing tales for generations.

While folk healers and curanderas have understood the healing power of the story since ancient times (Feder, 1981), psychologists and therapists are re-discovering the validity of narrative and poetic techniques used to promote emotional healing. Poetry therapy, defined by poetry therapists as the integration of language arts and

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psychotherapeutic theory and technique to promote emotional well-being (Hynes &
Hynes-Berry, 1994), is being used increasingly in hospitals, schools, and community
settings (Mazza, 1993). According to the National Association for Poetry therapy,
(NAPT), poetry therapy includes poetic and narrative techniques as well as bibliotherapy
(NAPT Guide to Training, 1997).

Because poems and stories can be interpreted as being about someone other than
the client, poetry therapists propose that literature can be used as a safer way to bring up
issues, point out problems, or confront inconsistencies in a resistant participant who may
feel safer discussing personal issues when the focus is not on his or her own life.
Proponents of poetry therapy contend that writing and responding to the writings of
others allows individuals to express emotion, validate feelings, define ideas, put
experiences in context, scrutinize assumptions, learn vicariously, connect with others,
and become more aware of personal choices (Hynes & Hynes-Berry, 1994).

Poetry therapists also propose that poetry and other literature acts as a catalyst for
emotional disclosure by reflecting the emotions experienced by the reader, or acting as a
trigger for memories that are then shared in a way that reduces any sense of isolation in a
poetry therapy participant (Hynes & Hynes-Berry, 1994; Leedy, 1969). The isoprinciple
in poetry therapy is the process whereby a therapist carefully chooses a poem that
reflects the moods and emotions of the client, allowing the poem to act as “an
understanding someone” (Leedy, 1969) that promotes self-disclosure. It is sometimes
used in conjunction with creative writing in response to literature, when a participant in
Some of the first documented modern uses of poetry in psychotherapy groups were the groups of Eli Griefer, a poet, pharmacist, and lawyer who worked with psychiatrists Dr. Jack Leedy and Dr. Sam Spector to establish poetry therapy groups in hospitals in New York City (Mazza, 1999). In 1969, in response to this work, Dr. Leedy published his book, *Poetry Therapy*, one of the first books on poetry as psychotherapeutic technique. In the 1960’s and 1970’s, poetry techniques gained popularity in mental health settings, and in 1971, poet and psychologist Arthur Lerner founded the first nonprofit organization to promote the study and practice of poetry therapy (Mazza, 1999). The National Association for Poetry therapy (NAPT ) was formed in 1981, with the expressed purpose being the promotion of the therapeutic use of poetry and the maintenance of guidelines for training, certification, and ethics in poetry therapy practice (Mazza, 1999). Currently, NAPT recognizes three levels of poetry therapy certification: Certified Poetry Educators, Certified Poetry Therapists, and Registered Poetry Therapists (*NAPT*, 1997).

Though empirical studies on poetry therapy are sparse, there have been numerous anecdotal reports and case studies indicating that poetry can be a powerful tool for promoting emotional expression, reducing tension, and facilitating healing (Fuchel, 1985). The documented therapeutic uses of poetry therapy include use with the following types of issues: treating drug and alcohol abuse (Gillespie, 2001), grief (Mazza, 2001), sexual abuse (DeMaria, 1991), depression in children and adolescents
Anecdotal reports and writings of domestic violence victim-survivors suggest that the use of poetry therapy with this particular population of posttraumatic stress disorder survivors is common and useful (Campbell, 1998; Deats & Lenker, 1991; Kissman, 1989). Booker (1999) documents the use of poetry to empower and raise the consciousness of Latina victim-survivors of spousal abuse. Booker’s article documents how carefully selected poetry is used in therapy to validate and universalize feelings related to abuse, thereby helping victim-survivors connect with each other, build strength, and make meaning out of traumatic experiences of interpersonal violence. It stands to reason, if poetry therapy is useful in healing victim-survivors of domestic violence, poetry therapy may also be useful in helping domestic violence counselors who hear stories of interpersonal violence and are thereby at risk for symptoms of secondary posttraumatic stress disorder.

Secondary Posttraumatic Stress and Counselors

Secondary posttraumatic stress disorder (SPTSD) is a subsidiary form of posttraumatic stress disorder (PTSD) that occurs following vicarious exposure to a sudden, life-endangering or traumatic event, which includes childhood sexual abuse and severe threats to psychological integrity (American Psychiatric Association [DSM-IV-TR], 2000); Symptoms of PTSD/SPTSD are characterized by intrusive thoughts about the event, hyperarousal in response to reminders of the event, and avoidance of situations that remind the affected individual of the event (DSM-IV-TR, 2000). SPTSD occurs in individuals traumatized through their close interactions with primary victim-
survivors who may tell vivid stories about a dangerous event or demonstrate its effects. It is not surprising, therefore, that symptoms of the disorder were first documented during wartime, (Friedman, 2002), or that one of the first descriptions of SPTSD symptoms in professional literature was in Haley’s (1974) writings describing symptoms associated with therapists’ reactions to hearing about war atrocities.

In the mid to late 1970’s, Maslach and her colleagues published research recording symptoms of posttraumatic stress disorder among human service professionals. This research identified symptoms of SPTSD, along with additional work-related behaviors in professional caregivers experiencing acute or chronic work-related stress. Maslach termed this phenomenon burnout (Maslach, 1976; Maslach & Leiter, 1997). Symptoms of SPTSD have been described and researched under a variety of names since then.

Sets of similar symptoms observed in professional caregivers who work with trauma survivors have been studied under terms that include vicarious trauma, countertransference, compassion fatigue, secondary stress symptoms. The term vicarious trauma, coined by McCann and Pearlman (1990), countertransference, (Haley, 1974; Wilson & Lindy, 1994) and compassion fatigue (Figley 1995), all refer to very similar sets of stress-related symptoms experienced by helping professionals, with some important differences in the terms.

Countertransference is a more general term that usually refers to therapist reactions to client material, but includes a broader set of reactions than what is described by the term secondary posttraumatic stress disorder. Vicarious traumatization refers to a
set of stress symptoms associated with therapists’ work that include changes in cognitive schemas and behaviors on a broader and more long-term scale than the other terms (Price, 1998; Stamm, 1997). Compassion fatigue, as Figley (1995) describes it, more closely aligns with the current DSM IV-TR (DSM-IV-TR, 2000) definition of secondary posttraumatic stress, but refers primarily to SPTSD as experienced by professionals exposed through trauma work. Secondary traumatic stress as used by Stamm (1997) is synonymous with compassion fatigue and vicarious traumatization.

As those who work in the field of domestic violence have noted, counselors who work with domestic violence survivors are clearly exposed to secondary trauma, sometimes daily, and the effects of stress on their work, their lives, and their clients’ lives can be difficult and debilitating (Berah, Jones & Valent, 1984; Mileti, Drabek & Hass, 1975). Typical working conditions for domestic violence counselors, who often work for under-funded agencies and may be required to remain secretive about the location of their workplace or the nature of their work (Walker, 2005), may create a sense of isolation and lack of support among these counselors. Outside of large cities, domestic violence counselors may work in locations where they are the only mental health professional on site. In all circumstances, the characteristics of the client population, who may be extremely vulnerable, dependent, distrustful, and exhibit learned helplessness, or the lack of initiative to get out of an abusive relationship that is a consequence of abuse, help make these clients difficult ones (Walker, 2005). These factors may, theoretically, contribute to domestic violence counselors’ likelihood of developing symptoms of secondary posttraumatic stress. Symptoms of SPTSD may
cloud a counselor’s judgment and make job responsibilities more difficult to carry out. At the same time, a domestic violence counselor may be their client’s lifeline, and their clients’ safety and sometimes their very lives depend on the good judgment of a helping professional (Walker, 2005). Therefore, it is especially important that domestic violence counselors have effective ways to deal with the secondary traumatic stress that is part of their jobs (Pearlman & MacIan, 1995; Walker, 2005).

Most research on secondary posttraumatic stress focuses on work populations of trauma workers who work in a different domain from domestic violence, though a few studies focus on domestic violence or rape crisis counselors (Berah, et al., 1984; Mileti, et al., 1975; Zimering, Munroe, & Gulliver, 2006). Note that many childhood sexual abuse survivors make up the population with whom rape crisis counselors work, so in many cases, rape crisis counselors are also domestic violence counselors.

Impact of Trauma

Evidence that trauma work increases stress and negatively impacts helping professionals in general has been well-established (Berah, et al., 1984; Mileti, et al., 1975; Zimering, Monroe, & Gulliver, 2006). While it is not clear how generalizable findings from studies on emergency service rescue workers, policemen, and other trauma workers are to therapists and counselors, the shortage of research on domestic violence counselors makes it reasonable to look at studies of other workers engaged in trauma work to provide information and clues as to how domestic violence counselors may manifest symptoms of secondary posttraumatic stress and respond to interventions. It is clear from studies on secondary traumatic stress that working with trauma survivors is
related to stress in helping professionals (Follette, Polusny, & Milbeck, 1994; Forman, 1994; Lesaca, 1996; Pearlman & Maclan, 1995; Weiss, Marmar, Metzler, & Ronfeldt, 1995). Research on SPTSD symptoms in health care workers, law enforcement providers, and other professionals exposed to the effects of trauma through their work shows similar trends, with higher levels of stress and more negative effects for those with greater exposure to traumatic material, younger workers, workers whose caseloads include abused children, and those with personal histories of trauma (Dunning & Silva, 1980; Durham, McCammon, & Allison, 1985; Freinkel, Koopman, & Spiegel, 1994; Pearlman & Maclan, 1995; Pope, Feldman-Summer, 1992). There is less research on resiliency factors or interventions that ameliorate negative effects in those professional helpers, though empirical research on interventions for symptoms of posttraumatic stress disorder in general shows that group therapy, cognitive behavioral therapy, expressive writing techniques, internet writing, and therapies that combine relaxation and self-exposure to traumatic material are successful to varying degrees in ameliorating symptoms of posttraumatic stress in primary victim/survivors (Carbonell, Figley, Boscarino, & Chang, 1999; Scott & Stradling, 1994; van Etten & Taylor, 1998). Experts suggest that treatments for SPTSD should be similar (Friedman, 2002).

Writing as an Intervention

Research suggests that the most often proven effective methods of intervention are cognitive-behavioral approaches that combine relaxation with self-directed exposure to traumatic memories and include some sort of verbalization of memory and emotion (Carbonell et al., 1999). Therefore, it stands to reason that writing, which can have all of
these elements, may be an effective intervention. Emotionally expressive interventions that assist the traumatized individual in “working through” the trauma, or revisiting the painful memories associated with a traumatic experience while expressing the emotions that go with them, are common in clinical practice (Littrell, 1998), and may include writing interventions. Memory studies in neurobiology show evidence that writing may help in the integration of traumatic memory (Metcalf & Jacobs, 1996). James Pennebaker and his colleagues have shown emotionally expressive writing to be a therapeutic intervention proven to be beneficial to the writer in terms of both physical health and mental health, in a variety of circumstances (Pennebaker, 1998). These include reductions in physician visits (Pennebaker & Francis, 1996), improved immune functioning (Pennebaker, Kielcolt-Glasser & Glasser, 1988), increased antibody production (Petrie, Booth, & Pennebaker, 1998), and increased psychological well-being (Lepore, 1997). Writing that promotes deeper emotional expression has been demonstrated, through metaanalysis of studies, to be the most beneficial form of emotionally expressive writing (Smyth, 1998). For this reason, the present study utilizes a type of writing focused on emotion: poetry.

Rationale for the Study

Because there appear to be few published empirical studies examining secondary posttraumatic stress disorder in domestic violence counselors, or the effects of reactions, interventions, risk factors, and preventative measures for trauma counselors in general, leading researchers have called for more empirical studies in this area for this population (Stamm, 1997). Since physical and mental health benefits for counselors writing about
trauma are possible, given the growing number of studies showing positive effects of expressive writing for other populations, studies on the effects of writing on work-related trauma symptoms in domestic violence counselors should be useful. In addition, empirical studies on the efficacy of poetry therapy as an intervention have been called for by researchers promoting this growing therapeutic modality, (Mazza, 1993), and anecdotal evidence indicates that poetry therapy may be successful with domestic violence counselors in alleviating symptoms of secondary stress. Because of the potential seriousness of any impairment on professional work due to symptoms of SPTSD, especially for those who help domestic violence victim-survivors, it is important to find effective interventions for symptoms of SPTSD in these counselors.

Primarily, this study was designed to expand previous research documenting the benefits of writing about traumatic events by examining the impact of poetry therapy on secondary posttraumatic stress symptoms in domestic violence counselors. It was intended to increase knowledge about the effectiveness of poetry therapy specifically on domestic violence counselors. Also, the study was designed to gather information on domestic violence counselors, including information on personality, demographic characteristics, working conditions, and information on counselor self-care, in order to determine which characteristics might correlate with the development of secondary posttraumatic stress disorder symptoms and/or the effectiveness of poetry therapy in treating symptoms of SPTSD. Research questions for this project are: 1) Does poetry therapy have an impact on secondary posttraumatic stress symptoms in domestic violence counselors? 2) Is there a difference in effectiveness between the poetry
therapy intervention and control group when these interventions are used with domestic violence counselors to reduce symptoms of SPTSD? 3) What demographic, workplace, self-care and personality variables predict SPTSD in domestic violence counselors?

Terms

Several terms used in this study have been defined differently in different contexts. In order for there to be clarity about this research project, these terms are defined here as they are used in this study.

*Domestic violence* refers to physical or psychological abuse, threats, intimidation, or harassment inflicted by a family member, household member, or significant other in a dating relationship or caretaker relationship. Persons need not be married or living together or be a parent or guardian, and the perpetrator can be of the same sex/gender as the victim.

*Domestic violence counselors* refers to degreed counselors with a master’s degree or more, whose caseload is made up of at least 50% domestic violence survivors. These survivors may include men, women, or children who have witnessed or survived spousal abuse, child abuse, or sexual abuse by a family member. Counselors may work in a variety of settings.

*Traumatic events* refers to events of the type precipitating symptoms of posttraumatic stress disorder as defined by the DSM-IV-TR (2000). These events must threaten the life or physical safety of the primary victim, and be events that would be experienced as overwhelming to most individuals. As in the DSM-IV-TR (2000),
traumatic events will include the sexual abuse of children, and events experienced vicariously.

Poetry therapy is defined as the integration of language arts and psychotherapeutic theory and technique to promote emotional well-being (Hynes & Hynes-Berry, 1994).

Posttraumatic stress disorder refers to a set of symptoms that follows the DSM-IV-TR guidelines for diagnosis of this anxiety disorder. Secondary posttraumatic stress disorder, in keeping with Figley’s (1995) definition and the DSM-IV-TR (APA, 2000) definition, refers to posttraumatic stress disorder brought about by vicarious experience in those who have close contact with trauma survivors.

Organization of This Dissertation

This dissertation project is organized into five chapters. This first chapter introduced the major areas involved in this research project. It defined and provided background on poetry therapy, provided an overview of the research on secondary posttraumatic stress and writing interventions, and gave the rationale for the design of the outcome study. Chapter II focuses on identifying and explaining vulnerability factors, resiliency, and interventions for SPTSD in professionals who work with trauma victim-survivors, and examines the mental health benefits of writing, especially those that pertain to posttraumatic stress symptoms. Elements of effective therapeutic writing as described in the research literature, are also explained. Chapter III provides the details of the methodology involved in conducting this research project, with the writing intervention, survey, website development, and volunteer participation in the study via
the internet detailed. Chapter IV provides results of the study as it pertains to poetry therapy, personality, and other factors related to symptoms of traumatic stress in domestic violence counselors who participated. The fifth chapter discusses the results in relation to poetry therapy and secondary posttraumatic stress, with suggestions made for further research.
CHAPTER II
LITERATURE REVIEW

Chapter Overview

This chapter gives a research-based review of literature on secondary posttraumatic stress symptoms pertinent to this study. It highlights literature that supports an understanding of SPTSD and the most effective treatments for alleviating its symptoms in helping professionals. It reviews the literature on writing therapies and their use in treating SPTSD.

PTSD and SPTSD

The symptoms defining posttraumatic stress disorder were not characterized as a specific disorder in the Diagnostic and Statistical Manual of Mental Disorders, until the 1980’s (Fauman, 1994). Today, however, PTSD is recognized in a variety of populations experiencing trauma, including veterans, domestic violence victims, natural disaster survivors, victims of child abuse, and others exposed directly or vicariously to experiences that could result in death or serious bodily harm (Figley, 1995). Childhood sexual abuse, even when not life-threatening, is considered a traumatic event due to the age and vulnerability of the child (Fauman, 1994).

The current estimated lifetime prevalence of posttraumatic stress disorder among the general population of adults is 7.8% (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995), with more than 10% of the men and 6% of the women who report PTSD reporting four or more types of trauma during their lifetimes (Kessler et al., 1995). Women appear to be more vulnerable for acquiring the disorder than men, with 10.4% of
women meeting criteria for diagnosis during their lifetime, while only 5% of men meet diagnostic criteria. Though some researchers suggest that men may not seek treatment or admit to symptoms as often as women, others cite women’s increased risk for domestic violence and sexual assault as factors causing higher rates (Halligan & Yehuda, 2000; Stamm, 1997).

In both men and women, researchers have found that the majority of victims diagnosed with PTSD report experiencing subsequent traumas, indicating a vulnerability of victim-survivors for repeated victimization (Beaton & Murphy, 1995). Because studies show that counselors have a higher rate of past abuse than the general population (Beaton & Murphy, 1995; Berah, et al. 1984), the prevalence rate may be even higher in domestic violence counselors, who are frequently women helping women. If those who have experienced the disorder once are more likely to suffer from it again, it appears that, at any one time, a higher number of domestic violence counselors may be experiencing the disorder than workers in other professions, especially if these counselors are exposed through their work to stories similar to their own (Figley, 1995).

Secondary posttraumatic stress disorder, or PTSD that comes about as a result of vicarious trauma rather than direct experience, was first described and identified as a subsidiary form of the disorder in the fourth edition of the Diagnostic and Statistical Manual (Figley, 1995). Those with SPTSD, like primary victims, have a reaction to an event that involves intense fear, helplessness or horror. A diagnosis of the disorder requires that symptoms follow a traumatizing event experienced vicariously. Such an event is defined as one that is sudden and involves death or the threat of death or serious
injury to the person suffering from the disorder or others close them, and it is an event
that most human beings would experience as life-endangering and overwhelming (DSM-
IV-TR, 2000). Natural disasters, war experiences, armed robbery, and sexual assault,
among other traumatic experiences, are commonly the cause of PTSD. Feelings of fear,
horror, or helplessness mark the experience of the afflicted individual during the
traumatic event. Often the same experiences may be present as symptoms that follow
the event (Carleson & Ruzek, 2002; Figley, 1995).

By definition, symptoms of posttraumatic stress disorder, and its subsidiary
SPTSD, fall into three categories: a) those indicated by a re-experiencing of the
traumatic event; b) those involving avoidance and emotional numbing; and c) increased
arousal responses (Fauman, 1994). Re-experiencing the traumatic event refers to
intrusive and distressing memories of the event, flashbacks of the event, nightmares of
the event or other frightening images related to it, and exaggerated emotional and
physical reactions to experiences that remind the person of the trauma. Avoidance
reactions involve excessive avoidance by the PTSD or SPTSD sufferer, who may avoid
activities, places, thoughts, feelings, people, or conversations related to or reminiscent of
the trauma. Emotional numbing refers to the victim’s loss of interest in things that once
brought pleasure, feelings of detachment from others, and restricted emotions. Increased
arousal is indicated by difficulties in sleeping, irritability or anger outbursts, difficulties
concentrating, hypervigilance, and an exaggerated startle response in the afflicted
person. Physical symptoms and somatic complaints, such as shakiness, rapid heartbeat,
feelings of breathlessness, or feelings of dizziness, most of them associated with fear
reactions, are often experienced by the sufferer along with the psychological symptoms. Sometimes these physical symptoms are characteristic of panic attacks that are occasionally part of the clinical picture. Secondary symptoms, including depression, anxiety, addictions, somatic complaints, and interpersonal problems at work or in families are also commonly seen in those suffering from PTSD as well as SPTSD (Fauman, 1994). For a diagnosis of PTSD, symptoms must: 1) cause significant distress or impairment in social, occupational, or other important areas of functioning; 2) not be due to another disorder; 3) appear only after exposure to the traumatizing event (DSM-IV-TR, 2000).

Typically, the posttraumatic stress symptoms of secondary victim-survivors are less severe and their recovery from traumatic exposure is quicker than that of primary victims (Figley, 1995). Though an initial reaction to any trauma is normal for most individuals, it is the prolonged nature of the symptoms, which go on longer than a month following the actual trauma, that distinguish posttraumatic stress disorder from a normal response (Fauman, 1994). An individual with PTSD may react with symptoms of anxiety to even minor threats and painful reminders of the threatening experience for years following the event (Fauman, 1994; McFarlane, 1988). Just as primary survivors, most secondary survivors of trauma experience symptoms that subside within a few weeks of exposure to the traumatizing events; only those whose symptoms are pervasive and severe enough to persist beyond one month in duration fit the DSM-IV-TR (2000) criteria for SPTSD. Spouses, children, and other family members, nurses, psychotherapists, police officers, victim advocates, and other trauma workers who see
the effects of the event and hear the victim’s story, are most likely to develop SPTSD (Dutton & Rubenstein, 1995).

In accordance with a *DSM-IV-TR* diagnosis, PTSD can be described as acute, chronic, or with delayed onset (*DSM-IV-TR*, 2000). When a diagnosis is made by a qualified mental health professional, the specifier *acute* is used when the duration of symptoms is less than three months; *chronic* is used when the symptoms last three months or longer; and *with delayed onset* is used when there is a delay of at least six months between the occurrence of exposure to a traumatic event and the onset of symptoms (*DSM-IV-TR*, 2000). The primary determinants of the onset and severity of PTSD are a) the proximity, b) intensity, and c) duration of a traumatic event (APA, 2000; Schnurr, Friedman, and Rosenberg, 1993; Yehuda, 1999).

Psychological effects from secondary posttraumatic stress are cumulative and sometimes permanent in secondary victims, and are caused by exposure to graphic accounts of traumatic events told by primary victims, the obvious effects of these events on real people’s lives, and the necessary involvement of trauma workers in primary victims’ lives as they recover (Atkinson-Tovar, 2002; van der Kolk, 1994). Feelings marking the experience of the victim-survivor during the traumatic event or exposure to it characterize the physical and emotional symptoms of the victim-survivor diagnosed with PTSD (Figley, 1995; van der Kolk, 1994). Researchers have noted variations of symptoms in professional helpers that indicate psychological distress or dysfunction and often signal SPTSD (Dutton & Rubenstein, 1995). These include distressing emotions related to fear, sadness, anger or shame in the aftermath of the traumatic exposure.
(Courtois, 1988; McCann & Pearlman, 1990); intrusive imagery related to a client’s trauma (Courtois, 1988; Herman, 1997; McCann & Pearlman, 1990); numbing or avoidance, which may include avoiding certain topics or clients (Courtois, 1988, McCann & Pearlman, 1990); physiological and somatic complaints, including heart palpitations, sleep disturbances, headaches, stomach problems, and physiological arousal; addictive or compulsive behaviors (Courtois, 1988; Boylin & Briggie, 1987; van der Kolk, 1994); and impairment in work functioning (Boylin & Briggie, 1987). Secondary posttraumatic stress symptoms occur in all races, genders, age groups, and regardless of level of training (Edelwich & Brodsky, 1980).

The most wide-ranging and potentially destructive symptoms are those symptoms of SPTSD that affect the work lives of professionals whose ability to provide professionally competent care is compromised. The occupational effects of SPTSD on these sufferers include withdrawal from friends and colleagues, feelings of isolation and lack of appreciation, cynicism, avoidance of supervision, chronic lateness, missed appointments, decreased self care, and a loss of professional commitment and judgment that may manifest itself in an inability to set appropriate boundaries with clients, and other forms of unprofessional behavior (Figley, 1995; Boylin & Briggie, 1987). Left unacknowledged or untreated, SPTSD in professionals may ultimately result in professional burnout, which sometimes results in the loss of family and friends and may culminate in the decision of the afflicted person to leave the care taking field (Foa Jonathan, Davidson, Francis, & Ross, 1999).
SPTSD and Trauma Work

The literature on SPTSD in the helping professions is difficult to synthesize. A diverse set of occupational samples, different measures, differences in traumatic events and resources to deal with them, the degree of the worker’s proximity to harm, and other context variables and worker variables make causes and trends difficult to identify (Beaton & Murphy, 1995). An early study on stress related to vicarious trauma conducted by Dunning and Silva (1980) documented adverse reactions to work-related trauma in rescue workers who responded to plane crashes and mass suicides. This study showed that greater exposure to vicarious trauma indicated more adverse reactions in workers, and the researchers called for more attention to the effects of trauma on professional helpers by organizations and supervisors. Durham, McCammon, and Allison (1985) empirically studied 79 police, fire, emergency medical, and hospital personnel following exposure to trauma after a disaster, and found higher levels of PTSD symptoms for those involved with rescue work compared with hospital workers not involved with work related to the disaster. Freinkel, Koopman, and Spiegel (1994) sent questionnaires on stress and dissociative symptoms to 18 journalists a month after they witnessed a California execution, demonstrating a prevalence of dissociative symptoms among this population of professionals exposed to trauma. Hafemeister (1993) also explored the impact of trauma associated with the criminal justice system, examining the effects of jury duty on individuals serving on cases where evidence was particularly graphic and gruesome, and showing elevated stress levels for those
individuals present at the trial. Forman (1994) has researched the characteristics of traumatic events that increase the likelihood that emergency workers suffer from symptoms of PTSD, finding that increased exposure to trauma results in more effects. Marmar and Weiss and their colleagues (1996) have published papers on symptoms of PTSD in this same population, examining the effects of witnessing trauma on 157 workers following the 1989 Loma Prieta earthquake and the collapse of the Nimitz Freeway in San Francisco (Marmar, Weiss, Metzler, & Delucci, 1996). When compared with 201 rescue workers not exposed to the trauma, results indicated more dissociative symptoms in workers who were younger, reported greater exposure to the critical event, perceived a greater threat at the time of exposure, showed lower scores on scales of adjustment, identity, ambition, and prudence on the Hogan Personality Inventory, and had higher measures on methods of coping on scales of avoidance, self-control, active problems solving, and external locus of control (Marmar, et al., 1996). As Stamm (1997) summarized, when results across these studies on EMS workers are viewed collectively, 9% of EMS workers showed symptoms similar to psychiatric outpatients.

Several studies look specifically at the effects of traumatic exposure on counselors (Brady, Guy, Poelstra, & Brokow, 1999; Lesaca, 1996; Roman, 2000; Wertz, 2000). Some qualitative studies that explore the negative impact of trauma work on domestic violence counselors illuminate areas where more empirical research is needed (Bell, 2000; Iliffe & Steed, 2000; Roman, 2000). A qualitative study of the effects of domestic violence work on counselors in Australia suggested that helping victim/survivors of domestic violence presented psychological and physical risks to
domestic violence counselors, including symptoms of secondary posttraumatic stress
disorder (Iliffe & Steed, 2000). Bell (2000) also conducted a qualitative study in which
she interviewed thirty domestic violence counselors about stress, and determined that
stress levels were impacted by both work factors and personal factors, including
exposure to past traumas and current support in personal life. Roman (2000) explored
the experiences of female psychotherapists working with male batterers, reporting that
respondents felt traumatized by their work and reported that they needed support,
especially from other females, to continue with their work.

Empirical studies confirm the deleterious effect of trauma on counselors working
with victim-survivors. Lesaca (1996) studied PTSD and depression symptoms in 21
counselors who provided counseling to individuals affected by disaster, showing
significant elevations in symptoms at four and eight weeks after the counseling took
place, with symptoms diminishing with time. Brady, Guy, Poelstra, and Brokaw (1999)
examined results from a national survey on 1,000 women psychotherapists, showing that
those exposed to higher amounts of sexual abuse material had more trauma symptoms.
Wertz (2000) assessed 115 trauma therapists, showing an increased prevalence of PTSD
symptoms, with higher rates for those showing more empathy for their clients.

SPTSD Controversy

Despite evidence that secondary trauma can cause debilitating behaviors and
emotions in those exposed vicariously to trauma, the diagnosis of secondary
posttraumatic stress disorder in counselors and other helping professionals is sometimes
controversial (Stamm, 1997). Those who oppose the SPTSD diagnosis in helping
professionals make the point that the incidence is low among trauma workers. Even when clinical criteria are met, these critics say, labeling professionals with the disorder may act as a barrier to identifying and treating those who need help (Adams, Matto, & Harrington, 2001; Stamm, 1997). Research on secondary traumatization confirms that, while trauma counselors are likely to report symptoms of posttraumatic stress symptoms, they seldom meet the criteria or number of symptoms necessary to categorize them as suffering from full blown secondary posttraumatic stress disorder. According to Adams’ et al. (2001) review of studies on secondary traumatization (Adams et al., 2001; Ghahramanlou & Brodbeck, 2000; Jenkins & Baird, 2002; Schauben & Frazier, 1995; Steed & Bicknell, 2001; Wasco & Campbell, 2002), there is a very low incidence of trauma counselors who meet clinical criteria, with the range of incidence being 0% to 4%. The numbers of counselors experiencing symptoms but not meeting all of the diagnostic criteria, however, may be greater (Adams et al., 2001). Fauman (1994) points out that posttraumatic stress disorder is the one mental disorder described in the *Diagnostic and Statistical Manual of Mental Disorders* as having a known cause that is external to the disturbed person and out of his or her control (Fauman, 1994). As such, it is the only *DSM-IV-R* disorder in which no blame or weakness can be attributed to the individual developing symptoms of the disorder (van der Kolk, 1994). Figley (1995) argues that a distinction between a reaction to trauma versus a disorder, based on abnormality of the recovery process, is important in treating symptoms of SPTSD/PTSD. Still, critics argue that any labeling of a commonly occurring set of behaviors in counselors as a disorder implies a weakness or problem, and may do more harm than
good because counselors may be less likely to seek help if they fear getting labeled with a diagnosis when their symptoms are normal responses to traumatic events (Stamm, 1997).

Neurobiology of PTSD

Neurobiological researchers have shown that posttraumatic stress disorder, which includes SPTSD, has its roots in normal behavior in response to abnormal events (Friedman, 2002; Ledoux, 1996). Researchers also show that brain changes during trauma may have a damaging impact on memory and functioning (Charney, 2004; Murburg, 1997). An overview of the neurobiological processes underlying PTSD will allow for some understanding of the processes of the disorder, and will also show how writing interventions may increase the resiliency of trauma survivors and help facilitate a return to more normal brain functioning in these individuals.

Researchers interested in the neurobiology underlying behavior argue that the persistent symptoms of PTSD, including the recurrent memories of the trauma often reported and written about by survivors of domestic violence, begin with the activation of the limbic system in reaction to stress and terror (Friedman, 2002). PTSD has its roots in phylogenetic responses to life-and-death situations that appear to be adaptive in that they help human beings respond successfully to danger and avoid the same types of future situations. A flood of neurochemicals in the brain during traumatic events sets up a readiness for fight or flight responses to danger (Friedman, 2002) preparing an individual to quickly confront or retreat from what is perceived as dangerous or harmful. The amygdala, which modulates emotional memory, triggers signals to the brain’s
noradrenergic center, which activates production of the chemical messengers involved in
the fight or flight response (Ledoux, Cicchetti, Xargois, & Romanski 1990). The
neurochemical changes cause both the immediate effects of stress and the long term
effects in those suffering from PTSD (van der Kolk, 1994).

Learned fear, a classically conditioned fear reaction that begins at the time of a
traumatic event and is activated during its reminders, is enhanced by the neurochemicals
released during trauma, which explains later intense responses to reminders of trauma
(Kandel, Schwartz, & Jessel, 1991). Some individuals may be more vulnerable to the
effects of learned fear and neurobiological changes in response to trauma, and thus more
likely to develop PTSD in the aftermath of trauma (Kandel, et al., 1991). As these
individuals come to expect the intense negative symptoms triggered by memories of the
event, they may try to avoid the reaction by avoiding reminders of the event. Numbing,
withdrawing, or engaging in other dissociative behaviors, either consciously or
unconsciously, in response to experiences that might otherwise produce painful
reminders are characteristic behaviors of PTSD sufferers (Eichenbaum, 1997). Damage
associated with prolonged periods of stress due to PTSD reactions to reminders of
trauma includes hippocampal atrophy, cortex damage, attention deficits, and learning
problems (Friedman, Charney, and Deutsch, 1995).

Studies on memory storage in the brain (Ledoux, 1996; McGuire, Silbersweig, &
Frith, 1996; Metcalf & Jacobs, 1996) show ways that writing may impact symptoms of
posttraumatic stress disorder by helping integrate and assimilate traumatic memories.
Early brain studies on rats show that lesions to the amygdala eliminate fear-based
memory and learning (Cahill, Haier, Fallon, Alkire, Tang, Keator, Wu, & McGaugh, 1996; Ledoux, 1996) and those to the hippocampus impair relational, contextual learning (Metcalf & Jacobs, 1996). Similar differences in laterality for PTSD sufferers are evident in memory studies using brain imaging techniques, which show that traumatized individuals tend to process emotionally-laden material more with the right side than the left side of the brain (Kapur, Craik, Tulving, Wilson, & Houle, 1994; Lanius, Williamson, Densmore, Boksman, Neufeld, Gati, & Menon, 2004; MacGuire, et al., 1996).

Metcalf and Jacobs (1996) explain differences in memory storage related to traumatic memories as the result of a dual memory system related to brain hemisphere specialization. The system, they say, is made up of a hot, or emotional-fear amygdala-based system, and a cool or hippocampal-based cognitive system. Encoding into the two memory systems is thought to be parallel. The hot system records fear-provoking, fragmentary, unintegrated elements, which are stimulus-driven and entail a sense of reliving upon retrieval. In this system, enhanced memories are selectively encoded, with those having the greatest emotional impact encoded in a way that makes them the most vivid (Burke, Heuer, Reisberg, 1992). The cool system records memories that are emotionally neutral, integrated, narrative, and remembered in sequence with other events. This conceptualization of memory explains fragmentary, “flashback” memories that have no spatio-temporal anchoring as the result of “hot” system memory encoding during times of trauma. Because the “cool” system is likely to become dysfunctional at times of high-level traumatic stress, and the “hot” system
hypersensitive, these emotionally-based memories may dominate, though at lower levels of traumatic stress, both “hot” and “cool” systems may be enhanced. Metcalf and Jacobs (1996) suggest that by narratizing the fragmentary elements of traumatic memory, the “hot” system memories can be interwoven into a “cool” framework and put into context, thus dissipating some of the fear and confusion that often accompanies them. From this perspective, writing about trauma provides a method by which the “hot” system memories are integrated into a cognitive structure through the use of narrative methods that provide structure, sequence, and meaning. It is this verbal processing of emotional memory that may explain how writing about trauma helps survivors: as processing affective memories occurs, new information is associated with events, memories are put into sequence, given meaning, and put in context, and in this way integrated into a cognitive, explanatory framework. Thus, memories for the event become less episodic and less affect-laden (Metcalf & Jacobs, 1996).

Individuals who recount memories as verbal narratives show fewer signs of posttraumatic stress and show more activation of the left side of the brain during reminders of trauma, when brain imaging techniques are used to study brain activation patterns (Bremner, Staub, Koloupek, Southwick, Souffer, & Charney, 1999; Charney, 2004). According to Charney (2004), this suggests that the subjects without PTSD do not process their traumatic memories as visual, affect-laden memories as much as PTSD sufferers; whereas those afflicted with PTSD show a right-lateralized pattern of activation consistent with the processing of emotional memory (Charney, 2004). Writing is a left brain function; speech and language are centered in the left side of the brain, and
writing involves a sequential, logical, analytical process (Ornstein, 1997). Therefore, it could be that writing (a left brain function) about traumatic memories (a right brain function) allows traumatic experiences to be processed in a way that puts memories into sequential context, assigns them meaning, and allows them to be better utilized by the traumatized person.

Charney (2004) also relates neural mechanisms to behaviors and character traits associated with resiliency, demonstrating that reward and motivation (hedonia, optimism, and learned helpfulness), fear responsiveness (effective behaviors despite fear), and adaptive social behavior (altruism, bonding, and teamwork) are character traits associated with resilience, and activated by certain neural mechanisms that increase right brain activity.

Vulnerability Factors

Symptoms of SPTSD in its extreme form can be debilitating and disruptive to daily functioning, especially for professionals suffering from symptoms that affect their personal lives and their work (Foa, et al., 1999). While all trauma workers are at an increased risk of suffering some SPTSD symptoms, vulnerability factors make some trauma workers more likely than others to experience the disorder (Figley, 1995). Vulnerability factors for secondary victims appear to parallel those in other forms of PTSD (Figley, 1995), though additional work related variables have been shown to increase incidence of SPTSD in professionals (Creamer & Liddle, 2005). A number of studies have shown that those who have experienced past personal traumas or previous symptoms of PTSD are more likely to experience extreme reactions or repeated PTSD
(Follette, et al., 1994; Figley, 1995). Also, individuals who have experienced prolonged or intense traumas are more vulnerable for PTSD (Follette, et al., 1994; Herman, 1997; Figley, 1995), as are professionals who work with primary victims who have experienced interpersonal violence, such as domestic violence or rape (Courtois, 1993; Figley, 1995). Breslau, Kessler, Chilcoat, Schultz, Davis, & Andreski (1998) identified gender as a risk factor for PTSD, though this finding is probably due to the increased risk of assaultive violence for females (Halligan & Yehuda, 2000). Also, a history of mental health problems has been determined to be a risk factor (McFarlane, 1990; Macklin, Metzger, Litz, McNally, Lasko, Orr, & Pitman, 1998), as has lower intelligence (Breslau, Kessler, Chilcoat Schultz, Davis, & Andreski, 1998) and a history of developmental or neurological disorders (Gurvits, Gilbertson, Lasko, Tarhan, Simeon, Macklin, Orr, & Pitman, 2000). Some researchers, also, suggest that there may be biological factors that predispose some individuals to PTSD (Pitman, 1989; Yehuda, 1999). Personal experiences with interpersonal violence or prior assault may especially predispose individuals to experience future PTSD (Breslau, et al., 1998; Salston & Figley, 2003), though not all studies have found past personal history of trauma to be a risk factor for professional helpers (Creamer & Liddle, 2005; Follette, et al., 1994; Adams, Matto, & Harrington, 2001). Follette, Polusney, & Milbeck (1994), found that past abuse predicted secondary traumatic stress in law enforcement personnel, but not in counselors. Jenkins and Baird (2002) reported that personal trauma history correlates with symptoms of PTSD, but Adams, Matto, and Harrington (2001) found no correlation with trauma history for trauma counselors. In disaster workers responding to the atrocity
of September 11, 2001, Creamer and Liddle (2005) found no significant correlation with stress symptoms and past abuse in helping professionals. Still, estimates from the literature that show that as many as two thirds of counselors may have themselves been victims of abuse (Pope & Fieldman-Summers, 1992), make this vulnerability factor a particular concern.

A number of work-related variables have been shown to increase incidence of SPTSD in professional helpers (Creamer & Liddle, 2005; Lind, 2000; Salston & Figley, 2003). Some studies show that less experienced and more youthful trauma workers may be more likely to suffer from symptoms of SPTSD (Coyne, 2003; Creamer & Liddle, 2005; Ghahramanou & Brodbeck, 2000; Linley, Joseph, & Loumidis, 2005), though other studies show that time in the field working with trauma may also increase vulnerability for more experienced trauma workers (Baird & Jenkins, 2003; Price, 1998). Also, therapists reporting case loads with higher numbers of domestic violence victim-survivors or perpetrators report more symptoms of stress according to some research (Creamer & Liddle, 2005; Ennis & Horne, 2003), though other studies do not replicate this findings for trauma counselors (Baird & Jenkins, 2003). In most studies examining caseload factors, the finding of a higher number of child clients has been associated with greater stress for trauma workers (Canfield, 2003; Follette, et al., 1994; Matthews & Casteel, 1998). Matthews and Casteel (1998) compared occupational fields to determine if different people-oriented professions had different stress levels, and found that those who work with children, the needy, and those who are physically ill or injured feel more stress from their work environment than others and are more likely to burn out. Follette,
Polusny, and Milbeck (1994) studied 271 mental health and law enforcement professionals working with domestic violence victim-survivors, and found that higher levels of posttraumatic stress symptoms were associated with negative coping, stress, and negative clinical responses to childhood sexual abuse in both the law enforcement and mental health professionals. Canfield (2003) studied child psychotherapists and found a significant relationship between the number of child clients and symptoms of secondary posttraumatic stress.

As Courtois (1993) points out, any human-induced victimization, or premeditated, chronic, and progressive victimization, or victimization that involves betrayal or coerces and confuses someone less powerful, is especially difficult for both the survivor and the helper. In fact, some researchers are beginning to characterize the problems of long-term trauma workers as similar to the evolving category of posttraumatic stress disorder termed complex posttraumatic stress disorder (Foa, et al., 1999; Herman, 1997). This form of PTSD is a severe and unique form of the disorder arising out of a prolonged period of trauma during which the victim is under the control of the perpetrator of interpersonal violence inflicted on the victim-survivor (Whealin, 2002). Victims of POW camps, those experiencing extensive and prolonged domestic violence, children held in child pornography rings, victims of severe child abuse, or those living in brothels may exhibit the symptoms of complex PTSD. Complex PTSD includes changes in self-perceptions, alterations in perceptions of the perpetrator, loss of belief systems, and loss of self-worth. Changes in faith, systems of meaning, and world view are common in these sufferers, who may, as a result of their affliction, become
distrustful, alienated, cynical, depressed, and less likely to engage in self-care behaviors (Whealin, 2002; Beaton & Murphy, 1995; Boylin & Briggie, 1987).

Beaton and Murphy (1995) explain that most trauma workers perceive role-conflict when they themselves must seek out professional help, and often feel weak, out-of-control, and vulnerable, as a result. They are likely to use both conscious and unconscious defense mechanisms, such as denial, repression, suppression, and black humor to avoid confronting symptoms; therefore, family and co-workers may not readily recognize symptoms of secondary posttraumatic stress. Supervisors and co-workers may avoid confronting obvious symptoms because of their awareness of their own vulnerability (Beaton & Murphy, 1995). Family and friends may find symptoms difficult to understand because they believe that the trauma worker chose to expose himself or herself to traumatic material. Workers in some environments may avoid seeking help because of fear that to do so will jeopardize their jobs (Atkinson-Tovar, 2002; Beaton & Murphy, 1995). At the same time, helping professionals such as counselors may feel bound by confidentiality to nondisclosure, thus exacerbating secondary symptoms.

Though many studies show that younger workers, or those with less experience working with trauma are more likely to exhibit signs of SPTSD (Beaton & Murphy, 1995; Figley, 1995), older workers, because they are more likely to have been doing trauma work for a longer period of time, may also be more likely to display symptoms of SPTSD (Baird & Jenkins, 2003; Price, 1998). As researchers of secondary posttraumatic stress disorder have noted, long-term trauma workers such as
policemen, nurses, and domestic violence counselors, captive in a profession that 
exposes them to continuous stories of trauma, can exhibit these symptoms, and at the 
same time, are more likely to avoid discussing the traumas that affect them with either 
supervisors or clients (Stamm, 1997). In addition, these individuals are more likely to 
abuse substances and engage in self-harming behavior than individuals in other 
occupations (Stamm, 1997). They exhibit a greater potential to engage in addictive and 
compulsive behaviors and decreased ability to engage in self-care, (Boylin & Briggie, 
1987).

Pearlman and Saakvitne (1995a) describe what they term Constructivist Self 
Development Theory (CSDT) to explain how aspects of the self are impacted by 
traumatic events, especially those involving interpersonal violence or complex 
posttraumatic stress. According to their Constructivist Self Development Theory, the 
meaning a particular trauma has for a person is constructed by that person based on 
unique individual factors and beliefs. Pearlman and Saakvitne (1995a) noted that 
changes in a helping professional’s cognitive schema due to secondary traumatic stress 
could negatively impact their sense of trust and safety so that they are unable to respond 
appropriately to clients. McCann and Pealman (1990) identified seven schema especially 
likely to be altered by trauma, including vicarious trauma: 1) the individual’s personal 
frame of reference about self and others in the world; 2) safety; 3) dependency and trust; 
4) power; 5) esteem; 6) independence; 7) intimacy, (in Courtois, 1993).
Difficulty of Work with Domestic Violence Survivors

Because of the vulnerability of the primary victim-survivors with whom domestic violence counselors work, secondary posttraumatic stress reactions in these counselors can have especially negative effects on those being served. Individuals who are victim-survivors of domestic violence often experience stigmatization or a lack of social support by family or society for acknowledging their problem (Foy, 1992) and therefore may be more reliant on a professional therapist for support. Friends or family who do not wish to acknowledge the family pattern of abuse may not only ostracize victim-survivors, so their natural support network is disrupted, but sometimes the dysfunctional family contributes to the psychological abuse (Walker, 2005). Victim-survivors of partner violence often feel guilt, self-blame, and a sense of betrayal when they leave their abusers, since these individuals, while dangerously abusive at times, may have provided their primary source of emotional comfort during nonabusive, or “honeymoon” periods interspersed with the abuse (Dutton & Haring, 1999). Abused children may love their caretakers and feel a complex set of conflicting emotions towards both family members and professionals who help them (Dutton & Haring, 1999). Complicating the problems of both victim-survivors of partner violence and children is the fact that many of these individuals lack financial resources (Dutton & Haring, 1999). Adult victim-survivors may have been kept isolated and out of the work force by abusive spouses on whom they depended for financial support. Therefore, leaving an abusive spouse often entails economic stressors, in addition to physical danger and lengthy court battles involving custody of children (Walker, 2005). Though
group support is especially helpful for female domestic violence victims who need to break their social isolation, the assistance of an individual therapist also, is still crucial (Walker, 2005). In addition, because domestic violence victims are more likely than other trauma victims to suffer from multiple stressors and complex PTSD, they may suffer from symptoms not frequently seen among other PTSD sufferers, symptoms that make them difficult, and often traumatic cases for counselors. Prolonged periods under the control of an abuser may effect profound psychological changes in the clients, such as those related to their beliefs about the safety of the world, beliefs about themselves, and learned helplessness (Figley, 1995). Responses to questions in Schauben and Frazier’s (1995) study of domestic violence counselors indicate that a) counselors working with this population find it difficult to hear and empathize with client’s stories of abuse and pain, b) that trust is more difficult for domestic violence counselors to establish with these clients, and c) that counselors often feel frustrated in dealing with other systems such as legal and mental health systems that offer inadequate support to domestic violence survivors.

In addition, the severely abused victims of domestic violence are often threatened with physical harm or even death if they try to leave their abusers, and are more likely to be injured as they exit a relationship, so care and safety precautions must be encouraged as these individuals leave abusers (Walker, 2005). Child victims may be even more vulnerable than adult victims, since they are not only financially dependent on those who harm them, but emotionally and physically dependent on them for their well-being and even day-to-day survival (Dutton & Haring, 1999; Hamblin, 2002). In both populations,
the inadequacy of the legal system in addressing the problem of domestic violence means the support and good judgment of a counselor may be the only lifeline out of abuse for these individuals. Misjudgments on the part of the domestic violence counselor may mean more abuse or even death for the primary victim (Dutton & Haring, 1999).

As Figley (1995) points out, it is the experiences and responses of victim-survivors that invoke the stress reactions of caregivers. Though appropriate adaptive stress reactions that modify and rectify the reaction of the primary victim are ideally elicited in professional caregivers, caregivers who feel overburdened or inadequate to the task of helper are more likely to engage in maladaptive responses, such as retreating from client anger or caring excessively out of their own sense of guilt. Some counselors suffering from symptoms of SPTSD may even begin to denigrate or blame the victims for causing the abuse, with devastating effects (Figley, 1995).

**Empathy and SPTSD**

It is often those most sensitive individuals who work in an engaged and empathic way and feel responsibility for others, that are drawn to the helping professions (Foa, et al., 1999; van der Kolk; 1994). Yet empathy, a key therapeutic factor in helping the traumatized person, may increase the chances of a traumatic response in the professional helper (Figley, 1995; Foa, et al., 1999). Some researchers say that trauma workers are frequently confronted with people whose stories are similar to their own traumatic experiences, and that the stories they hear elicit manifestations of unresolved conflicts related to their own personal traumatic material, thus making SPTSD symptoms more likely (Figley, 1995; Trippany, Wilcoxen, & Satcher, 2003). Some research, however,
suggests that empathy may be a resiliency factor. Maslow’s (1968) concept of self-actualization and Carl Roger’s (1951) ideal of a “fully functioning person” both include elements of empathy, suggesting that empathy may be an aspect of personality that allows one to build social support, self-actualize, and experience positive emotions. Fatemi (2004) identifies elements of empathy associated with positive human emotions, and she relates how writing experiences have led to experiences of positive human emotion in college students.

Resiliency Factors

Encouraging studies on posttraumatic stress disorder indicate that people’s ability to cope with stress is mediated by resiliency factors and adaptive responses that can lessen stress reactions (Bonanno, 2004; Figley, 1995). These include family and community support, emotional care, comfort, love, affection, encouragement, advice, companionship, and tangible aid (Figley, 1995; Quarantelli & Dynes, 1977). Recent studies with trauma counselors have corroborated the earlier finding that social support is an especially important factor in ameliorating work-related stress for trauma counselors (Bell, 1999; Roman, 2000).

Controversial research on personality factors associated with adaptive responses to stress suggests the possibility that individuals reporting more cognitive coping strategies differ from those who report more emotional coping styles, and may be more resilient, though evidence is inconclusive, (Heyer, McCranie, Boudewyns, & Sperr, 1996; Penley & Tomaka, 2002) and past studies have not examined whether the emotional versus cognitive coping style may actually develop as a result of
trauma.

To combat the problem of secondary traumatic stress in professional caregivers, education about stress in general and secondary posttraumatic stress and its ameliorating factors should be provided to domestic violence counselors and other trauma workers, and organizational support and promotion of self-care are advised by researchers in the field of occupational stress (Atkinson-Tovar, 2002; Munroe & Shay, 1993, Stamm, 1997). Courtois (1993) advises that trauma workers not work in isolation, but receive education about trauma syndromes and their treatment, normal responses to trauma, and the effects on personal schema. In addition, she suggests that prevention and management strategies involve the opportunity to ventilate in a supportive environment, create boundaries between professional and personal activities, include variety in professional activities, and she recommends monitoring caseloads in regards to size and number of trauma cases (Courtois, 1993). Pearlman and Saakvitne (1995b) also advise professional caretakers and those treating them to attend to issues of spirituality, since prolonged work with victims of interpersonal trauma can impair a professional caretaker’s sense of meaning, hope, and connection with something larger than the self, a traumatic effect these researchers identify as one of the most devastating.

SPTSD Treatment

The availability of professional support is not always provided to counselors, who may be reluctant to seek help when symptoms of SPTSD emerge (Kassam-Adams, 1995; Stamm, 1997). When treatment for symptoms of PTSD are required, however, experts suggests that the treatments used to combat reactive symptoms in primary
victims should also work also with professionals experiencing secondary posttraumatic stress symptoms as a result of their work, though some treatments may be better suited to one population over another (Figley, 1995; Freidman, 2002.). Effective treatments most often contain elements of psycho-educational, cognitive-behavioral, and supportive therapy, though emotionally-focused therapy, expressive arts, and psycho pharmaceutical interventions also show positive outcome effects, especially when used in conjunction with cognitive-behavioral techniques (Friedman, 2002; Lepore, Fernandez-Berrocal, Ragan, & Ramos, 2004).

Cognitive-behavioral methods, including psycho-educational approaches, flooding, relaxation training, positive self-talk, thought-stopping, and cognitive restructuring, have been the most commonly researched interventions for PTSD in general (Freidman, 2002). In the cognitive restructuring process, the survivor’s reactions to the trauma, their survival responses, and the effects on their lives are examined. This has been demonstrated to be an effective treatment for posttraumatic stress symptoms (Lepore, et al., 2004). A review of outcome studies show the most positive effects for cognitive-behavioral programs combined with emotional processing techniques (Foa, Zoellner & Feeney, 2006). Foa (2006) and colleagues found that situational inoculation training, which combines emotional exposure with anxiety management techniques, showed the greatest immediate effects on symptoms, while prolonged exposure, utilizing flooding through repeated processing of memories, showed greater longer-term effects in a three month follow-up. Both approaches rely on direct confrontation of the event, and include re-experiencing through visualization to help victims tolerate feelings brought up
by memories and environmental reminders of the trauma. Also, Solomon, Gerrity, & Muff (1992) concluded through a meta-analysis of all published studies that pharmacotherapy as well as psychotherapy through behavioral, cognitive, psychodynamic, and hypnotherapies were effective in eliminating some stress symptoms.

Psychoeducational elements are both part of the cognitive-behavioral approach, and a major component of programs in domestic violence centers which have sprung up to educate the public and support victims of domestic violence (Dutton and Haring, 1999). These have been especially successfully with victims of domestic violence in helping them understand their symptoms and counter the feeling that they did something wrong or that some weakness in them caused them to be traumatized (Foa, et al., 1999). Group therapy has been proven to be very effective with mild to moderate cases of posttraumatic stress disorder, allowing victims the opportunity to share memories of their traumatic events, discuss symptoms and survival responses, and examine the impact of symptoms on functioning in a supportive environment with other survivors of similar events (Foa, et al., 2006).

A few interventions specifically designed to combat secondary posttraumatic stress disorder in helping professionals have recently been studied (Gentry, Baggerly, Baranowsky, 2004; Mitchell & Bray, 1990). For trauma workers, debriefing, or allowing workers to vent feelings and disclose in a supportive environment soon after exposure to a crisis, has been proven effective in helping trauma workers cope (Everly, Boyle, Lating, 1999; Mitchell & Bray, 1990). Gentry, Baggerly, Baranowsky, (2004) studied
the effectiveness of the Certified Compassion Fatigue Training, based on Figley’s work on compassion fatigue in helping professions, and determined that it was effective in ameliorating symptoms in mental health professions.

Researchers explain the most effective approaches as ones highly focused on outcome objectives, exposure based, and client-directed both in terms of the selection of traumatic material to be considered and the amount of exposure to the material that they experience (Lick & Bootzin, 1975; Lepore, et al., 2004). In these approaches, there is simultaneous exposure to the traumatic memory and the reduction in distress. Thus, the client is able to remember the trauma without the negative arousal that previously accompanied the memory of the trauma (Lick & Bootzin, 1975).

In general, interventions that assist the traumatized individual in working through the trauma, a process which includes revisiting the painful memories associated with the experience and expressing the emotions that go with them until they can be more easily tolerated, are common in clinical practice (Littrell, 1998). Researchers are still debating whether emotional expression alone effects change, or whether it is the mental process of structuring emotional memory that is the cause of change (Littrell, 1998; Greenberg & Safran, 1984).

Expressive Writing Research

A technique that encourages the expression of feelings while putting those feelings and related events in context is expressive writing, which is empirically proven to be an effective technique beneficial to victims of trauma (Brown & Heimberg, 1997; Esterling, L’Abate, Murray, Pennebaker, 1999; Lepore, 1997; Lepore, Greenberg,
Bruno, Smyth, 2002). Many therapists over the past thirty years have encouraged writing as a form of therapy (Adams, 1990; Progoff, 1975; Lazarus, 1991). Until the last twenty years, however, few studied its effects empirically.

Drawing on constructivist theory (Delia & Crockett, 1973), a new perspective on writing took hold among educators in the 1960’s, who began to view writing as the creation or construction of meaning, rather than the transmission of meaning (Fatemi, 2004). In this process-oriented view of writing, writing is viewed as a creation of the writer, and as such, the writer’s psychological and cognitive developmental processes are reflected in the writing (Fatemi, 2004). It is the process-oriented view of writing that explains creative writing and written responses as reflections of the writer’s unique attempt to unravel meaning through it. This may explain why the earliest written literature, (e.g. the Aeneid, the Iliad), have traumatic experiences at their core, with themes of battle, war, and life-threatening experiences written or originally told about by survivors, and written down by those who experienced them vicariously. These writers may have been seeking to understand and make meaning from real life experiences that were traumatic. Many modern wartime poets also wrote after experiencing battles. Siegfried Sassoon and Wilfred Owen, for example, wrote after being hospitalized for shell shock, which today is recognized as PTSD (Hipp, 2005). Contemporary poet Gregory Orr, writing reflectively about poetry and survival following the September 11th tragedy, observed, “Survival begins when we ‘translate’ our crisis into language — where we give it symbolic expression as an unfolding drama of Self and the forces that assail it” (Orr, 2002).
A number of theorists and researchers have attempted to explain the consistent positive benefits of expressive writing psychologically (Foa & Kozak, 1986; Foa & Rothbaum, 1998; King, 2003). The earliest theories stressed emotional expression as catharsis, which was associated with stress reduction related to the resolution of conflict (King, 2003). The inhibition model of stress explains the effects of writing on health by postulating that emotional repression is a form of physiological work, and that writing about emotional events helps to lift the repression and alleviate associated stress (Pennebaker, 1989; Littrell, 1998; Wegner, 1994). Social identity theories (Tajfel & Turner, 1986) suggest that writing about stressful personal events provides the building blocks of identity, with stories providing a way to incorporate both the good and bad aspects of an event into one’s definition of self (Adams, 1990).

Several theories that explain the benefits of writing on symptoms of posttraumatic stress have been developed that integrate a cognitive-behavioral perspective with a neurological perspective (Smyth 1998; Littrell, 1998). Foa and colleagues have developed a model called the desensitization model to explain how expression of trauma-related thoughts and feelings, expressed through talking or writing, helps people adjust (Foa & Rothbaum, 1998). In Foa’s model, adjustment to trauma requires activation of the memories of the trauma that are fearful. These fearful memories are then paired with new, non-fear-provoking information that is incompatible with the fear response evoked by the original memories. In this way, traumatized individuals habituate to stimuli that evoke fearful memories, which writing allows (Foa & Rothbaum, 1998). This model is compatible with the many studies that show that
exposure of traumatized individuals to fear-provoking stimuli in a “safe” environment facilitates recovery (Lepore, 1997; Lepore & Greenberg, 2003; Lepore et. al., 2002).

Smyth and other researchers have postulated a similar view that people who express their emotions about stressful events in writing may have more opportunities to reappraise and interpolate thought, though Smyth says it is the reappraisal strategies that attenuate subjective distress in individuals (Smyth, 1998; Littrell, 1999). According to Smyth’s (1998) view, writing provides opportunities for habituation, but it also provides opportunities to practice emotional regulation in response to traumatic stress. Smyth’s theory explains the benefits of writing as an integration of traumatic events made possible by the re-experiencing of emotion-laden memories reactivated by the process of writing (Smyth, 1998). Ullrich and Lutgendorg (2002) explain the benefits of writing through their model of psychological and physiological effects of disclosure. Written disclosure, they theorize, allows integration or assimilation of traumatic and stressful experiences that thereby normalizes neuroendocrine function, enhance immunity, and promote positive health as well as mental health benefits (Ullrich & Lutgendorg, 2002).

Some research literature expresses a controversy over whether expressive writing works by providing an opportunity for cognitive processing or as a distraction from symptoms. Numerous research findings indicate that the cognitive processing that takes place in the writing process promotes integration that results in fewer negative symptoms characteristic of PTSD, such as intrusive thoughts, flashbacks, and related symptoms (Lepore, 1997; Lepore, et al., 2002), though more recent research indicates that the choice of cognitive over emotional strategies depends on the context of the
stressor and perceptions of control in the most resilient individuals (Roussi, 2002).
Research on personality factors provides evidence that individuals reporting more
cognitive coping styles differ in their interpretation of stressful events from those who
report more emotional coping styles when confronting stressful experiences (Penley &
Tomaka, 2002). Some research also suggests that those with more cognitive styles may
be more resilient, though a criticism of this line of thought is that the past experiences of
cognitive processors versus those with more emotional styles may be different (Penley
& Tomaka, 2002). Still, if cognitive processing is tied to resilience, writing that allows
more cognitive processing could be more beneficial.

The findings of Schwartz, Davidson, and Maer, (1975) suggest that the practice
of distraction, which writing can provide, may be an effective coping tool for dealing
with symptoms of PTSD and related health consequences, though distraction from
stressful thoughts and experiences may relieve the symptoms only temporarily
(Schwartz, 2000; Schwartz, et al., 1975). Later findings suggest that active inhibition of
intrusive thoughts may exacerbate those thoughts later on, with negative consequences
(Brewin & Beaton, 2002; Brewin & Smart, 2006; Kelley & Nauta, 1997; Wegner,
Schneider, Carter, & White, 1987), indicating that writing that is used only as a
distraction from symptoms may not be effective.

Pennebaker’s Research
The research of James Pennebaker empirically supports the theoretical idea that writing
about traumatic events has positive effects on physical and mental health (Pennebaker,
1998; Smyth & Pennebaker, 2001). In their empirical studies, Pennebaker and his
colleagues have shown a relationship between writing and immune function, writing and coping, and writing and self-satisfaction, and writing and emotional regulation, concluding that emotions related to trauma and stress need to be expressed (Pennebaker, 1997a, 1997b). As a corollary, Pennebaker has shown that individuals who conceal the traumatic experiences in their past exhibit more health problems than those who are less inhibited about sharing them (Pennebaker 1993; 1998). Additionally, Pennebaker and other researchers have shown emotional inhibition to be correlated with poorer health, including increased risk of cancer (Gross, 1989), compromised immune functioning, (Petrie, Booth & Pennebaker, 1998), and greater incidence of cardiovascular diseases, asthma, and arthritis (Friedman & Booth-Kewley, 1987). In general, these and other studies suggest that expressive therapies may be beneficial to health and mental health in general (Lepore & Smyth, 2002).

Pennebaker (1997a) explains that writing allows the individual to organize and create a coherent story about a stressful event and that this process provides an opportunity for the individual to formulate an explanation of situations and related emotions that is logical and more controlled. Pennebaker (1997a) says that when individuals change the way they think about or process a trauma, they spend less time ruminating and exhibit better overall health. In addition, Pennebaker (1997a) suggests that labeling emotions with words may help an individual to integrate their emotions with an understanding of the traumatic event.

Studies using Pennebaker’s writing paradigm, or drawing on his techniques,
show that writing about emotions related to traumatic events is helpful, though some
techniques produce better mental and physical health results related to writing
(Pennebaker, 1997b). Better results occur when writers are encouraged to focus on
incidents that are currently troubling them and when they write about both the objective
experience of what has happened to them as well as their feelings about it (Brown &
Heimberg, 1997; Pennebaker, 1997b). Writing that taps into deeper levels of feeling, both
positive and negative, related to distressing events is especially beneficial for the
physical and mental health of those who have experienced trauma (Pennebaker, 1997b;
Pennebaker, Colder, & Sharp, 1990). By encouraging individuals to write about their
“deepest thoughts and feelings” as Pennebaker’s basic paradigm does, the researcher
enhances the writer’s tendency to write about stressful events and negative emotions
(Smyth, 1998). Also, maximum physical and mental health benefits occur when
individuals write in a unique or designated setting where they are free from distractions
and interruptions, and when they retain anonymity in their writing, keeping it to
themselves (Pennebaker, 1997b).

Using computer-analyzed writing samples, Pennebaker has also shown that
individuals who use words tied to negative emotions show greater benefits, suggesting
that expression of these emotions rather than repression may be imperative for greater
health and mental health (Watson & Pennebaker, 1989). Yet, Pennebaker and his
colleagues acknowledge that emotional expression of negative affect alone is not
sufficient for benefits to occur. It is the process of assimilating and restructuring
information facilitated by the writing process, Pennebaker says, that assists individuals in overcoming symptoms (in Murray, 2002).

Not surprisingly, studies show, too, that individuals who are naturally more reticent and less self-aware show the greatest improvements (Pennebaker, 1998). Related findings suggest that men, more so than women, benefit from emotionally expressive writing (Pennebaker & Graybeal, 2001), perhaps because cultural factors often inhibit more emotional expression in social interactions among men.

Additionally, researchers have published research that indicates that there is a relationship between the amelioration of stress reactions and emotional expression through writing, even in the absence of therapy or other treatments (Bonanno, 2001; Smyth, 1998). Recent studies also indicate that writing that focuses attention to the positive aspects of stressful events, or the perceived benefits of having experienced stressful events, enhances well being (Bonanno, 2001). This positive focus appears to promote the development of social and personal resources (Frederickson & Spiegel, 2001).

Though their research on internet writing is still in its infancy, Lange, van de Ven, Schrieken, & Emmelkamp (2003) have shown positive effects of the use of this technology in students with PTSD and bereavement issues, pointing out that internet therapy has some advantages over traditional therapy, including the fact that it allows the participants more control over time factors and that some individuals prefer to disclose information by the internet, because of the anonymity it allows. Recent meta-analyses of written-disclosure studies conclude that writing about emotional subjects significantly
ameliorates distress and enhances health and well-being, and that the beneficial health and mental health effects of writing are more long-lasting when writing is spread over more days time, (Lepore & Smith, 2002; Smyth, 1998), which internet therapy allows. Lange and colleagues (2003) have replicated findings of symptom reduction in sufferers of PTSD symptoms following a structured set of internet writings, devised as a model for use in future studies. He calls the computerized model “interapy.” Entirely web-based, participants access structured writing and psychoeducational experiences on-line, with pre-tests and post-tests also utilized in outcome studies. Other findings related to internet writing by email (Murphey & Mitchell, 1998) and in comparison with telephone counseling (King, Engi, & Poulous, 1998) show mental health benefits for participants, though participants who have previously disclosed regarding the trauma, and younger participants tend to show more positive results.

If, as Pennebaker (1998) asserts, writing about traumatic events at deeper emotional levels is more beneficial to those experiencing distress, it stands to reason that, for some individuals, writing in response to poetry, or writing poems in which deeper emotions about events are expressed, may increase benefits inherent in the writing experience. Since engagement with the process of expressing emotions has been shown to be a positive prognostic factor in studies involving habituation and processing of memories with PTSD victim-survivors, (Jaycox, Foa, & Morral, 1998), and poetry therapy is a process that engages the participant in remembering and processing personal emotions (Hynes & Hynes-Berry, 1994), poetry therapy may assist in promoting habituation in PTSD/SPTSD survivors.
The Present Study

Anecdotal reports and published writings of domestic violence victims show that the use of poetry therapy with posttraumatic stress victims is common and useful with the domestic violence population (Kissman, 1989; Mazza, 1991; Campbell, 1998; Deats & Lenker, 1991), yet few empirical studies documenting the effectiveness of poetry therapy exist (Mazza, 1993; 1999). Studies documenting and exploring secondary posttraumatic stress reactions in trauma counselors are also rare and called for by those working in this field (Stamm, 1997). The crucial role counselors play in combating domestic violence suggests that these counselors should be taught effective self-care techniques, as researchers on symptoms of SPTSD have suggested (Maslach & Leiter, 1997; Figley, 1995; Stamm, 1997). Since writing is an activity easily engaged in, is low-cost, and affords the opportunity for details related to secondary victims’ clients to remain confidential, it is a strategy for coping with SPTSD that may be especially well-suited as an intervention strategy for the population of domestic violence counselors at risk for symptoms of SPTSD. As such, a study on the effects of expressive writing in domestic violence counselors is warranted.

Research Questions

This research study was designed to answer the following questions related to expressive internet writing and symptoms of stress in domestic violence counselors: 1) Does poetry therapy have an impact on secondary posttraumatic stress symptoms in domestic violence counselors? 2) Is there a difference in effectiveness between the poetry therapy intervention and control group when the intervention is used with
domestic violence counselors to reduce symptoms of SPTSD? 3) What demographic, workplace, self-care and personality variables predict SPTSD in domestic violence counselors?

Hypotheses

Based on past research on writing and other therapeutic interventions for symptoms of posttraumatic stress, the study is based on the hypothesis that writing in response to poetry reduces symptoms of secondary posttraumatic stress disorder in domestic violence counselors when compared with a no writing control group. In addition, another hypothesis of the study is that personality variables as measured by the International Personality Item Pool Representation of the NEO Personality Inventory (IPIP NEO) and demographic variables will predict symptoms of SPTSD in this sample.
CHAPTER III

METHODOLOGY

Design

The design of this study utilizes structured poetry therapy activities, with the time and spacing of activities similar to that used in Pennebaker’s basic expressive writing paradigm (Pennebaker, 1997b). Pennebaker’s paradigm (Pennebaker, 1997b) has provided standardization for expressive writing procedures that make effects across studies on expressive writing more easily compared. Using it, Pennebaker and his colleagues typically assign participants to one of three groups: an expressive writing group, a no writing control, and a meaningless writing control. Those in the writing groups are typically asked to write on three occasions, for a period of 15-20 minutes. Those in the expressive writing group are instructed to “write about your deepest thoughts and feelings,” (Pennebaker, 1997b). Though the present study was originally designed to utilize Pennebaker’s expressive writing paradigm and extend it to examine the effects of additional types of structured writing not usually examined by studies using Pennebaker’s model, the difficulty of finding participants willing to commit to the time and effort required for completing assessments and participating in writing interventions made it unfeasible to use a larger number of groups. Therefore, the design of the study utilizes only structured poetry therapy activities, along with a no writing control group, with the time and spacing of activities similar to that used in Pennebaker’s studies.
Delivery of activities and submission of assessments took place by an internet website created by the researcher to facilitate participation. Prior to the study, the researcher created the website which contained instructions for participation in the study and all assessments and writing activities needed for the groups. The website design was intended to be attractive and reflective of the nature of the work of domestic violence counselors. Classic artwork showing images of women and families was used in its creation, with images selected that reflected diverse ethnicities and both genders. In creating activity pages unique for each group, an attempt was made to keep pages as similar to one another as possible, with the same colors, pictures, and fonts used for the different group treatment pages, to ensure that effects were not due to extraneous factors. This was an experimental study in that participants were randomly assigned to a treatment group, either poetry therapy or a control group.

In the design for this study, the changes to Pennebaker’s paradigm are intended to promote deeper emotional disclosure through the use of poetry. Poetry therapy as used in this study is designed to promote writing about work-related stress that is personal and emotionally focused. Since Smyth’s (1998) meta-analysis on written disclosure indicates that writing activities that are about emotional subjects, in general, reduce distress, and additional studies suggest that the expression of deeper emotions about personal issues promotes greater physical health, a sense of subjective wellbeing, and more adaptive behaviors (Pennebaker, 1997b), it seemed rational to extend the Pennebaker paradigm in a way that might intensify levels of emotional disclosure. Poetry therapy was used in accordance with the Hynes and Hynes-Berry model in order to promote deeper levels of
emotional disclosure about personal emotions in participants in response to literature (Hynes & Hynes-Berry, 1994). It should be noted, also, that all poems used in this project had been used previously by the researcher in support groups for domestic violence counselors, under the supervision of a registered poetry therapist.

Participants

A total of 97 participants participated anonymously by completing some portion of the assessments or activities accessed via the website set up for this study. Only 53, or 54.6% of those participating, finished both pre and post tests. Most drop-outs showed a consistent pattern of completing pre-tests, but not post tests, though some left out random assessments or assignments, and some completed assessment instruments, but did not complete writing assignments. Of the 53 participant completing all activities, 28 participated in the no writing control group, while 25 participated in the poetry therapy group.

Table 1, Appendix D, provides an overview of the demographics, workplace, and self-care variables indicated for this sample by group.

Instruments

Demographics

The researcher created a questionnaire designed to gather demographic information as well as workplace and self-care data. Questions asked about gender, age, ethnicity, sexual orientation, socio-economic factors, religious affiliation, and past abuse. The questionnaire included questions related to workplace variables shown to
have an effect on SPTSD symptoms or burnout, including questions about caseload, numbers of survivors, percentage of children seen each week, and relationship with supervisors. The questionnaire also included questions about self-care behaviors shown to promote resiliency including those related to amount of time spent in leisure activities, talking about problems, exercising, and writing in a personal journal.

**SPTSD**

The Impact of Events Scale (Horowitz, Wilner, & Alvarez, 1979) was used to measure symptoms of secondary posttraumatic stress disorder. (See Appendix C.) This instrument is a 15-item questionnaire measuring intrusion and avoidance behaviors associated with SPTSD. The IES contains two subscales, avoidance and intrusion, which correspond to symptom categories used to diagnose SPTSD according to the *DSM-IV-R*. Questions are based on a four-point scale ranging from “never,” to “often,” and responses are scored as 0, 1, 3, or 5, with higher score values indicating more stressful impact. In Horowitz' original study (Horowitz, et al., 1979), calculated a mean total stress score of 39.5 ($SD=17.2$, range 0-69), with the mean intrusion subscale score (items 1, 4, 5, 6, 10, 11, 14) calculated at 21.4 ($SD = 9.6$, range 0-35), and the mean avoidance subscale score (items 2, 3, 7, 8, 9, 12, 13, 15) calculated at 18.2 ($SD = 10.8$, range 0-38). Interpretation of scores can be made using the following guide: 0 - 8 Subclinical range; 9 – 25 Mild range; 26 – 43 Moderate range; 44 - Severe range.

The Impact of Event Scale (IES) has been widely used as a measure of stress reactions after traumatic events (Sundin & Horowitz, 2002). Recent reviews indicate that its two-factor structure is stable over different types of events, and that it adequately
discriminates between stress reactions at different times after the event (Devilly & Spence, 1999). Though it does not measure hyperarousal symptoms, it has been shown to have convergent reliability with observer ratings of PTSD (Sundin & Horowitz, 2002). The intrusion and avoidance scales have displayed acceptable reliability (alpha of .79 and .82, respectively), and a split-half reliability for the whole scale of .86 (Horowitz et al., 1979; Sundin & Horowitz, 2002) in samples from the literature. Also, Fischer and Corcoran (1994) found that the subscales of the IES show good internal consistency, with the range of coefficients from .79 to .92, with an average of .86 for the intrusive subscale and .90 for the avoidance subscale. Devilly & Spence (1999) found IES to correlate with the Mississippi Scale for Civilian PTSD (CMS) (.51) in the moderate range. Alpha for this sample was .81.

**Personality**

The International Personality Item Pool Representation of the NEO-PI-R, (IPIP NEO), short form, is an internet-based public-domain instrument similar to the shortened form of Goldberg’s NEO-PI-R, that measures personality traits related to the” Big Five” (Costa & McCrae, 1985) personality factors (neuroticism, extroversion, openness to experience, agreeableness, and conscientiousness). The IPIP NEO was used in this study. (See Appendix B). Responses to the 120 questions on this instrument yield a score between 0 and 100 for each of the five dimensions measured. Numerical scores reported for each of the five domains are percentile estimates, and indicate at what percentile a particular score falls, when compared with other scores.
Paul Costa and Robert McCrae (1985) originally developed the “Big Five” Personality Inventory after finding five broad dimensions of personality derived from factor analyses on a large number of self- and peer reports on personality questions. The IPIP NEO personality test is an online test measuring similar domains, and is used most often in career counseling, employee training, and personal growth, according to the Mental Measures Yearbook (2003). A description of the “Big Five” factors (Eysenck, 1991) follow: Extraversion refers to the degree to which a person tolerates sensory stimulation from other people and social situations. High scorers are characterized by their preference for being around others and involvement in many activities, and low scorers are characterized by a preference for being alone and in private. Agreeableness refers to the degree to which a person defers to others by being tolerant, agreeable and accepting of others. High scorers are typically trusting, considerate of others, accepting, and good team players, while low scorers tend to relate to others by being tough, guarded, persistent, competitive or aggressive. Conscientiousness refers to how much a person considers others when making decisions. High scorers tend to be trustworthy, honest, and concerned with completion of tasks. Neuroticism measures stability, anxiety level, and volatility, with higher scorers being more volatile and anxious. Openness to experience refers to how much a person is open to new experiences and new ways of doing things, with higher scorers being more flexible, creative, and interested in abstract ideas, and lower scorers typically being more inflexible and showing a preference for the conventional and concrete.
According to the *Mental Measurements Yearbook*, the reliability of the IPIP NEO has been calculated from 0.85 to 0.95 at the domain level, with validity scores ranging from 0.50 to 0.70 (Plake, Impara, & Spies, 2003). Criterion-related validity and predictive validity have also been established (Plake, Impara, & Spies, 2003). Scoring of the IPIP NEO for this sample took place via website.

Procedure

The researcher solicited participants via outlets that targeted domestic violence counselors or other mental health professionals likely to encounter a high number of domestic violence survivors in their work. Participants were anonymous volunteers presumed to be working with primary victims of domestic violence, who responded to communications disseminated through a variety of channels. These included emails, internet postings, flyers provided at professional workshops and seminars, and letters disseminated through domestic violence centers, rape crisis centers, CPS offices, schools, and family violence counseling centers, and by personal networking.

Initially, the researcher contacted all agencies listed on the Texas Council on Family Violence and Texas Association Against Sexual Assault websites either by telephone or email, and letters explaining the study were sent to these agencies via email or regular mail. In addition, emails were sent to other domestic violence, sexual assault, and CPS or family violence centers listed on the internet and operating in four states: Texas, North Carolina, California, and Missouri. Initially, the researcher attempted to confine publicity about the website and study to domestic violence counselors affiliated with the Texas Council on Family Violence and Texas Association Against Sexual
Assault, but the low participation rate made it necessary to extend efforts to solicit volunteers in other states and other agencies providing services to a population that included domestic violence survivors. North Carolina and California were chosen as states that were geographically diverse, representing the east and west coasts of the US. Missouri was selected because of its centralized position in the US. The researcher contacted agencies from states that were shown on the internet as National Domestic Violence State Coalitions by telephone and/or email, and sent letters via email explaining the study and how to participate in it. The researcher also provided information about the study and the website address at the end of presentations given on child abuse and therapeutic writing in Texas, including the following: a) a presentation on child witnesses to domestic violence given at the Texas Prevent Child Abuse Convention in Dallas, Texas, in February, 2005; b) presentations on dissertation research, expressive arts counseling, and domestic violence given to Dallas Independent School District Psychological Services interns and staff in October, 2004; November, 2004; and in April, 2005; and c) a presentation on therapeutic writing and SPTSD given to Houston Area Women’s Center staff in March, 2006. The researcher made additional personal visits and gave talks to potential participants in larger domestic violence centers in Texas in the Fall of 2005 through March, 2006. At ten agencies, the researcher met with center directors, counseling directors, lead counselors, or small groups of counselors and staff, who were given information in person and asked to provide information to other potential participants. The Houston Area Women’s center, which has a policy of participating in a limited number of studies each year, chose this study as
one of its projects, disseminating information on the project to its counseling staff of more than twenty-five counselors, interns, and volunteers, via the agency newsletter and emails sent to the counseling staff by the administrative staff of the agency. In all of the agencies where the researcher made personal visits, letters and flyers were posted or distributed to counselors in the main office, counselor lounge, or other common area where counselors were likely to see them. The researcher also utilized and encouraged personal networking by talking with counselors, sending emails, and disseminating information at meetings of school and internship organizations where student interns and others were told how to participate via website. The researcher also posted notices on internet research bulletin boards, inviting qualified participants to go to the website created for this research. All in all, the researcher sent out emails to over seven hundred different email addresses, with solicitation letters attached, and provided over 150 paper handouts or letters to potential participants. Emails were sent to Texas Council on Family Violence and Texas Association Against Sexual Assault agencies on two separate occasions.

The researcher created the website and set it up prior to soliciting volunteer participants, so that individuals who visited the website and indicated their willingness to participate were immediately randomly assigned to groups. Each participant obtained a unique login identification word (login id), password, and group assignment, which were generated on the website pages when an individual clicked a box at the bottom of the IRB-approved information sheet that indicated their desire to participate (see Figure A 1). Because this was an anonymous study, signed consent forms were not required.
The website was designed to interact with an SQL database that generated the randomly assigned login identification words, passwords, and group assignments. Each login id was pre-assigned to correlate with one of the randomly-assigned groups. On the same page where the login id, password, and group assignments were generated, instructions for accessing assessments and group treatments were also provided (see Figure A 2). Participants were instructed to use their login id on subsequent visits to the website. Participants could only access assignments for the group to which they were randomly assigned using their group assignment number and password. Their login id appeared on all submissions to allow assessments and writing activities to be matched for each individual participant (see Figure A 3). Also, a contact page allowed participants having questions about the website or research project to email the researcher, and a system for retrieving lost or forgotten information was set up for those who chose to register identifying information.

Treatment Groups

Through the research website, participants could not only view the information sheet for the study, agree to participate, and access and view instructions for writing activities for their assigned group, they could also complete and submit activities. On the same page where participants were given login identification words, passwords, and group assignments, they were directed to pre and post assessment instruments and group assignments they could complete and submit online.

Participants in each treatment group were provided with instructions unique to their group. On reaching the access page for activities for their group, all participants in
writing groups were provided with the following instructions: “You have been assigned to a treatment group (their group number). In this group, you will be asked to write 15-20 minutes on each of three different occasions, on nonconsecutive days, at your convenience. Access instructions for each occasion below.”

Below the instructions, buttons labeled *occasion one*, *occasion two*, and *occasion three* were listed (see Figure A 4). By clicking on the icon for the occasion, participants were allowed access to writing instructions, provided that they also supplied the correct password. A description of each group and instructions provided for it on the website follows:

*Treatment 1– No Writing Control Group.* Participants in this group were told to go about their daily routine as usual. This intervention is also part of the Pennebaker paradigm. Instructions read, “Please go about your daily activities as usual, without writing about them, unless writing is part of your normal routine. After ten days to two weeks, please log back in and complete the post-treatment assessments.”

*Treatment 2- The Poetry Therapy Group.* The poetry therapy group was instructed to respond to simple contemporary poetry reflecting an emotional theme typical of PTSD reactions documented in research literature. Poems reflected a variety of emotions, including guilt, anger, sadness, and a sense of helplessness in response to events out of control. These poems were poems previously used by the researcher in group therapy with domestic violence counselors. These poems were selected by the researcher in conjunction with a registered poetry therapist, for use by the researcher in a support group for domestic violence counselors. The chosen poems were also the top
three most frequently used poems in poetry therapy used by NAPT therapists, according to unpublished research done by poetry therapist Sherry Reiter at the 1997 NAPT annual convention (in Mazza, 1999). Participants were provided with a different poem for each of the three occasions, in the following order: *The Armful*, by Robert Frost (1928)(see Figure 5); *Autobiography in Five Short Chapters*, by Portia Nelson (1993) (see Figure A 6); and *The Journey*, by Mary Oliver (1986) (see Figure A 7). Instructions for each occasion can be seen in the figures provided in Appendix A.

Recruitment of volunteers was ongoing for a period of approximately eighteen months. Participants were told they could participate at any time, as long as they completed all assessments and activities according to directions, with activities submitted on nonconsecutive days and completed, along with assessments, within three weeks. All requests for assistance were replied to within 36-48 hours, and reminders were sent to those who requested them via the website.
CHAPTER IV

RESULTS

Fifty-three participants completed both the pre and post assessments and answered questions about their workplace and about self-care. Table A 1 shows demographics and participants’ responses to self-care items and questions related to experience working with trauma survivors.

The mean score for the poetry therapy and no writing control participants on the Impact of Events Scale (IES) pretest were 24.44 ($SD = 7.79$) and 24.29 ($SD = 8.61$), respectively. This indicates that both groups scored in the mild range for stress related to SPTSD on the pretest. The mean score for the poetry therapy and no writing control participants on the Impact of Events Scale posttest were 20.24 ($SD = 7.32$) and 20.71 ($SD = 11.05$), respectively, indicating that both groups scored in the mild range for stress related to SPTSD on the posttest, as well.

Scores for the 93 participants who completed the personality inventory, the IPIP NEO, showed mean scores of $M = 43.74, (SD = 17.34);$ $M = 43.20 (SD = 21.83);$ $M=43.73 (SD=22.08);$ $M= 46.69 (SD=15.92);$ and $M=36.92 (SD=18.35)$ on extroversion, agreeableness, conscientiousness, neuroticism, and openness, respectively. Mean scores were in the average range for all five domains.

Question One

*Does poetry therapy have an impact on secondary stress symptoms in domestic violence counselors?*
To answer the first research question, a paired samples t-test was conducted to compare pretest and posttest scores on the Impact of Events Scale (IES) for participants in the poetry therapy group. The paired-samples t test is a statistical procedure that evaluates whether the mean of the difference between the two variables is significantly different from zero.

In this first analysis, the paired-samples t-test, with a single pair of variables representing the total scores of the IES for the poetry therapy group on pretests and posttests, with the significance level set at .05, was conducted using SPSS 10.0. Results from the paired-samples t-test indicated that there was a significant difference between pretests and posttests for the IES total score for participants in the poetry therapy group (see Table 2). The mean pretest score of 24.44 (M = 24.44, SD = 7.79) was significantly greater than the posttest score of 20.24 (M = 20.24, SD = 7.32), t (24) = 5.15, p = .00.

It should be noted also the paired samples t-test rests on the assumption that cases represent a random sample and difference scores are independent, which should have been true in this case, given that poetry therapy participants were randomly assigned. Also, the t-test assumes the difference variable is normally distributed in the population.

Because of concern over violations of assumption of the t-test in testing the poetry therapy group, a nonparametric Wilcoxon matched-pairs signed-ranks test was also performed to determine if there were differences in pre tests and posttests that would indicate that the intervention had an effect on the IES score. The results of the
Wilcoxon indicated a significant difference between the two groups, $z = -3.672$, $p = .000$, confirming finding from the pairwise t test that participation in poetry therapy had a significant impact on test scores on the IES, for domestic violence counselors who participated in this study (see Table 3).

Question Two

**Is there a difference in effectiveness between poetry therapy and no writing control when the poetry therapy and no writing control interventions are used with domestic violence counselors to reduce symptoms of SPTSD as measured by the Impact of Events Scale (IES)?**

To answer the second research question, an Analysis of Variance (ANOVA) was used to evaluate the effects of group treatments on symptoms of secondary posttraumatic stress disorder as measured by Impact of Events Scale (IES) total score. Results of a preliminary ANOVA on IES pretest scores indicated no significant differences between groups before the intervention, $F (1, 52) = .005$, $p = .946$.

The ANOVA procedure allows researchers to compare group differences on between-subjects factors. In this case, factors were the two group treatments: poetry therapy and the no writing control. Results of the ANOVA procedure showed that the independent variable of group treatment had no impact on the dependent variable, IES score, $F(1, 52) = .033$, $p = .856$, with no significant difference found in group means for the two groups (see Table 4).
Question Three

To what extent do demographics and personality variables predict secondary posttraumatic stress symptoms?

The last set of analyses answered the third research question. This set of analyses relied on correlation coefficients and regression analyses to understand what variables best predicted symptoms of posttraumatic stress as measured by the Impact of Events Scale (IES) total score. Two separate bivariate linear regressions were planned to determine how well sets of 1) personality variables and 2) demographic variables predicted SPTSD symptoms. Bivariate correlations were also examined for this data. It should be noted that regression and correlation effect sizes were evaluated based on Cohen’s (1988) standards for determining effect size strength. Using Cohen’s standards for regressions, an $R^2 = .02$ or less was considered small, $R^2 = .15$ was considered medium, and $R^2 = .35$ or more was considered large. Correlations among the predictor variables using Cohen’s standards were evaluated such that correlations of $r = .30$ was considered a small effect, and $r = .50$ was considered a large effect.

Multiple regression analyses were chosen because they made it possible to examine the predictive value of several variables on the posttest results. The moderately large sample size made the regressions resistant to abnormalities. Random assignment of participants to treatment groups suggests that scores should be independent from one individual to the next. Also, an examination of scatterplots for each of the personality domains showed a relatively equal dispersion of scores and no indications of assumptions being violated in this data set with respect to personality variables.
A correlation analysis was conducted using SPSS to determine which personality variables showed a significant linear relationship with the IES or each other. These correlations are depicted in Table 5. Though no specific procedure was used to correct for the inflated chance of Type I error, a significance value of \( p = .01 \), smaller than the customary \( p = .05 \), was chosen for this analysis because the use of multiple predictors and procedures increases the likelihood that at least one of the tests will cause the rejection of a true null hypothesis (Huck, 2000), and a smaller \( p \) value can help correct this tendency. At the \( p = .01 \) level, symptoms of SPTSD were shown to be significantly negatively correlated with openness to experience \( r (93) = -.318 \), as indicated by test scores. This suggests that as the personality trait of openness to experience went up, symptoms of SPTSD decreased. Also, extroversion was significantly correlated with openness, \( r (93) = .373, \ p < .001 \), and significantly negatively correlated with neuroticism \( r (93) = -.267, \ p < .001 \), in this sample. This indicted that as the traits associated with extroversion went up (e.g., friendly, outgoing, active) went up, the traits associated with openness (creativity, tolerance, appreciation of new experiences) went up, and those associated with neuroticism (anxiety, anger, avoidance of others) went down. Neuroticism was also significantly negatively correlated with agreeableness (altruism, concern for others, empathy), \( r (93) = -.366, \ p < .001 \). This indicates that as the scores on this domain went up, scores on agreeableness went down. Agreeableness was also significantly correlated with conscientiousness in this sample, \( r (93) = .595, \ p < .001 \), showing a strong effect size in the tendency for these scores to covary.
The first multiple linear regression analysis was conducted to evaluate the prediction of the IES total score from personality variables indicated by the IPIP NEO. Models were tested using a multiple linear regression procedure in SPSS 10.0. It was hypothesized that one or more of the five variables representing the five personality indices on the IPIP NEO would predict higher levels of SPTSD symptoms, as indicated by scores on the IES. Since a greater number of participants completed the pretest than the posttest for the IES, the pretest was chosen as the criterion variable. All five personality indices from the IPIP NEO were used as predictive variables in the regression: extroversion, agreeableness, conscientiousness, neuroticism, and openness to experience.

Results of the multiple regression showed that the linear combination of scores on the personality indices significantly predicted pretest IES total scores showing secondary posttraumatic stress symptoms, $F(5,91)=3.122$, $p=.012$. The multiple correlation coefficient for the sample was .383, indicating that approximately 14% of the variance of the IES total could be accounted for by personality variables. The $R^2$ statistic of .146 is a small effect, by Cohen’s (1988) standards. Examination of beta weights indicated that only openness to experience was shown to be statistically significantly ($\beta = - .362; p = .003$). This indicates that the having a less open-mind to new experiences is significantly related to more symptoms of SPTSD. (See Table 6).

In a second set of analyses, demographic, workplace, and self-care variables along with openness to experience scores were examined using the bivariate correlation and regression procedures in SPSS. Seven predictor variables (gender, abuse history, years working with trauma survivors, hours spent exercising per week, hours spent
talking to supportive others per week, times an individual wrote in a journal or diary per week, and NEO subtest score on openness to experience), along with IES pretest scores for all participants were used in these procedures. Variables that had some basis for prediction of SPTSD symptoms based on research literature or those that showed stronger correlations in preliminary analyses were chosen for this analysis.

A correlation analysis was conducted using SPSS to determine which variables showed a significant linear relationship with each other. These correlations are depicted in Table 7. Though no specific procedure was used to correct for the inflated chance of Type I error, a significance value of $p = .01$, smaller than the customary $p = .05$, was chosen for this analysis because the use of multiple predictors and procedures increased the likelihood that at least one of the tests would cause the rejection of a true null hypothesis (Huck, 2000). A smaller $p$ value can help correct this tendency. At the $p = .01$ level, symptoms of SPTSD were shown to be significantly negatively correlated with years working with trauma $r (88) = -.319, p < .001.$ and openness to experience $r (90) = -.318$, as indicated by test scores. This suggests that as either a) years working with trauma or b) the level of openness to experience went up, symptoms of SPTSD decreased. Also, hours spent talking and time writing were significantly negatively correlated with each other $r (90) = -.351, p < .001.$, indicting that as number of hours talking per week went up, the number of times writing per week went down. (See Table 8). Correlations shown to be significant in this analysis, were all relatively small.

A multiple linear regression analysis was also conducted to evaluate how well the model using the seven predictor variables (gender, abuse history, years working with
trauma survivors, hours spent exercising per week, hours spent talking to supportive others per week, times an individual wrote in a journal or diary per week, and openness to experience) predicted symptoms of SPTSD as indicated by IES scores. It was hypothesized that one or more of the seven variables would predict scores on the IES.

Results of this multiple regression showed that a linear combination of scores on the seven predictor variables was significantly related to the IES total score showing SPTSD symptoms, for the 84 participants answering all seven questions, $F(7,77)=3.373$, $p=.003$, $P<.01$. The multiple correlation coefficient for the sample was .235, indicating that approximately 5% of the variance of the IES total could be accounted for by these variables. Examination of beta weights indicated that only years working with trauma ($\beta = -.294; p = .008$), and openness to experience ($\beta = -.307; p = .003$), were statistically significantly in terms of predictive value in the model. Again, the moderately large sample size made the regression resistant to abnormalities. Random assignments of participants to treatment groups made scores independent, increasing the likelihood that results are valid.
CHAPTER V
DISCUSSION AND CONCLUSIONS

Results of this study indicated that domestic violence counselors who participated in the research project showed a decrease in symptoms of secondary traumatic stress following participation in poetry therapy. The finding that there was a positive effect of the writing treatment is consistent with prior studies on emotionally expressive writing that show a decrease in symptoms following writing treatments (Pennebaker & Seagal, 1999). However, when the effect of the no writing control group was examined, no difference related to poetry therapy as opposed to no writing was found. The lack of a significant difference between the effects of poetry therapy versus the no writing control group is problematic. A possible explanation for this finding is that participation in the study, regardless of the treatment group, impacted counselors favorably, so that symptoms decreased. Another likelihood is that the solicitation of participants resulted in a sample that may have tended to write as self-care more than other counselors from the outset, and may have continued to write during the study. This is likely for a number of reasons. In general, agencies that serve domestic violence survivor-victims often encourage writing by providing journals or publishing clients’ writings. Groups of counselors at three of the sites where participants were solicited to participate in this study were also given instruction in using writing interventions with clients, so it is possible that a high number of counselors participated who had an interest in writing or supported writing efforts. At one large Houston-area counseling center, support for the study was provided primarily because the study involved writing, which
counselors at the center had an expressed interest in learning about, and which counselors were encouraged to do as a form of self-care. Also, counselors at another women’s center where the researcher solicited volunteer participants had participated in self-care poetry therapy groups with the researcher in the past. Since the instructions for the no writing control group stated “…go about your daily activities as usual, without writing about them, unless writing is part of your normal routine…..” it is possible that many of the participants participating in the no writing control group did in fact write in a journal or otherwise engage in emotionally expressive writing during the course of the study, as part of their normal routine. In fact, fifteen of the 28 participants in the no writing control group indicated that they wrote in a diary or journal one to three times a week, prior to treatment.

The relationship between personality variables and symptoms of SPTSD were also examined in this study. Correlation analyses on personality variables indicated small but significant positive correlations between extraversion and openness to experience in this sample, $r (93) = .373, \ p < .001$. This finding closely approximates findings from Costa and McCrae’s (1985) research indicating a .40 correlation between these domains on the NEO-P-R, a similar instrument which also assesses Big Five personality variables. Also the significant negative correlation between extraversion and neuroticism in this sample, $r (93) = -.267, \ p < .001$, is somewhat smaller, but in the same direction as correlations from past research showing a -.53 correlation between these domains on the NEO-P-R (Costa and McCrae, 1985). Because high scorers on neuroticism tend to be more angry, avoidant, depressed, and anxious around others
(Costa & McCrae, 1992; Johnson, 2000), and therefore less pro-social, this would explain the negative correlation between neuroticism and extraversion, which includes several pro-social characteristics (e.g., friendliness, gregariousness). Also, the anti social elements of neuroticism contrast with the pro-social elements of agreeableness (e.g., trustworthiness, cooperation, altruism) (Johnson, 2000), which may also explain the negative correlation in this pair, $r(93) = -.366$, $p < .001$. The positive correlation between agreeableness and extraversion may have to do with the fact that both agreeableness and extraversion are related to an orientation towards others. Also, agreeableness and conscientiousness are also positively correlated in this sample, and show a large effect size, $r(93) = .595$, $p < .001$. In this pair, underlying elements appear to be complimentary, in that a number of the characteristics of conscientiousness (e.g., dutifulness, self-discipline, cautiousness) appear to be ones that would promote or enhance certain characteristics of agreeableness (e.g., trust, morality, modesty).

Regression analyses results also showed that openness to experience significantly predicted SPTSD symptoms for this sample, indicating that domestic violence counselors who were less open to experience were at risk for developing SPTSD symptoms. The openness to experience variable as measured by the IPIP NEO describes a dimension of cognition that is associated with imaginative, emotionally-aware, and psychologically liberal people. Those scoring higher on openness to experience are usually adept at abstract and creative thinking, as opposed to conventional, more practical people who prefer the concrete over the abstract. Those with higher scores on
openness to experience are also often more adept at symbolic representation, including artistic and metaphorical use of language (IPIP NEO, 2006).

Openness to experience has been tied to emotional intelligence and empathy (McCrae & Costa, 1997). Because more open people may be more empathic and experience their emotions more intensely, they may also be more emotionally vulnerable (McCrae & Costa, 1997). Therefore, the finding that openness to experience is negatively correlated with symptoms of PTSD in this study is somewhat surprising, but is probably related to the finding that more open people show emotions more freely (McCrae & Costa, 1997). Since emotional expression has been shown to foster better mental health outcomes (Pennebaker, 1997), the tendency of more open people to engage in more emotional expression may have made openness to experience a resiliency factor that decreased symptoms of SPTSD.

Results of the regression analysis on demographic, workplace, and self-care variables showed that the number of years working with trauma had an effect on symptoms of SPTSD. Years working with trauma was the only demographic or workplace variable showing significant predictive ability in determining total scores for the Impact of Events scale in this study. The negative correlation for this variable suggests that those individuals who have been in the field longer have fewer symptoms of PTSD. While this result is inconsistent with findings that those who have done trauma work for longer periods of time may be more likely to show symptoms of SPTSD (Baird & Jenkins, 2003), the fact that only two respondents indicated having been in the field longer than seven years suggests that this sample consisted of
individuals with relatively low levels of experience working with trauma. Therefore, the finding that years in doing trauma work is negatively correlated with higher levels of PTSD probably reflects the vulnerability of less experienced workers, and replicates past studies that have shown that less experienced counselors are more likely to show higher levels of stress (Creamer & Liddle, 2005; Ghahramanou & Brodbeck, 2000; Linley, Joseph, & Loumidis, 2005).

In addition to the findings that years working with trauma and openness to experience were correlated with SPTSD symptoms in this sample, the correlational analysis done in this study showed a negative correlation between hours a week spent talking and times a week participants wrote in a journal or diary, meaning that as an individual talked more to supportive others during the week, he or she wrote less, and as the participant engaged in more personal writing, he or she spent less time talking with others. Because both talking to supportive others and personal writing are emotionally expressive activities, it is likely that as an individual engages more in one of these, he or she is in less need of the ameliorative effects of the other activity, and thus less likely to engage in it.

Limitations of the Study

There are a number of limitations restricting generalizability of this study. First, the study was open only to participants who self-identified as domestic violence counselors and had adequate access to the internet to allow them to participate via the research website. Counselors who did not have email accounts may not have been made aware of the project, and only those with regular access to the internet would have been
likely to participate. Also, because the site required use of passwords and specific personal identification words generated by the website, counselors less familiar with the internet may have found the website more difficult to use, and therefore may have chosen not to participate, or may have been more likely to drop out. Also, counselors at smaller agencies, which typically exist in more rural areas, may have had less access to the internet through their workplace.

Solicitation of volunteers through emails, at writing workshops for counselors, and through personal networking may also have biased the sample in favor of individuals more likely to write or view writing favorably as a form of self-care. Because this was an anonymous study with only intrinsic rewards for participation, those who did not view writing as a favorable activity may have been more likely to decline participation or drop out of the study. In addition, results may have been positively skewed by participants’ attitudes towards writing or a desire to help out the researcher, especially since solicitation of participants was sometimes done in conjunction with workshops or other presentations on poetry therapy or expressive writing presented by the researcher, and because personal networking was utilized. Also, though potential participants were randomly assigned to writing or no writing control groups, and because participation was anonymous and online, it may have been easier for participants who did not like the writing activities to drop out. Therefore, individuals who were not inclined to write may have been under represented.

Another possible problem affecting participation was the time and involvement required of participants. This was a long study requiring that participants go back to the
site on more than one occasion. Participants who were busier, under more stress, had less access to a computer, or were less motivated by intrinsic factors related to participation in the study may have found it more difficult to complete the activities. Also, participants without email accounts could not receive reminders to write or complete assessments, and those without anonymous email accounts may have been less likely to request reminders, and thus more likely to forget to participate in the study or drop out.

Another possible limitation of the study is that counselors serving non English-speaking populations may have been underrepresented. As domestic violence counselor was originally defined by the study, counselors with a master’s degree or above were solicited for participation. Yet, in many instances, domestic violence programs employ “advocates” at the bachelor’s level or below, especially when these individuals have language skills that enable them to serve non English speaking clients. At times, these individuals provide the only mental health services available to clients with limited English speaking skills. In addition, advocates and counselors with specialized language skills are sometimes themselves still acquiring English as a second language. For these counselors, writing in response to poetry written in English may have made participation prohibitive and may have restricted participation to more acculturated counselors.

Though the study examined the responses of domestic violence counselors, and participants were solicited primarily from centers set up for the express purpose of serving domestic violence victim-survivors, other counselors attending workshops on writing and workshops on child abuse as well as mental health professionals working in schools were told about the study and invited to participate if they met the requirements
of 1) having a master’s degree or higher and 2) working with a clientele made up of at least 50% victim-survivors of domestic violence. Although counselors working with domestic violence survivors in a variety of settings have similar expectations and stressors (e.g., hearing stories of interpersonal violence, concern for client safety, interaction with law enforcement and other agencies), there are many factors on which counselors differ that may impact their experience. Resources available at the worksite, population worked with, support systems, individual stressors not related to their work, and other factors related to the setting may have influenced counselors’ experiences and vulnerability to work related stress, creating a less homogenous sample. Also, individual differences, such as personal support, family stressors, or health factors, may have contributed to resiliency or lack of resiliency in some counselors. Therefore, future studies soliciting participants from a variety of settings should examine differences in perceived stressors and utilization of support systems, as well as individual factors.

Implications and Conclusions

The findings from this study have implications for counselors and administrators in agencies providing services to domestic violence victim-survivors. Findings suggest that practitioners can benefit from writing and poetry therapy to relieve stress associated with symptoms of secondary posttraumatic stress disorder. As other researchers have suggested (Stamm, 1997), administrators should provide education on secondary posttraumatic stress disorder to staff who work with victims of domestic violence. Part of the education on SPTSD should include information about self care, and information on writing as a technique for self care should be included in the educational program.
Workshops and trainings on therapeutic writing may be especially beneficial for domestic violence counselors, who may use techniques for self-care, as well as with their clients demonstrating symptoms of posttraumatic stress. In addition, administrators and supervisors can provide opportunities for staff to engage in activities that ameliorate symptoms of SPTSD through increased opportunities for social support, which has been shown to increase counselor resiliency. Support groups that utilize writing and poetry therapy may be an especially effective means of helping staff cope with stress. For counselors working in isolation at satellite sites or smaller sites, internet writing may provide a way for these counselors to engage in self care or connect with others and in this way increase their resiliency to the demands of their work.

The need for additional support for less experienced counselors was also suggested by the study’s findings. This provides empirical support for practice recommendations provided by Courtois (2000) for providing support for newer staff. Less experienced staff need good supervision, and may need more support and education about the impact of their work on their own well being. Special groups, experienced mentors, and experiential workshops or planned activities for self care can be used by administrators and supervisors to help newer counselors learn coping strategies.

In addition, counselor training programs can help new counselors become more aware of vulnerability and resilience factors for secondary posttraumatic stress disorder and teach ways to minimize symptoms. Information provided on domestic violence and trauma work through counselor training programs can more adequately prepare counselor-trainees to work with domestic violence survivors. Training in self care
techniques can be provided to counselor-trainees also. Instruction on self-care should include information on ways that writing can be used to combat symptoms of posttraumatic stress. As domestic violence counselors learn to care for their own needs, they will be able to better deliver effective counseling to clients seeking to escape the dangerous and debilitating effects of domestic violence.
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APPENDIX A

PARTICIPANT INSTRUCTIONS

TAMU Counseling and Assessment Clinic      (979) 845-1700

National Contact:
RAINN                          1-800-656-HOPE (4673)

In addition, the principal investigator is available to talk to you or provide additional ref

I wish to participate in this research.

Figure A 1. Consent box detail.
Steps for Participation in this Project:
(You may wish to download or print this for later reference.)

1. Read the Information sheet, if you have not done so already. Then get a randomly assigned personal login id and assigned treatment group number from this page.
2. Complete the personal questionnaire and pre-assessments from the Returnvisits page, accessed through the navigation bar at the top of this page.
3. When go to the Returnvisits page to access assignments, click on a pencil to find activities unique for your group. Note that a box will pop up asking for your username (your username=your group assignment provided on this page, ex. "group1" - Make sure the "g" is lowercase when you type it in), then type your password in the pop-up box requesting it. Warning: If you clicked the pencil for any group but your assigned group, this will not work! Once you get to your group assignments, follow the directions for completing and submitting assignment #1, #2, and #3. Assignments should be completed and submitted on nonconsecutive days within a two week period.
4. After completing assignments specific to your group, complete posttest assessments, accessed from this the Returnvisits page.
5. Make sure your personal login id is on all submissions, since this is the only way that anonymous submissions can be matched. Thanks!

Go to Returnvisits now for access to assessments and activities!

Information Required for Future Access and Submissions

You will need these for return visits.

Your Personal login id: aquamarine

Your group assignment (which you will also use, "username" when prompted) is: group3

Your password (when prompted) is: jewels

Go to Returnvisits now to begin assessment.

You will use these for return visits and submission.
Please remember them and/or email your login id, username, and password to yourself for safe keep. You would like for this information to be kept in records in case you forget it, provide a confidential anonymous email address and other information matching purposes below. Then, if you need noticed, you may contact us via the "contact us" page accessed through the navigation bar at the top of other pages, and request that we send this inform the email address you provide. All email address deleted after the end of the study. This feature is and not necessary for participation in this project.

Optional Information Needed for Retrieval of Past.

Figure A 2. Instructions for participating from website.
Figure A 3. Login box detail.

Figure A 4. Instructions for group one and group two.
Figure A 5. Poetry group, occasion 1.
Autobiography in 5 Short Chapters

I
I walk down the street.
There is a deep hole in the sidewalk.
I fall in.
I am lost... I am helpless.
It isn't my fault.
It takes forever to find a way out.

II
I walk down the same street.
There is a deep hole in the sidewalk.
I pretend I don't see it.
I fall in again.
I can't believe I am in the same place.
But, it isn't my fault.
It still takes a long time to get out.

III
I walk down the same street.
There is a deep hole in the sidewalk.
I see it is there.
I still fall in. It's a habit.
My eyes are open.
I know where I am.
It is my fault. I get out immediately.

IV
I walk down the same street.
I walk around it.

V
I walk down another street.

By Portia Nelson

Questions and Suggestions for Reflection (Optional)

Does the poem remind you of yourself, or someone else you know? What is “the hole in the sidewalk” for you or the person you think of when you read the poem?

Which “chapter” represents the present time? What events do you associate with each “chapter” before the one representing this one? What feelings come up for you in each “chapter”?

What does “another street” look like for you, or for the person you associate with the poem?

Is anything hindering the last “chapter” from taking place in real life? What? What happens last chapter from happening in reality? What feelings do you have when you read and imagine the last line?

Write your personal response to the poem, or answer any of the optional questions for reflection that you wish to answer here:

Submit
Instructions

Arrange 15-20 minutes of time without interruptions when you can read and write. Then read the following poem. Use the rest of your time to reflect and respond in writing to the poem or any of the questions that follow it. You do not need to answer in any order, and you do answer all of the questions; just respond to what is most meaningful to you. Use the text box to type in your thoughts and feelings, in any form. There are no wrong or right responses. Remember that writings will not be read for content, and all participants will remain anonymous. When you have finished this activity, click the submit button below the text box to register your participation.

The Journey

One day you finally knew what you had to do, and began, though the voices around you kept shouting their bad advice— though the whole house began to tremble and you felt the old tug at your ankles. “Men and my life!” each voice cried.

But you didn’t stop.

You knew what you had to do, though the wind cried with its stiff fingers at the very foundations, though their melancholy was terrible. It was already late enough, and a wild night, and the road full of fallen branches and stones.

But little by little, as you left their voices behind, the stars began to burn through the sheets of clouds, and there was a new voice which you slowly recognized as your own, that kept you company as you strode deeper and deeper into the world, determined to do the only thing you could do— determined to save the only life you could save.

—by Mary Oliver—

Write your personal response to the poem, or answer any of the optional questions for reflection that you wish to answer here:

Submit

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Questions and Suggestions for Reflection (Optional)

1. Is there something in your life you feel you have to do? What is it?

2. Whose voices demand something of you? What do they seem to say? How do you respond?

3. Imagine a "new voice" in your own life. What does it say?

4. Where is it that you want to go in your life? Imagine that you are already there. Write a letter as if you had already reached your goal. Your letter may be to someone from your family or your work, or someone from your past, or to yourself. Say to the person you are writing whatever it is you need to say.

Figure A 7. Poetry group, occasion 3.
On the following pages, there are phrases describing people's behaviors. Please use the rating scale below to describe how accurately each statement describes you. Describe yourself as you generally are now, not as you wish to be in the future. Describe yourself as you honestly see yourself, in relation to other people you know of the same sex as you are, and roughly your same age. Please read each statement carefully, and then circle the number to indicate your response. It is important that you answer each question.

Response Options

1: Very Inaccurate
2: Moderately Inaccurate
3: Neither Inaccurate nor Accurate
4: Moderately Accurate
5: Very Accurate

How accurate do the following statements describe you?
<p>| | | | | | |</p>
<table>
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<td>1.</td>
<td>Worry about things</td>
<td>1</td>
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<td>2.</td>
<td>Make friends easily</td>
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<td>Have a vivid imagination</td>
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<td>Trust others</td>
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<td>Complete tasks successfully</td>
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<td>Get angry easily</td>
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<td>Love large parties</td>
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<td>Believe in the importance of art</td>
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<td>Am always on the go</td>
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<td>Do more than what’s expected of me</td>
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<td>Carry out my plans</td>
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<td>Become overwhelmed by events</td>
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<td>Have a lot of fun</td>
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<td>Believe that there is no absolute right or wrong</td>
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<td>Make rash decisions</td>
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<td>Lose my temper</td>
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<td>Take advantage of others</td>
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<td>Leave a mess in my room</td>
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<td>Have a high opinion of myself</td>
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<tr>
<td>106.</td>
<td>Am not bothered by difficult social situations</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>107.</td>
<td>Like to take it easy</td>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>108.</td>
<td>Am attached to conventional ways</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>109.</td>
<td>Get back at others</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>110.</td>
<td>Put little time and effort into my work</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>111.</td>
<td>Am able to control my cravings</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>112.</td>
<td>Act wild and crazy</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>113.</td>
<td>Am not interested in theoretical discussions</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>114.</td>
<td>Boast about my virtues</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>115.</td>
<td>Have difficulty starting tasks</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>116.</td>
<td>Remain calm under pressure</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>117.</td>
<td>Look at the bright side of life</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>118.</td>
<td>Believe that we should be tough on crime</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>119.</td>
<td>Try not to think about the needy</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>120.</td>
<td>Act without thinking</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
The Impact of Event Scale

Below is a list of comments made by people after stressful life events. Using the following scale, please indicate (with a ) how frequently each of these comments were true for you DURING THE PAST SEVEN DAYS.

<table>
<thead>
<tr>
<th>Comment</th>
<th>Not at all</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I thought about it when I didn't mean to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I avoided letting myself get upset when I thought about it or was reminded of it</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I tried to remove it from memory</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I had trouble falling asleep or staying asleep because of pictures or thoughts about it that came into my mind</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I had waves of strong feelings about it</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. I had dreams about it</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. I stayed away from reminders of it</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. I felt as if it hadn't happened or wasn't real</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. I tried not to talk about it</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Pictures about it popped into my mind</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Other things kept making me think about it</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. I was aware that I still had a lot of feelings about it, but I didn't deal with them</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>13. I tried not to think about it</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>14. Any reminder brought back feelings about it</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>15. My feelings about it were kind of numb</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
</tbody>
</table>
### Table D 1

*Demographics and Descriptive Variables by Group*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Poetry Therapy</th>
<th>No Writing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Females</td>
<td>23</td>
<td>24</td>
</tr>
<tr>
<td><strong>Sexual Orientation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heterosexual</td>
<td>23</td>
<td>24</td>
</tr>
<tr>
<td>Homosexual</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Bisexual</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td><strong>Relationship Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Long term relationship</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>No current significant other</td>
<td>17</td>
<td>12</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>23</td>
<td>21</td>
</tr>
<tr>
<td>Black</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0</td>
<td>5</td>
</tr>
</tbody>
</table>
Table D 1: Continued

<table>
<thead>
<tr>
<th>Variables</th>
<th>Poetry Therapy</th>
<th>No Writing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Degree</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M.A./M.Ed.</td>
<td>13</td>
<td>15</td>
</tr>
<tr>
<td>M.S.W.</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;30</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>30-40 years</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>&gt;40</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td><strong>Years working with trauma survivors</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;5 years</td>
<td>20</td>
<td>14</td>
</tr>
<tr>
<td>5-10 years</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>&gt;10 years</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>History of abuse/times assaulted</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>Once</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>2-3 incidents</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>&gt;3</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>
Table D 1: *Continued*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Poetry Therapy</th>
<th>No Writing</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Hrs writing</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;1</td>
<td>9</td>
<td>13</td>
</tr>
<tr>
<td>1-3</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>4-7</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>&gt;7</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td><em>Hrs exercising</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1-3</td>
<td>18</td>
<td>25</td>
</tr>
<tr>
<td>4-7</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>&gt;7</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>
Table D 2

Summary of Paired t Test Results for the Effect of Poetry Therapy on Impact of Event Scale Scores

<table>
<thead>
<tr>
<th>Sig. score</th>
<th>diff.</th>
<th>N</th>
<th>df</th>
<th>Mean</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre IES &amp; Post IES</td>
<td>25</td>
<td>24</td>
<td>4.20</td>
<td>3.81</td>
<td>5.515</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Pre IES</td>
<td>25</td>
<td>24</td>
<td>24.44</td>
<td></td>
<td></td>
<td>7.79</td>
<td></td>
</tr>
<tr>
<td>Post IES</td>
<td>25</td>
<td>24</td>
<td>20.24</td>
<td></td>
<td></td>
<td>7.32</td>
<td></td>
</tr>
</tbody>
</table>
Table D 3

*Wilcoxon Results for the Effect of Poetry Therapy on Post Impact of Event Scale Scores*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean rank</th>
<th>Sum of ranks</th>
<th>Z</th>
<th>Asymp. Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Impact of Events</td>
<td></td>
<td></td>
<td></td>
<td>-3.672</td>
<td>.000</td>
</tr>
<tr>
<td>Negative ranks</td>
<td>22</td>
<td>13.57</td>
<td>298.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive ranks</td>
<td>8</td>
<td>8.83</td>
<td>26.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ties</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table D 4

*Analysis of Variance for Post Impact of Events Scale*

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Between groups</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IES Post</td>
<td>1</td>
<td></td>
<td>2.971</td>
<td>.033</td>
<td>.856</td>
</tr>
<tr>
<td>Between group error</td>
<td>(2.871)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Within groups</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IES Post</td>
<td>51</td>
<td></td>
<td>89.927</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within group error</td>
<td>(4586.274)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total error</td>
<td>(4589.245)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. Values enclosed in parentheses represent mean square errors. *p < .05*
Table D 5

Pearson Product-Moment correlations for Personality Predictor Variables and SPTSD

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Extroversion</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Agreeableness</td>
<td>.083</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Conscientiousness</td>
<td>.148</td>
<td>.595**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Neuroticism</td>
<td>-.267**</td>
<td>-.366**</td>
<td>-.219</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Openness</td>
<td>.373**</td>
<td>-.265</td>
<td>.258</td>
<td>.023</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>6. IES</td>
<td>-.223</td>
<td>-.019</td>
<td>.031</td>
<td>.081</td>
<td>-.318**</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Predictors: (Constant), hours exercise, times writing, abuse, gender, years working w/trauma, hours talking.
Dependent Variable: Impact of Events. P=<.01.
**Correlation is significant at the.01 level.
Table D 6

*Summary of Regression Analysis results for Impact of Personality Variables on SPTSD*

<table>
<thead>
<tr>
<th>Variable</th>
<th>$\beta$</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion</td>
<td>-.070</td>
<td>-.621</td>
<td>.536</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>.062</td>
<td>.472</td>
<td>.638</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>.133</td>
<td>1.088</td>
<td>.280</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>.158</td>
<td>1.358</td>
<td>.178</td>
</tr>
<tr>
<td>Openness</td>
<td>-.362</td>
<td>-3.095</td>
<td>.003</td>
</tr>
</tbody>
</table>

$N = 97$. 
Table D 7

*Pearson Product-moment correlations for predictor variables and SPTSD*

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gender</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Abuse</td>
<td>.123</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Yrs working w/trauma</td>
<td>.121</td>
<td>.266</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Hrs talking</td>
<td>-.183</td>
<td>-.036</td>
<td>-.033</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Times writing</td>
<td>-.186</td>
<td>.032</td>
<td>-.235</td>
<td>-.350**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Exercising</td>
<td>-.194</td>
<td>-.218</td>
<td>-.186</td>
<td>.255</td>
<td>.088</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Openness to experience</td>
<td>.039</td>
<td>-.056</td>
<td>.116</td>
<td>.033</td>
<td>-.123</td>
<td>.059</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>8. IES</td>
<td>.150</td>
<td>-.104</td>
<td>-.319**</td>
<td>.025</td>
<td>.008</td>
<td>.081</td>
<td>-.318**</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Predictors: (Constant), hours exercise, times writing, abuse, gender, years working w/trauma, hours talking.

Dependent Variable: Impact of Events. \(P = <.01\).

**Correlation is significant at the.01 level.**
Table D 8

Summary of Regression Analysis Results for Demographic, Workplace, and Self Care Variables on Impact of Event Scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>β</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Openness</td>
<td>-.307</td>
<td>-3.026</td>
<td>.003</td>
</tr>
<tr>
<td>Gender</td>
<td>.211</td>
<td>1.982</td>
<td>.051</td>
</tr>
<tr>
<td>Abuse</td>
<td>-.050</td>
<td>-.467</td>
<td>.642</td>
</tr>
<tr>
<td>Yrs working w/trauma</td>
<td>-.294</td>
<td>-2.706</td>
<td>.008</td>
</tr>
<tr>
<td>Times write</td>
<td>-.057</td>
<td>-.488</td>
<td>.627</td>
</tr>
<tr>
<td>Times exercising</td>
<td>.074</td>
<td>.676</td>
<td>.502</td>
</tr>
<tr>
<td>Hrs talking</td>
<td>.023</td>
<td>.202</td>
<td>.840</td>
</tr>
</tbody>
</table>

Predictors: (Constant), hrs exercise, times writing, abuse, gender, yrs working w/trauma, hrs talking.

Dependent Variable: Impact of Events. P=<.05.
VITA

Beth Carol Boone

Education and Licensures: Ph.D. in Counseling Psychology, Texas A & M, College Station, Texas, 2006; M.Ed. in Educational Psychology –University of Houston, Texas, 1988; B.A. in English Literature and Radio/Television/Motion Pictures –University of North Carolina, Chapel Hill, 1981. Licensed Professional Counselor –Texas State Board of Examiners of Professional Counselors; Psychological Associate –Texas State Board of Examiners of Psychologists.

DISD - Dallas, Texas. 2004-2005 School Year- APA internship. Provided psychological services in schools and youth and family clinics.

The Rape Crisis Center of Brazos County - September, 2002-February, 2004 – Counselor. Provided individual and group counseling for sexual assault survivors.

Texas A & M University– College Station, Texas -2000-2002 - Provided psychological services at the TAMU and Sam Houston State Student Counseling Centers.


Selected Presentations and Publications:

Lawson, D., Van Walsum, K., and Boone, B. (May, 2002). Interaction patterns of violent couples. Presentation on process research involving violent couples, presented at the Southwestern Association of Mental Health Professionals, Corpus Christi, Texas.


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