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Secondary Traumatic Stress in School Psychology Practicum and Internship Students

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SECONDARY TRAUMATIC STRESS IN SCHOOL PSYCHOLOGY PRACTICUM
AND INTERNSHIP STUDENTS

By

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SECONDARY TRAUMATIC STRESS IN SCHOOL PSYCHOLOGY PRACTICUM
AND INTERNSHIP STUDENTS

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Abstract

School psychology practicum and internship students increasingly engaged in activities in which they assisted children and clients who were survivors of various traumatic experiences. It has become apparent that the psychological effects of secondary traumatic stress (STS) extend beyond those directly affected and impact those in a variety of helping professions. Despite research that examined STS in various helping professions, gaps currently exist that describe STS in school psychology. In reported research, similar helping professionals engaged in school psychology service activities, which resulted in elevated STS symptoms and other adverse outcomes (Ravi et al., 2021). This study posited that school psychology students who worked with trauma in their practicum or internships exhibited higher STS symptoms and lowered professional satisfaction. Additionally, the relationships between STS, professional burnout, and compassion were examined. Lastly, the degree to which exposure and training predicted the amount of secondary traumatic stress and professional quality of life scores was assessed. The Secondary Traumatic Stress Scale (STSS; Bride et al., 2004) and the Professional Quality of Life Scale (PQLS; Stamm, 2010) were given along with an original demographic questionnaire to determine the impact of STS on participants. Results indicated that school psychology students' exposure to trauma during their practicum and internship experiences significantly predicted elevations in STS ($b = 4.30$), burnout ($b = 1.70$), and

compassion satisfaction ($b = 1.78$) while university training in topics related to STS were shown to decrease these variables ($b = -3.33; -1.25; -0.99$). No significant relationship between STS, burnout, and compassion satisfaction were found. The results indicated that school psychology practicum students and interns experienced elevated levels of STS, burnout, and compassion satisfaction as a result of their exposure to trauma work. Additionally, engaging in university training that addresses self-care, wellbeing, and responding to STS significantly decreased these variables. This implied that measures to address STS should be taken by university training programs and school psychology students in order to mitigate negative symptomology that may result from working with trauma.

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CHAPTER I

Introduction

School psychology graduate students engage in practicum and internship experiences essential to their educational background and training. While engaged in these experiences, school psychology practicum and internship students were exposed to various tasks that include evaluating, intervening, and providing therapeutic interventions to vulnerable populations. Some of the populations served included clients who were exposed to traumatic experiences. When school psychology students interacted with clients or students who were exposed to traumatic events, they were at risk for developing symptoms of secondary traumatic stress (STS). Initially redefined from vicarious traumatization to STS by Figley (1995), STS represented the emotional distress that resulted in becoming aware of the traumatic events of another.

To better understand the origin of STS research and delineate the differences between its current conceptualization, scholars focused on the operationalization of the term. They developed a unique categorization differentiating STS from other similar terms. Some of these similar terms included vicarious trauma, compassion fatigue, and burnout. Although these terms were similar, STS was differentiated by its similarity to post-traumatic stress disorder (PTSD) symptoms.

Literature about STS and its impact on related professions was described in a variety of sources, with particular emphasis on the medical and human service professions. The effects of STS on child healthcare professionals, social workers, and mental health professionals that work with children were described as having an impact across many areas of the professional's life, including psychosocial, work, and physical health effects. The impacts of STS on these related professionals were generalized to school psychology practicum and internship students. As many professional activities between these related professions overlap, school psychology students may be experiencing the same negative effects as their professional counterparts. Additionally, individual strategies (e.g., mindfulness, relaxation techniques, physical exercise, etc.) and system-level strategies (e.g., training, supervision, time-off, etc.) were explored to determine their impacts on professions related to school psychology. Recommendations for mitigating the negative effects of STS were included using both individual (i.e., person centered) and system-level strategies (i.e., organizational level). The most successful approaches were found to utilize a combination of both individual and system-level strategies.

CHAPTER II

Literature Review

Secondary traumatic stress (STS) has been defined as a natural, consequent behavior and emotion resulting from knowledge about a traumatizing event another experienced and wanting to help that person (Figley, 1995). As STS discourse and research increase, it is essential to understand the origins of STS as well as its defining characteristics. In its simplest form, STS was conceptualized as emotional distress that emerged from exposure to unmediated traumatic experiences of another individual. STS components and their related terminology were explored along with STS's effects on professionals in fields related to school psychology. Literature regarding exposure that school psychology practicum and internship students potentially endured, and the implications of STS exposure were surveyed. Lastly, literature related to the measurement of STS was explored.

Secondary Traumatic Stress and Related Terminology

There has been a marked increase over the past decade in the number of researchers who focus on the operationalization of terms related to STS (Meadors et al., 2010). However, as the literature increased, many researchers 'merged' terms associated with STS, which created conceptual confusion (Meadors et al., 2010). Many terms deviated from the original conceptualizations without justification for the changes (Bride,

2007). As a result, many of these associated identifiers were used interchangeably, though they possessed conceptual differences (Meadors et al., 2010). Researchers not having a consensus on the terminologies created confusion about the definition and measure of the constructs, which further increased inconsistencies in the field (Najjar et al., 2009). The concepts of STS, compassion fatigue, burnout, and vicarious trauma were explored in previous research that suggested slight differences between these terms (Huggard & Newcomb, 2017). Therefore, it was essential to distinguish between many terms in the literature related to STS, such as burnout, compassion fatigue, and vicarious trauma. Although often used as interchangeable terms, this study defined them as separate terms describing similar yet different phenomena.

Vicarious Trauma

In their previous research that described the effects of how traumatic work can affect mental health professionals, McCann and Pearlman (1990) coined the term “vicarious traumatization” that defined the transference of the client’s beliefs and assumptions related to traumatic experience to the therapist. As a result of their research, there was an increase in scholarly work on the effects and prevalence of vicarious trauma and its similar term STS among mental health workers (Bride, 2007; Pearlman & Caringi, 2009; Pryce et al., 2007).

As described by Pearlman and Saakvitne (1995), vicarious trauma was a cumulatively unwanted change in the mental health professional who engaged empathically with a trauma survivor’s narrative. Pearlman and Saakvitne (1995) noted

that cognitive changes in the clinician's personal or professional life affected their worldview, beliefs, values, and cognitive schema negatively.

While there was significant overlap in what the framers of STS and vicarious trauma attempted to describe, their theoretical foundations have since been described as dissimilar (Makadia et al., 2017). The fundamental difference between STS and vicarious trauma was described as the parallel STS has to PTSD, such as intrusion, avoidance, and arousal (Figley, 1995). In contrast, vicarious trauma initially involved disrupted beliefs concerning the self, others, and the world and did not concentrate on PTSD symptoms (McCann & Pearlman, 1990). Since then, other conceptual differences between vicarious trauma and STS emphasized by Thomas and Wilson (2004) stated that understanding the different nuances in these distinct phenomena was beneficial to researchers. They stated that a conceptual classification of these terms was necessary to make a proper classification of their impact on the helping process (Thomas & Wilson, 2004).

In addition to describing the definition of vicarious trauma, its negative impact was also explained in the literature. Ravi et al. (2021) stated that many people, including those that worked in the helping professions, healthcare, law enforcement, journalism, and law, encountered circumstances that resulted in their secondhand exposure to trauma. Ravi et al., (2021) elaborated that whenever helping professionals were exposed to client's secondary trauma, they were negatively impacted by internalizing these experiences. Hallinan et al. (2019) stated that certain professionals, such as first responders and victim assistance workers, were highly exposed to vicarious trauma and

traumatic experiences, increasing the likelihood of internalization. Hallinan et al. (2019) stated that vicarious trauma could lead to severe individual and organizational consequences if not addressed by trained professionals.

When faced with secondhand experiences, individuals compounded their own experiences or other shared experiences and increased the severity of their internalization (Ravi et al., 2021). The authors continued by stating that chronic exposure to secondary trauma can lead to vicarious trauma, where the individual internalizes the emotional experience of their clients as though that individual had personally experienced them (Ravi et al., 2021). As a result, Ravi et al. (2021) posited that an individual's vicarious trauma could cause a change in worldview and disturb a person's sense of justness and safety in the world. Several additional factors were noted by Ravi et al. (2021) that contributed to increased vicarious trauma internalization. These factors included a personal history of trauma, negative coping behaviors, a lack of social support, instability in non-work-related areas of one's life and working with a population that disproportionately experienced trauma. They also identified additional professional environment issues that increased vicarious trauma vulnerability, such as excessive workload, the unclear scope of work, and dissonance between institutional public-facing commitments to vulnerable populations and internal policies and incentives.

Vicarious trauma was shown to manifest in an individual's personal and professional life. Ravi et al. (2021) stated that a person who was usually affable and empathetic became increasingly irritable toward those they worked with, became distant

with family and friends, or even changed their parenting style (such as becoming overprotective of their children). This impacted mental health professional's work as well. Ravi et al. (2021) described how professionals became excessively worried about their clients, procrastinated completing important work, overreacted to unexpected environmental noises, experienced visual images of abuse-related injuries in settings outside of work, and found it challenging to watch previously tolerable entertainment such as shows or movies involving crime and violence.

Ravi et al. (2021) stated that having a support group assisted in identifying and confronting colleagues who may be experiencing vicarious trauma was important. Additionally, the authors stated that system-level change was necessary for preventing and addressing vicarious trauma because all staff, including auxiliary employees who did not work directly with clients, could also be affected (Ravi et al., 2021). Lastly, Ravi et al. (2021) stated that professional organizations should provide training to increase vicarious trauma awareness, inform employees of its various manifestations, and inform them of specific strategies to prevent and combat vicarious trauma. Additional strategies such as ensuring that employees had adequate supervision and support were described as essential, such as implementing organizational policies and procedures that ensured staff had well-balanced workloads, paid time off, and access to mental health resources vital to employees mental and physical health.

In addition, the Vicarious Trauma Organizational Readiness Guide (VT-ORG) and the Vicarious Trauma Toolkit (VTT) were developed to assist agencies and

employers with tools and resources to help prepare them to combat vicarious trauma (Hallinan et al., 2019). Hallinan et al. (2019) reported that the VTT was free of charge and could be downloaded online to help these agencies add to their repertoire and was formatted to assist a variety of professionals encountered vicarious trauma within their workplace. The resources that the VTT provided suggested a range of solutions for potential problems employers that range from low to high-cost suggestions or solutions that could be implemented within their organization (Hallinan et al., 2019).

To summarize, vicarious trauma could impact many professionals and employees from all walks of life, which in turn could cause detrimental effects to not only the employees themselves, but to the entire structure of the organizational makeup. However, it was essential to delineate the differences between vicarious trauma, secondary traumatic stress, and burnout as their definitions aid research in identifying the specific needs of employees and those who may experience these phenomena so that targeted assistance may be provided.

Burnout

Job burnout was described as a chronic form of work-related strain characterized by feelings of emotional exhaustion, depersonalization/cynicism, and reduced personal accomplishment regarding work (Maslach et al., 2001). Burnout was first recognized as a psychological problem among healthcare and service professionals in the 1970s (Pines & Maslach, 1978). Although considered a stereotype that affected older men (particularly in business), Nunn and Isaacs (2019) reported that burnout decreased with age.

Additionally, Nunn and Isaacs (2019) reported that women were more at risk than men, with intelligent, committed, single young women at the greatest risk.

While burnout was widely known, it was seen as an occupational state or hazard and not a diagnosis (Nunn & Isaac, 2019). Nunn and Isaac (2019) described burnout as having the same features as major depression or severe anxiety which occurred in an occupational environment. People particularly prone to burnout were described as empathetic high achievers who took patients' problems to heart (Nunn & Isaac, 2019). The National Association of School Psychologists (NASP; NASP, 2017) reported that most school personnel, including educators and school psychologists, were able to return to the typical school routine following a crisis scenario quickly and without formal mental health treatment; however, many individuals required additional intervention and support.

In the educational field, Taylor et al. (2021) reported that the nature of educational professionals' work often required educators to invest substantially in students, colleagues, and schools without receiving similar levels of mutual investment. In addition, Taylor et al. (2021) noted negative emotional, psychological, and professional repercussions when teachers felt that their investments were not reciprocated. Together, the chronic lack of mutual investment predicted the three significant components of burnout, which compounded the negative feedback loop that ultimately led to burnout syndrome (Mearns & Cain, 2003). School psychologists, who are educational professionals, had an increased risk for burnout as school psychologists

were tasked with providing crisis intervention and additional mental health support to the school community (NASP, 2017).

Taylor et al. (2021) stated that chronic stress and burnout in educators was associated with increased rates of a variety of mental and physical health problems, including clinical depression, reduced immune system functioning, obesity, cognitive aging, and multiple types of cancer. Burnout syndrome was described by Taylor et al. (2021) as typically involving a depletion of one's emotional resources to cope with stressors (i.e., emotional exhaustion) and was defined by feeling cynical, irritable, having a negative attitude toward work (i.e., depersonalization), and reduced self-efficacy and productivity (i.e., personal accomplishment). Taylor et al. (2021) further suggested that teachers were susceptible to this phenomenon as one-third of teachers reported being "stressed" or "extremely stressed," and that up to 45% of teachers experienced burnout at some point during their careers. Due to this high percentage of reported burnout, Schaufeli and Enzmann (1998) concluded that teachers made up the largest vocational subgroup in burnout literature and that addressing teacher stress and burnout constituted a significant public health issue.

Research consistently demonstrated the association between burnout and work-related factors (Shoji et al., 2015). Meta-analytical studies by Shoji et al., (2015) suggested significant relationships between job burnout and risk factors such as high job demands (e.g., workload, role conflict) or diminished job resources (e.g., control,

autonomy at work). Additionally, another critical factor of burnout was years of work experience, culture, job ambiguity, and supervisor support (Shoji et al., 2015).

Nunn and Isaacs (2019) described burnout as impacting those it affected by making them feel depersonalized, ineffective, exhausted even after resting, showing signs of insomnia, and having a lack of achievement in one's life. Those affected with burnout were described to report feeling ineffective even when they achieved a good outcome (Nunn & Isaacs, 2019). Additionally, clinicians in healthcare fields affected by burnout were described as rendering less effective work over time (Nunn & Isaacs, 2019).

A variety of literature was found describing factors that increased or decreased burnout's severity. Nunn and Isaac (2019) described personal health as a critical component to combating burnout. People whose health status was fair or poor were ten times more likely to suffer burnout than people in good health. It was also found that holding long and unhealthy work hours, such as working longer than 14 consecutive hours, was a significant risk factor (Nunn & Isaac, 2019). Unsurprisingly, burnout was more likely to manifest in more stressful working environments than in more relaxed and peaceful environments (Nunn & Isaac, 2019). Additionally, Nunn and Isaac (2019) noted increased stress associated with burnout in healthcare professionals such as psychiatry, emergency medicine, and intensive care staff due to the demanding work of these professions. Nunn and Isaac (2019) also found that stress from burnout was compounded by poor workplace practices, including people in power who imposed burdensome duties

on staff who were powerless to resist, thus making it difficult or impossible for the staff to discuss or voice their concerns.

Burnout was reported in the education field, but methods for addressing burnout were not pervasive (Taylor et al., 2021). Shanafelt et al. (2017) recommended a variety of ways to address the problem of burnout on both the individual and organizational level and called for a coordinated effort to address burnout on a national, state, organization, leader, and individual level.

At the individual level, Nunn and Issac (2019) reported a variety of methods to fight against burnout that included reading relaxing material unrelated to work before sleep, avoiding over-exposure to upsetting news that they were powerless to change, not using alcohol as a sedative, and reducing caffeine consumption a few hours before bedtime. Additionally, Nunn and Isaac (2019) found that good sleep protected against both burnout and depression and that enduring sleep problems suggested more severe psychological problems. Recommendations for combatting burnout included spending time with family, talking about burnout with a trusted individual, engaging in work activities that were enjoyable, avoiding work that was stressful, engaging in regular exercise, engaging in a creative endeavor, listening to music, enjoying humorous entertainment, and doing philanthropic activities that benefited others (Nunn & Isaacs, 2019).

Similar to Nunn and Isaac's (2019) strategies, additional individual-level strategies were presented by NASP (2017) in order to assist school psychologists,

educational workers, and crisis intervention teams reduce burnout. The first strategy presented was physical self-care, which included maintaining a healthy diet, adequate sleep, taking breaks during the workday, exercising to reduce stress, limiting the use of alcohol or other substances for sleeping and relaxation, and engaging in various physical stress management techniques such as using relaxation or deep breathing. The second strategy NASP (2017) presented was engaging in emotional health awareness and monitoring signs of secondary trauma. Other recommendations by NASP included knowing one's own limitations, accepting fewer responsibilities, using time management strategies, practicing one's spiritual or religious faith, engaging in preferred hobbies, maintaining daily routines, staying connected with friends or family, and listening to soothing music.

Additionally, NASP (2017) reported that stress was reduced by engaging in activism or advocacy work. School psychologists and educators were encouraged to engage in debriefing stressful events with other caregivers or colleagues at the end of each day and when crisis response and recovery efforts were concluded (NASP, 2017).

Further intervention research conducted by Panagioti et al. (2017) evaluated the effectiveness of interventions that reduced burnout in physicians. Panagioti et al. (2017) examined which types of interventions (physician-directed or organization-directed interventions), physician characteristics (length of experience), and health care setting characteristics (primary or secondary care) were associated with improved effects. In their randomized clinical trials, the researchers determined that recent intervention

programs for burnout in physicians (individually targeted interventions) were associated with minor benefits that were boosted by adopting organization-directed approaches (Panagioti et al., 2017). In their conclusion, Panagioti et al. (2017) supported the view that burnout was a problem of the whole health care organization, rather than individuals, and that a combined effort between individuals and organizations was the most effective method of combating burnout.

Individual interventions identified as effective against burnout and stress were mindful-based interventions (Fendel et al., 2021). The application of mindfulness in teaching to reduce stress and promote wellbeing has become a popular endeavor during the past decade (Hwang et al., 2017). In their research, Fendel et al. (2021) described reductions in burnout and stress for physician participants who engaged in mindfulness-based interventions that resulted in burnout reductions maintained an average of 5.3 months later. In addition to research that targeted physicians and medical professionals, evidence also suggested the effectiveness of mindful-based interventions on teacher stress and burnout (Taylor et al., 2021). In their research, Taylor et al. (2021) demonstrated that mindfulness-based interventions combat teacher stress and burnout and that brief sessions (6 hours across four sessions) effectively reduced self-reported stress, and burnout.

Although burnout was reported to be widespread, with as many as 21% to 67% of providers reporting high levels of burnout (Morse et al., 2012), and one-third of educational professionals reporting being highly stressed (Taylor et al., 2021), it was essential to understand the differences in the definition of burnout and STS. Although

burnout was described as a component of STS, burnout did not fully describe STS symptoms, and therefore it was considered a separate construct. In fact, by conceptualizing burnout as different from STS, researchers were then able to identify practical interventions (Shoji et al., 2015).

Shoji (2015) separated the conceptual difference between burnout and STS and found that burnout predicted STS, but STS was not a predictor for burnout. Therefore, separating conceptualization differences between the two terms was beneficial, and Shoji called for more research to be done in this area. For the use of this study, burnout was conceptualized as a psychological syndrome in response to chronic interpersonal stressors on the job and was defined by three dimensions of exhaustion, cynicism, and inefficacy (Maslach et al., 2001). A further key differences between the terms burnout and STS were that burnout occurred across all professions regardless of whether these professions had exposure to persons with traumatic experiences or not (Sodeke-Gregson et al., 2013).

In contrast to burnout, Devilly et al. (2009) described STS as being nearly identical to PTSD, except STS affected those emotionally impacted by the trauma of clients. Some researchers believed that the ‘burnout’ component should have been eliminated from the definition of STS as it was ‘arbitrarily attached’ to the original theoretical focus of STS (Salston & Figley, 2003). Additionally, STS was not correlated with the Maslach Burnout Inventory (MBI), which was a well-validated measure of burnout and respected within the field (Devilly et al., 2009). In summary, the theoretical

framework proposed by Bride et al. (2007) described the differences best by noting that STS was a construct that was distinct from burnout.

Compassion Fatigue

Introduced by Figley in 1995, compassion fatigue was described as a more user-friendly term for the negative symptoms of secondary traumatic stress disorder (Devilly et al., 2009). Although compassion fatigue was introduced to describe the adverse effects of STS, some researchers still used STS and compassion fatigue interchangeably, which caused confusion (Meadors et al., 2010). Although there was still debate on the differences between compassion fatigue and STS, compassion fatigue was described in the literature as a form of caregiver burnout (Devilly et al., 2009). Research reported by Figley (1995) who created the Compassion Fatigue Self-test, showed that compassion fatigue was determined by the level of exposure with traumatized clients and was characterized by professionals' inability to empathize with the client. In contrast, Huggard and Newcomb (2017) defined compassion fatigue as the adverse effects experienced by health professionals who discussed traumatic experiences with others. Additionally, research suggested that compassion fatigue was correlated with the attrition of several helping professions, such as healthcare workers, mental health professionals, and social workers (Bride 2007). In the same way burnout affected a person's feelings towards their profession, compassion fatigue affected a person's feelings towards continued work with a client.

Zhang et al. (2018) indicated that although the terms compassion fatigue and STS were used interchangeably in the literature, they were separate conditions with different etiology, prevalence, symptoms, and treatment efficacy. According to Heritage et al. (2018), compassion fatigue represented the adverse outcomes when someone helped others, while compassion satisfaction represented positive outcomes. Both the negative (compassion fatigue) and the positive (compassion satisfaction) were measured by the Professional Quality of Life Scale and used to create the participants' compassion satisfaction score (Stamm, 2010). Further, Zhang et al. (2018) characterized compassion fatigue as the progressive and cumulative outcome of prolonged, continuous, and intense contact with patients, self-utilization, and exposure to multidimensional stress that led to compassion discomfort that exceeded normal professional endurance levels. Using criterion that distinguished compassion fatigue from STS, Zhang et al. (2018) conducted research that demonstrated that when compassion fatigue set in, it compromised an essential component of compassionate care and resulted in worse clinical and patient outcomes. In their meta-analysis, Zhang et al. (2018) showed a strong correlation between compassion fatigue and burnout, whereas compassion satisfaction had a weak correlation with burnout. Factors such as stress positively correlated with compassion fatigue, while positive affect had a moderately positive relationship with compassion satisfaction. Lastly, Zhang et al. (2018) concluded that sociality and social support reduced compassion fatigue in nurses.

In educational research, Perez-Chacon et al. (2021) examined compassion fatigue during the COVID-19 health emergency which suggested sensory processing sensitivity was a risk factor for increased levels of compassion fatigue in educators. The findings from Perez-Chacon et al. (2021) demonstrated that the prevalence of burnout and compassion fatigue in health care and educational professionals was significant, and that displaying compassion fatigue was an emerging psychosocial risk in education made more severe by the COVID-19 pandemic (Perez-Chacon et al., 2021). Additional risk factors during the COVID-19 pandemic were identified by Yang (2021) who found that seasoned Caucasian educators reported higher levels of compassion fatigue than their counterparts. Additionally, self-efficacy had a negative and significant association with compassion fatigue (Yang, 2021). Moreover, the negative association between the perceived online teaching of self-efficacy and compassion fatigue was intensified among educators with a higher level of social emotional learning competencies (Yang, 2021). These findings related to compassion fatigue during the COVID-19 pandemic highlighted the importance of continued research in this area in order to prevent compassion fatigue in educators. Research such as this demonstrated that further risk factors from novel societal adversities could further increase the risk of professionals developing compassion fatigue.

Concerning additional ways to combat compassion fatigue in behavioral health specialists, Craig and Sprang (2010) explored evidence-based practices that reduced trauma and compassion fatigue. Additionally, Craig and Sprang (2010) noted that age and

experience were factors in reducing compassion fatigue in behavioral professionals. More experienced and older professionals had less self-reported compassion fatigue levels as evidenced by scores on the Professional Quality of Life Scale (Craig & Sprang, 2010). Additionally, findings by Eastwood and Ecklund (2008) showed that residential treatment center workers had reduced compassion fatigue when self-care strategies were used that included components of bio-behavioral, affective-cognitive, relational, and spiritual components.

In addition, understanding the differences between compassion fatigue and STS led to improved identification and measurement (Shoji et al., 2015). Therefore, the conceptualization of STS for the current study was based on the reconceptualization by Salston and Figley (2003), who defined STS as a syndrome of symptoms parallel to post-traumatic stress disorder and dissimilar to compassion fatigue. STS differed from PTSD in that the PTSD symptoms did not manifest from the direct personal experience of trauma but rather from indirect exposure. Given that these two phenomena occurred parallel to each other, symptoms of STS and PTSD had similar presentations. Symptoms resulting from STS included hyper-arousal, hyper-vigilance, numbing, disengagement, disidentification with clients, dissatisfaction with work and their organization, and home-life (Caringi et al., 2016). This framework ultimately delineated compassion fatigue from STS by symptomology. The key difference between compassion fatigue and STS symptomology was that compassion fatigue was originally defined as emotional

exhaustion due to working with clients of trauma while STS also included symptoms that mirrored PTSD.

Secondary Traumatic Stress in Mental Health and Related Professions

In mental health and helping professions, STS, compassion fatigue, and burnout were identified as workplace-based challenges (Pearlman & Caringi, 2009) and occupational hazards (Huggard et al., 2013). As a result, the costs of these exposures to trauma on mental health professionals were thought to be immeasurable (Pearlman & Saakvitne, 1995). Many mental health professionals advocated for increased resources such as enhanced clinician training and treatment options devoted to preventing and treating STS (Tyson, 2007).

Researching mental health workers' STS was warranted because of the high frequency of indirect exposure to traumatic events that, in turn, increased mental health professionals' risk of developing STS (Elwood et al., 2011; Shoji et al., 2015). Common themes within the STS literature were how to prepare professionals to face the possibility of developing STS and how to curb the harmful effects of STS (Bride, 2007; Laurent & Wright, 2020; Makadia et al., 2017; Teel et al., 2019). Professionals in related human service fields such as social workers (Bride, 2007), child protective service workers (Bride & Jones, 2007), military health providers (Cieslak et al., 2013), and general trauma therapists (Elwood et al., 2011) were at risk for developing STS symptoms. Researchers also found the existence of STS symptoms in medical fields, including nursing (Christodoulou-Fella et al., 2017), medical doctors (McCain et al., 2018), and

trauma physicians (Teel et al., 2019). Furthermore, soldiers, children, and other professionals in the workplace experienced the psychological effects of STS (Laurent & Wright, 2020). However, there has been little to no research documenting the effects of STS on school psychologists and school psychology practicum and intern students who provided supervised services to children.

Additional features of burnout and STS were described by NASP (2017) in an effort to reduce potential negative effects following a school crisis. NASP (2017) described STS signs and symptoms as being either physical reactions, emotional symptoms, and/or social or interpersonal withdrawal or isolation. Regarding physical reactions, these included chronic fatigue and exhaustion as being the most frequently reported (NASP, 2017). Sleeping and eating problems, headaches, stomachaches, or muscle tension were also experienced and when these symptoms occurred, additional support and intervention were likely needed (NASP, 2017). However, NASP (2017) also postulated that other signs of STS were not evident among school psychologists, such as having trouble paying attention, confusion, constantly being on the lookout for danger, or easily being startled.

Emotional symptoms related to STS were also outlined by NASP (2017) and included excessive worry or anxiety about crisis victims the professional recently worked with, disconnection or numbing, extreme anger at a given situation related to their work, and demoralization or resignation. Additionally, some individuals experienced recurrent crisis thoughts or distressing dreams, a constant replaying of the events, and even some

confusion on making everyday decisions (NASP, 2017). Some school psychologists or educators experienced extreme depression with hopelessness or suicidal thoughts that caused them to self-medicate their emotional symptoms with increased drug or alcohol use (NASP, 2017).

Lastly, NASP (2017) outlined several social or interpersonal signs that served as identifiers for individuals who experienced STS. These signs included difficulties in relationships, at home or work, irritability, outburst of anger, social withdrawal or isolation, attempts to overcontrol at work, behavior, absenteeism, arguments with other staff, or shortened patience with students or clients (NASP, 2017).

School psychology intern and practicum students engaged in many activities that mirror licensed professional work. Given that these activities were similar to professional work, this study inferred practicum and internship students were also vulnerable to STS. Figley (1995) identified several reasons why counseling professions were vulnerable to STS. First, empathy was beneficial for trauma workers to help the traumatized, but it also made workers vulnerable to countertransference. Countertransference occurred when a counselor redirected feelings toward a client and became emotionally entangled with the client (Leiken, 2020). Figley (1995) went on to state that many trauma workers experienced trauma in their own lives, and boundaries needed to be maintained between trauma workers and clients in order to reduce countertransference. If boundaries and limitations were not maintained, even one specific event could have led to a rapid onset of STS symptoms (Figley, 1995). Lastly, Figley (1995) noted that if the trauma was like

the helping professional's own previous trauma, the helping professional's trauma was reactivated.

A study conducted by Ivicic and Motta (2017) examined STS in 88 psychologists, social workers, mental health counselors, and creative arts therapists and reported that up to 27% of the participants had symptomology for secondary traumatization. Additionally, Bride (2007) studied the prevalence of STS in licensed social workers in Georgia and found that 70% of practitioners demonstrated elevated STS scores due to their work with traumatized populations. In the same study, Bride (2007) found that some of the social workers met the criteria for PTSD according to the Secondary Traumatic Stress Scale (STSS).

Furthermore, research related to health science librarians suggested that professionals who reviewed and provided health-related literature to trauma victims were at risk for STS (Becker & McCrillis, 2015). Thus, STS was not described as unique to professions often viewed as first responders and likely existed in several fields that supported first responders. Therefore, it was concluded that school psychology students engaged in many activities that were, at a basic level, similar to health science librarians, and those activities occurred before the student's practicum and internship classes. This was because, during school psychology training programs, students underwent both behavioral and academic school-based consultations, some of which dealt with complex subject matter, such as trauma. School psychology students both read distressing texts

related to psychological disorders and engaged in supervised interactions with these populations.

With regards to professionals that worked exclusively with children, Caringi and Hardiman (2012) examined STS in child welfare workers and found that child welfare workers demonstrated STS symptoms (Caringi & Hardiman, 2012). Caringi and Hardiman (2012) found that 75% of workers and supervisors experienced significant levels of STS, and more than 50% had symptoms that mirrored PTSD. Further, Ting et al. (2011) found that in a sample of 285 master's level social workers, there were increased STS symptoms in those who had recently worked with clients with suicidal behavior. Thus, they demonstrated the temporal relationship between interaction with trauma exposure and STS presentation.

Practicum and internship have been regarded as fundamental aspects of school psychology students' education, oftentimes marking their first foray into professional life. In general, students and trainees who worked with populations that experienced trauma were likely to experience the deleterious effects of STS. Researchers and leaders in mental health training called for the inclusion of trauma in the curriculum for all mental health training programs as current training programs were insufficient in this area (Courtois & Gold, 2009). Research suggested that early-career professionals who worked with individuals experiencing trauma had more difficulties or felt overwhelmed as they had limited skills and life experiences (Cunningham, 2014). Butler et al. (2017) recently surveyed 195 students in a graduate social work program and found that all students

reported exposure to trauma in their field placements or coursework. Additionally, Butler et al. (2017) reported that the more graduate students in social work were exposed to trauma, the more likely the students were to report increased subsequent STS and burnout levels. Nearly all the graduate students in social work reported that clients had experienced trauma to some extent, even if their setting was not clinical. The students in the Butler et al. (2017) study demonstrated symptoms of fear, helplessness, horror, or reactivation of upsetting thoughts and feelings from their histories in reaction to the trauma-infused curriculum. Of importance, self-care was a mitigating factor. Lastly, Butler et al. (2017) reported that the graduate students in social work recognized negative symptoms of trauma exposure within themselves but made no attempt to engage in self-care.

If graduate training programs were not providing strategies to reduce STS, the training program's students may be less likely to know effective methods for reducing STS, such as self-care. Without instruction, some mental health students engaged in counterproductive strategies in response to trauma exposure. For instance, Didham et al. (2011) showed that 52 of 58 social work practicum students reported having severe traumatic exposure, and every social work student reported changes in sleeping, eating, concentrating, psychoactive substance use, confidence, and academic performance as a result of attending practicum. Surprisingly, some of the distressing events were the result of the actions and behaviors of not only social work students' clients but of the social work students' field instructors or faculty consultants (Didham et al., 2011). In this

instance, 29 of the 58 social work students surveyed in the Didham et al. (2011) study reported a range of distressing supervisor or colleague interactions that included being physically intimidated, verbally intimidated or threatened, yelled at, or sexually harassed. For social work students that were sexually harassed by their colleague or supervisor, the social work students reported increased negative outcomes as opposed to being sexually harassed by a client (Didham et al., 2011). Further highlighting the importance of experience and training, Bager et al. (2008) found evidence that youth and less experience as a mental health professional was associated with more significant secondary trauma symptoms or disrupted beliefs. This highlighted the importance of not only students understanding the effects of STS but also the origins of the traumatic exposure.

In Bober and Regehr's (2006) study exploring strategies for reducing STS in 259 mental health workers, the authors demonstrated that mental health students' belief in the usefulness of coping strategies such as self-care, supervision, and leisure activities did not translate into time devoted to those activities. Additionally, the researchers suggested no relationship between traumatic stress and time devoted to coping strategies (Bober & Regehr, 2006). This suggested that even though some mental health professionals experienced elevated STS, mental health workers were not engaged in activities that would reduce the adverse symptoms, even when they believed that engaging in these activities would reduce their STS. Similarly, educators recognized signs of STS but often did not engage in positive strategies to alleviate their symptoms (Hydon et al., 2015).

Hydon et al. (2015) reported that the impact of STS on educators' personal and professional life was devastating and that simply acknowledging the signs of STS was the first step in ameliorating its effects. School psychology practicum and internship students were similar to the mental health workers in this study in that they believed in the beneficial effects of coping strategies, yet they may not have engaged in these activities without guidance.

In addition to the research demonstrating the deleterious effects of STS, researchers attempted to identify STS protective and risk factors (Makadia et al., 2017). Theorists proposed that individual and situational factors influenced vulnerability or adaptability to STS (Pearlman & Saakvitne, 1995). These factors included gender, age, personal history of trauma, experience as a mental health professional, coping strategies, support from others, supervision, and trauma-specific training (Makadia et al., 2017). Research by Bride et al. (2004) also demonstrated that hospital mental health professionals' STS levels were mitigated by emotional separation, serving as a protective factor. Therefore, preemptively teaching mental health workers how to differentiate from their patients and maintain a balance of healthy emotional distance at the onset of their work helped reduce STS symptoms (Bager et al., 2008).

Exposure to Traumatic Events and Effects in Practicum and Intern Students

School psychology practicum and intern students were much like other service professions in that practicum and intern students were exposed to hearing about children and client trauma which negatively impacted their wellbeing. Given the proposed

constructs of STS, many mental health trainees experienced the symptoms of working therapeutically with trauma clients (i.e., shock, confusion, anger, guilt, shame, withdrawal, and other adverse symptomologies; Makadia et al., 2017). Practicum students and interns who engaged in supervised school psychology service provision were also subject to high-stress scenarios. These practicum and internship students witnessed the impacts of trauma on children and their families like other human services and educator professionals, and according to Makadai et al. (2017), they experienced increased vulnerability to STS. Furthermore, fledgling mental health workers experienced poor mental health or general psychological distress as Walsh and Walsh (2001) outlined due to the demanding nature of their work.

As school psychology trainees worked in the schools with other educators, practicum and intern students were often used as part of frontline response teams that responded to crises and traumatic events. School psychology practicum and intern students experienced a plethora of traumatic events, which included physical assault (41%), child maltreatment (14%), and witnessing violence both inside and outside school (25%; Finkelhor et al., 2013). Additionally, national data showed that public schools experienced 1,183,700 violent crimes on campus and threats of physical attacks at a rate of 25 per 1,000 students (Institute for Educational Sciences, 2015). Furthermore, school communities were affected by other traumatic incidents such as school shootings, terrorist attacks, natural disasters, and other traumas such as student suicides (Hydon et al., 2015). Anywhere from 40% to 81% of the general population in the United States

experienced or witnessed a traumatic event (Breslau et al., 1997). Hydon et al. (2015) found that many frontline personnel were not adequately trained to respond to students' psychiatric needs, resulting in higher stress responses and lower effectiveness.

Ultimately, researchers reported that school personnel who provided socio-emotional supports for students following a crisis found themselves at a higher risk for compassion fatigue and STS (Hydon et al., 2015).

Bride (2004) stated that psychosocial mental health services providers were likely to come into professional contact with persons who experienced one or more traumatic events. Additionally, Bride (2004) suggested that while providing service to traumatized populations, mental health service providers shared the emotional burden of the trauma, witnessed damaging cruel past events, and acknowledged the existence of terrible events in the world. Mental health service providers in all areas, including school psychology practicum and internship students, were sometimes tasked with assisting students in describing and working through traumatic experiences. The impact of traumatic exposure resulted in the emergence of STS symptoms (Figley, 1995).

In their frontline response role, school psychology practicum and intern students worked directly with students to assist with their emotional, academic, and psychological needs in response to traumatic events. Even amid the COVID-19 pandemic, the National Association of School Psychologists (NASP) expected school psychology interns and practicum students to complete 800 hours of direct field-based experiences working with students. (NASP, 2020). Many of these practica and internships occurred in the settings

where students and children attended face-to-face classes in school, despite uncertainty regarding rapidly changing pandemic guidelines. Therefore, it was inferred that school psychology interns continued to meet with students who experienced traumatic events even amid a novel global crisis.

Because frontline personnel working in education were actively reaching out to help students dealing with trauma, they were at a heightened sense of empathetic awareness, making them more vulnerable to STS and caused them to neglect their own needs and emotions (Hydon et al., 2015). Interactions with traumatized populations resulted in a manifestation of the essential components of STS, which were: (1) frequent and intense encounters with clients; (2) physical and mental fatigue states; (3) challenges to values, beliefs, and worldviews; (4) exposure to traumatized clients; and (5) elevated stress responses (Thomas & Wilson, 2004). Some of these components included elements of burnout, along with feelings of disillusionment, isolation, and emotional distancing that also occurred with both STS and burnout (Figley, 1995). Evidence suggested that members of school support teams experienced a lack of recognition and responsive services targeting their wellbeing despite suffering significant emotional consequences that ultimately impaired their functioning (Hydon et al., 2015). In addition to diminished effectiveness, evidence suggested that STS contributed to the manifestation of depression and anxiety disorders (Ahola et al., 2005).

As a result of working with traumatized clients and students, NASP (2017) reported that school personnel such as school psychology interns were at risk for multiple

long-term consequences that included illness and burnout as a result of feeling their needs were neglected following acts of violence and other crises. In addition, school psychology interns sometimes felt responsible for meeting the mental health needs of the students even when they lacked the necessary training and expertise to do so (NASP, 2017). The importance of traumatic events being acknowledged and normalized by both school leadership and mental health staff was also noted by NASP (2017).

Although the literature demonstrated the adverse effects of STS on educators, there has not been a significant increase in training and support for educators at risk for STS symptoms. For instance, Courtois and Gold (2009) cited prevalence and lack of adequate resources as creating difficulties for both clients and professionals. Expanding the availability of trauma education for a wide range of professionals was suggested as a possible recourse for combating the lack of trauma training across a wide array of professions (Courtois & Gold, 2009).

Although there was a distinct lack of adequate resources, such as the inclusion of trauma curriculum in graduate mental health programs, noted by Courtois and Gold (2009), some professional agencies such as NASP provided guidance for educators and school psychology professionals. NASP (2017) reported that opportunities for school personnel to access assistance from crisis responders and mental health professionals must be planned for and provided when needed. Additionally, immediate support and action from administration in reducing STS in school personnel was vital for shorter recover periods (NASP, 2017). Another way NASP (2017) noted that administrators

could support their staff was by ensuring that there were enough crisis team responders and mental health staff to both carry out the crisis plan effectively and to provide needed intervention in the days and weeks following a crisis. Administrators should have promoted a culture in which the educators and school psychologists in the workplace felt comfortable asking for help and taking a break (NASP, 2017). At the same time, school leadership needed to ensure that this was not perceived as an inability to do their jobs, rather an essential component of effective workplace functioning. Additionally, NASP (2017) stated that administrators were aware of the potential stigma that school personnel could face when accessing mental health services and endeavored to minimize this problem (NASP, 2017).

In addition to school psychologists and educators receiving support from school administrators, NASP (2017) recognized the importance of having administrators acknowledge the exhausting nature of mental health work within schools and the impact it has on school personnel. Participation as a crisis responder was itself a risk factor for STS and personnel experienced some form of personal impact after their involvement in this type of work. Various strategies, such as debriefing with other responders following difficult circumstances, shortening work shifts of crisis members, and rotations between more intensive and fewer intensive crises were recommended (NASP, 2017). Lastly, NASP (2017) highlighted that the provision of coverage for day-to-day duties of crisis response team members would also be helpful so that there was not a backlog of work once the crisis response concluded.

Negative Outcomes of STS

STS led to adverse outcomes that directly affected the clinician or student and impacted their health, work, personal, family, and other areas of their lives (Armes, 2020). Lee et al. (2018) suggested that STS mediated the relationship between clinicians' exposure to trauma at work and lowered perceptions of their physical health. Additionally, Armes (2020) stated that these lower perceptions of health were linked to an increase in unhealthy habits. In a similar study, researchers showed a positive correlation between increased tobacco and alcohol use in child abuse investigators and STS symptomology (Bourke & Craun, 2014). Comparably, Griffiths et al. (2018) found that increased stress due to child protection work was associated with workers' increase in unhealthy habits and poor physical and mental health. Physical problems noted by Griffith's et al. (2018) included coronary heart disease, acute myocardial infarctions, poor survival from cardiac events as well as changes in the immune and nervous systems. Furthermore, a research sample from telephone crisis workers indicated that psychological stress was positively correlated with impairment at work up to one week after exposure to a traumatic event (Kitchingman et al., 2018).

In addition research that noted STS negatively affected child clinicians' physical and psychological health, evidence also that suggested STS negatively impacts professional's workplace satisfaction. Bride (2007) showed that higher STS was negatively correlated with child protective workers' intentions to stay in their current work. Similarly, a study conducted in Israel by Itzick and Kagan (2017) found that child

welfare workers reported significantly higher intentions to leave their work due to their experiences than health care social workers. Additionally, these researchers found evidence that child welfare workers reported higher levels of fear that they would be subjected to violence through their work, pointing to unique factors of child welfare work that might heighten their risk for trauma and STS (Itzick & Kagan, 2017). In a study that examined five different child welfare agencies, child welfare workers who had elevated STS also had corresponding elevated intentions to leave their work (Middleton & Potter, 2015). In addition to the high prevalence of STS reported in the child welfare worker literature, Armes et al. (2020) reported that positive associations of psychological and physical distress, development of unhealthy habits, and turnover rates demonstrated that the negative experiences these workers had with STS are costly to both the professional workforce and the individual.

In addition to the negative work aspects of STS on child clinicians, Armes et al. (2020) expanded the literature to show that clinicians' self-reports of personal trauma in childhood and as an adult was associated with increased distress and impairment. Armes et al. (2020) suggested that social workers working with traumatized children or clients with a childhood trauma history may be reminded of their own personal trauma and consequently have heightened levels of distress and impairment across multiple domains (e.g., personal, professional, interpersonal, etc.).

Measuring Secondary Traumatic Stress

As the research demonstrating the importance of STS grew, researchers began to develop and refine measurement procedures used to detect STS. STS research has primarily employed the use of surveys that measure the degree of disrupted beliefs and trauma symptomology (Makadia et al., 2017). As an emerging field of study, much of the research has been theoretical, anecdotal, or descriptive in nature (Jorgensen, 2012). Indeed, many of the studies conducted focused on the nature, prevalence, measurement, and etiology of STS (Bercier & Maynard, 2015), and at the time of this study, no published research was found examining these topics within the field of school psychology.

Recent studies examining the prevalence of STS employed the distribution of physical or digital surveys. Many of these studies utilized the STSS (Bride et al., 2004), the Professional Quality of Life Scale (PQLS; Stamm, 2010), and a mixture of study-specific demographic questionnaires. The STSS has been used with a range of professionals such as nurses, psychologists, rescue workers, physicians, social workers, and victim advocates (Aisling et al., 2016; Argentero & Setti, 2010; Benuto et al., 2018; Kellogg et al., 2018). Regarding the use of the PQLS, several studies exist surveying STS in therapists, nurses, military combat deployment providers, pharmacists, and midwives (Cragun et al., 2016; Higuchi et al., 2016; Kalhori et al., 2019; Mizuno et al., 2013; Sodeke-Gregson et al., 2013). The breadth of professions surveyed using both the STS

and the PQLS was considerable and suggested that these measures would be appropriate for school psychology practicum and intern students.

During this study, school psychology trainees were engaged in many stressful activities that affected their overall stress and health. These activities included being a part of a crisis team, providing counseling and therapeutic services to traumatized students, engaging in conflict resolution, disability diagnosis, and responding to various unplanned challenges within the school. This study attempted to understand the impact of school psychology practicum and interns demanding work and how these environments influenced wellbeing. Researchers noted how essential it was for improving health service students' physical wellbeing and reducing other long-term effects, such as career burnout (Swords & Ellis, 2017). This study sought to increase the body of empirical support related to STS and school psychology students.

Purpose

The purpose of this study was to investigate the relationship between school psychology students' experiences, STS, burnout, and compassion satisfaction. Given the dearth of research examining the presence and effects of STS among school psychology trainees, this study sought to fill a seemingly overlooked gap in the research.

Furthermore, the findings had the potential to partially address the critical school psychology workforce shortage (NASP, 2016) by better preparing students for the trauma and stress experienced in the field, thereby potentially reducing burnout among school psychologists. The research questions for this research study were: Does exposure to

traumatic experiences during school psychology students' practicum and internship year result in higher STSS and PQLS scores? To what degree does STS correlate with burnout and compassion satisfaction among school psychology practicum and internship students? To what degree does exposure to trauma and university training in self-care, wellness, and responding to STS predict STSS, PQLS burnout, and PQLS compassion satisfaction scores?

This study hypothesized that school psychology students exposed to traumatic experiences during practicum and internship would yield higher STSS and PQLS scores. Additionally, it was hypothesized that STS is positively correlated with both burnout and compassion satisfaction. Lastly, it was hypothesized that exposure to trauma during practicum and internship and university training covering topics related to self-care, wellbeing, and responding to STS would predict changes in participants' STSS and PQLS scores.

CHAPTER III

Method

Participants

Participants for this study were recruited as volunteers through emails and through social media outlets. Emails were sent to program directors of NASP approved school psychology training programs across the nation listed on the NASP website of approved training programs. Emails requested the dissemination of information about the study to currently enrolled school psychology graduate students. Emails were also sent to the Utah Association of School Psychologists' listserv requesting school psychology graduate student members to volunteer as participants. Additionally, school psychology students who were members of the Facebook groups "LSSP Support Group," the "Psychology and Statistics: Early Career Researchers and Student's Forum," and "Psychology Students Net" were invited to participate. The solicitation emails and social media postings included a link to the research study website which included the survey link, the participant selection criteria, and the consent for participation. The selection criteria required that participant's be at least 18 years old and currently enrolled in a graduate school psychology program. All participants who met the inclusion criteria were allowed to participate in the study.

Seventy-five graduate school psychology students, 17 males and 58 females, who met the inclusion criteria were selected to participate in the study. Of the 75 participants, 13 participants submitted incomplete surveys, and thus, were excluded. The remaining sample of 62 participants, 10 males (16%) and 52 females (84%), who submitted a completed survey were included in the data analysis for this study.

A portion of the survey collected demographic data (see Table 1). The ethnicity of the final 62 participants were 40 Caucasian (64.5%), 18 Hispanic (29.1%), two African American (3.2%), one Swedish American (1.6%), and one Other (1.6%). Geographically, one participant (1.7%) reported being located in the Central region (Illinois) of the United States, two (3.3%) reported being in the Northeast region (New Jersey), 28 (45%) reported the Southeast region (Alabama, Tennessee, Texas), and 31 (50%) reported the Western region (California, Colorado, Nevada, New Mexico, Utah, Washington). The average age of the sample was 26 ($SD = 9$) with a range of 22 to 74.

Table 1

Participant Demographics

Characteristic	<i>N</i>	Percentage
Gender		
Female	52	84
Male	10	16
Ethnicity		
African American	2	3.2

Table 1 continued

Participant Demographics

Caucasian	40	64.5
Hispanic	18	29.1
Swedish American	1	1.6
Other	1	1.6
Geographic Location		
Central Region	1	1.7
Northeast Region	2	3.3
Western Region	31	50
Southeast Region	28	45

A post hoc power analysis was conducted using the software package GPower (Faul et al., 2007). A post hoc analysis was used to identify the number of participants required to detect the hypothesized difference between this study's sample and the generalized population to a significant degree (i.e., adequate sample size for the study). This was done to determine if the quantity of participants was sufficient to reject the null hypothesis. The sample size of 62 was used for the statistical power analysis and a two-predictor variable equation was used as the baseline. The alpha level used for the analysis was $p < .05$. GPower's (Faul et al., 2007) software calculation attempted to determine the function (i.e., sample) required to detect a significant effect size of 0.8 given that the alpha level error probability input was .05 with a sample of 62 participants. Therefore,

given the parameters defined by this study's hypothesis, the post hoc analysis revealed the statistical power for this study was adequate as the sample size exceeded the recommended number of participants of 45. Thus, there was adequate statistical power for this study.

Materials

Secondary trauma (Pearlman & Caringi, 2009) was the primary variable examined in this study and was measured using the Secondary Traumatic Stress Scale, a 17-item instrument designed to measure intrusion, avoidance, and arousal symptoms associated with indirect exposure to traumatic events via one's professional relationships with traumatized clients (Bride et al., 2004). The STSS produced a global score that was a mathematical calculation of the three domains of traumatic stress associated explicitly with secondary exposure to trauma (Bride et al., 2004). Internal reliability estimates provided in Bride et al. (2016) were within the acceptable range (Netermeyer, 2003) for each section of the measure: Intrusion $\alpha = .80$, avoidance ($\alpha = .87$), arousal ($\alpha = .83$), and Full STSS ($\alpha = .93$). STS levels were measured by participants using a 17-item Likert scale questionnaire with response options that range from 1 (*rarely*) to 5 (*very often*). The scoring procedure was broken into four categories: Intrusion, Avoidance, Arousal, and Total Score. Using structural equation modeling techniques, Bride et al. (2004) performed a confirmatory factor analysis to assess the question of factorial validity. Using fit indices, results from structural elements of the model such as factor loading, t-

values, squared multiple correlations, and factor intercorrelations, Bride et al. (2004) demonstrated support for the three-factor structure of the STSS.

Participants' answers were then totaled for each category (arousal, intrusion, and avoidance) to determine the level of severity of symptoms. The STSS total score was calculated by summing the item scores, with a higher score indicating a higher frequency of symptoms. A total score below 28 corresponded to "little or no STS," a score between 28 and 37 meant "mild STS," scores from 38 to 43 were interpreted as "moderate STS," scores from 44 to 48 were considered "high STS," while 49 and above were considered "severe STS" (Bride, 2007).

As an additional measure, the Professional Quality of Life Scale-21 (PQLS) was used to measure burnout and compassion satisfaction (Stamm, 2010). The PQLS was designed to measure compassion satisfaction, burnout, and secondary traumatic stress (Sprang et al., 2007). The three subscales were compassion satisfaction, secondary traumatic stress, and burnout, with the latter two subscales reflecting components of the construct of compassion satisfaction (Stamm, 2010). Using Cronbach's alpha, internal reliability had a coefficient of .90, demonstrating sound consistency among the test items.

Lastly, an original demographics measure was administered that collected information about the participants related to sex, age, ethnicity, location, highest educational degree obtained, level of current training program (Masters, Ph.D., etc.), classification in current training program (1st year, 2nd year, etc.), total time engaged in psychological work/training, and total practicum hours obtained. Additionally, the

demographic questionnaire asked participants' to report the frequency (*Never, Rarely, Occasionally, Often, Very Often*) the topics of self-care, wellbeing, and responding to STS were discussed during graduate coursework. Using the same response categories (*Never, Rarely, Occasionally, Often, Very Often*), the participants reported their activity level in school psychology graduate student organizations. Lastly, the participants reported the frequency (*Never, Rarely, Occasionally, Often, Very Often*) at which they worked with students/clients/patients that experienced trauma.

Procedure

The study was conducted in accordance with the Stephen F. Austin Institutional Review Board and both the American Psychological Association and NASP's ethical standards to assure the fair treatment of all participants. Participants completed digital forms in the following order: informed consent, STSS, and the PQLS. All information was collected virtually from the participants using their own electronic devices. All forms and data collection occurred online. Researchers demonstrated several advantages of collecting data in this way, including speed of completion, higher rates of response, convenience for respondents, and lower costs (Thatch, 1995). Additionally, online surveys allowed individuals to respond in a more naturalistic way, reduced stigma, helped respondents feel more comfortable than in-person surveys, and reached populations that would be otherwise hesitant to respond (Wright, 2006).

Participants wishing to participate in the study clicked the link directing them to the website where the documents were presented. First, participants were directed to read

the informed consent form and were provided contact information for the primary researcher and supervisor for any questions or concerns. This page allowed participants to either click agree to continue or deny consent to participate in the study. If the participant wished to complete the study, they were directed to the demographic questionnaire, the STSS, and finally, the PQLS. After the final questionnaire was completed, the participants were taken to another page where they were thanked for their participation. The information on the final page contained contact information for the principal investigator, counseling center resources provided by Stephen F. Austin State University's counseling center, and phone numbers and website information for nationally available mental health resources if the participants felt the need to seek further assistance. These national mental health resources included: emergency medical services, substance abuse and mental health services, and the national suicide prevention hotline.

Design

This study aimed to examine the national levels of STS in students who were enrolled in school psychology graduate programs. This study examined the amount of STS students experienced based on their sex, age, the number of practicum or internship hours accumulated, their classification (first year, second year, etc.), type of program (master's or doctoral), and the participants' highest achieved level of education. Information related to if the participants placement was in predominately urban settings (schools with greater than 528 students) or rural settings (schools with 528 or fewer

students) based on the average number of students in United States schools (Institute for Education Sciences, 2018). Additionally, the demographic questionnaire asked the frequency their university training programs discussed STS topics and self-care (*Never, Rarely, Occasionally, Often, Very Often*). Using the same response categories, the participants reported their activity level in school psychology graduate student organizations (*Never, Rarely, Occasionally, Often, Very Often*). Lastly, the participants indicated the frequency (*Never, Rarely, Occasionally, Often, Very Often*) at which they worked with students/clients/patients who experienced trauma.

The primary research questions for this research study were: Does exposure to traumatic experiences during school psychology students' practicum and internship year result in higher STSS and PQLS scores? To what degree does STS correlate with burnout and compassion satisfaction among school psychology practicum and internship students? To what degree does exposure to trauma and university training in self-care, wellness, and responding to STS predict STSS, PQLS burnout, and PQLS compassion satisfaction scores?

Variables used to address each research question were the STSS global score, the PQLS compassion satisfaction subscale score, the PQLS burnout subscale score, and responses from the demographic questionnaire (coursework during their university training on topics related to self-care, wellbeing, and responding to STS, and exposure to trauma work during practicum and internship experiences). The research design consisted of two primary methodologies. The first of which were multiple regression models

addressing the first and third research questions. These multiple regression analyses were used to estimate the strength of the relationship between predictor variables and the outcome variables. The predictor variables identified for these analyses were exposure to trauma during practicum and internship experiences and university coursework related to self-care, wellbeing, and responding to STS. The outcome variables for this study were designated to be the participants' STSS total scores, PQLS burnout scores, and PQLS compassion satisfaction scores. In addition, correlations were used to answer the second research question that sought to determine the relationship between school psychology practicum and intern students' STSS global scores to their PQLS burnout and PQLS compassion satisfaction subscale scores.

In order to address the first research question, participants' responses were gathered from the demographic question regarding their level of trauma exposure (*Never, Rarely, Occasionally, Often, Very Often*) during their practicum and internship experiences. This data served as one of the predictor variables for a multiple regression analysis. To determine this variable's predictive property, participants' responses were then compared to two outcome variables, the STSS global score and the PQLS burnout and compassion satisfaction scores. The second research question was addressed using a Pearson bivariate correlational analysis to compare the STSS global score to PQLS burnout and PQLS compassion satisfaction scores. Data from this analysis were used to determine the strength of the linear relationship between each of these variables. The third research question was assessed using a multiple regression model to predict the

value of the participants' STSS global scores, PQLS burnout scores, and PQLS compassion satisfaction scores by the participants' exposure to trauma during practicum and internship and their university training on STS topics related to responding to STS, self-care, and wellbeing. Similarly, the participants' PQLS burnout and compassion satisfaction scores were compared to participants' exposure to trauma during their practicum and internship experiences and university training topics related to responding to STS, self-care, and wellbeing.

CHAPTER IV

Results

Descriptive Statistics

The survey was available for participants to from June through September of 2021. The amount of trauma work reported by the participants was converted from Likert Scale to numeric form ranging from 1 (*Never*) to 5 (*Very Often*). The average amount of reported exposure to trauma during practicum and internship was 3.53 ($SD = 1.15$), ranging from 1 to 5. Similarly, participants self-reported exposure to in-depth university topics related to self-care, wellbeing, and responding to STS topics were converted to numerical form, 1 (*Never*) to 5 (*Very Often*). The average amount of participant exposure to university training topics related to self-care, wellbeing, and responding to STS topics ranged from 1 to 5, with a mean of 2.50 ($SD = 0.89$).

Secondary Traumatic Stress Scale Results

In order to understand which participants experienced symptoms of STS, the STSS was scored for each participant who completed the entire study. Scores on the STSS below 28 corresponded to “little or no STS,” scores between 28 and 37 meant “mild STS,” scores from 38 to 43 were interpreted as “moderate STS,” scores from 44 to 48 were considered “high STS,” while 49 and above were considered “severe STS” (Bride, 2007). In the current sample, 10% of participants reported little or no STS, 29%

reported mild STS, 16% reported moderate STS, 18% reported high STS, and 26% reported severe STS.

The mean score on the STSS was 41.65 ($SD = 11.4$), with a range of 18 to 64. This indicates 60% of practicum and internship students who completed the STSS for this study reported scores at the “Moderate,” “High,” or “Severe” range for STS symptomology.

Professional Quality of Life Results

The participants were asked to complete the PQLS in order to understand the degree of compassion satisfaction and burnout in the sample. Both burnout and compassion satisfaction were measured using subscales from the PQLS. The sum of scores from the participants’ burnout subscale less than 22 indicated “Low” levels of burnout; 23 to 41 were considered “Average,” while 42 or more was considered “High.” The average participant score on the burnout subscale was 33.85 ($SD = 4.2$), with a range of 24 to 41. Scores on the compassion satisfaction subscale less than 22 were considered “Low,” 23-31 considered “Average,” and 42 and above considered “High.” Participants’ scores on the compassion satisfaction subscale averaged 33.06 ($SD = 4.7$) with a range of 23 to 41.

Correlation Analysis

To determine if exposure to trauma, STSS total scores, and PQLS scores were correlated, a correlational analysis was conducted. Bivariate correlations with Pearson’s coefficients were performed between reported exposure to trauma during practicum and

internship and the STSS score, burnout subscale score, and compassion satisfaction subscale score. Then, Pearson's correlation coefficients were performed between STS scores and scores on the PQLS subscales (burnout and compassion satisfaction). Lastly, university training topics related to self-care, wellbeing, and responding to STS were compared to their STSS scores, burnout subscale score, and compassion satisfaction score. To calculate Pearson's correlation coefficients, Microsoft Excel (Microsoft Corporation, 2018) was used. All participants' responses were inputted into Microsoft Excel and organized into columns. To compare each variable, the program's statistical package was used to calculate Pearson's *r*-value, the significance level, and the probability value. Additionally, formulas within Microsoft Excel were used to calculate descriptive values such as the mean, range, standard deviations, and sums of all relevant values.

To determining the strength of the absolute value of Pearson's *r*, Cohen's (1988) guidelines were used. Cohen (1988) suggested that the strength of a relationship in the behavioral sciences can be assessed as 0.1 - 0.3 being a "small" correlation, 0.3 - 0.5 as a "moderate" correlation, and 0.5 - 1.0 as a "large" correlation. To determine if a correlation's *p*-value was significant, Gravetter and Wallneau's (2005) behavioral sciences recommendation of using 0.05 as the cutoff value was used.

The STSS total score and the participants' self-reported trauma exposure during practicum and internship scores had a moderate positive correlation that was statistically significant, $r(61) = .41, p < .001$. This suggests frequent exposure to working with

traumatized clients during practicum and internship was related to elevated levels (i.e., moderate, high, severe) of STSS scores in school psychology practicum and internship students. When self-reported trauma exposure during practicum and internship was compared to burnout, results produced a moderate positive correlation that was statistically significant $r(61) = .44, p < .001$. Similarly, when compassion satisfaction was compared to self-reported trauma exposure during practicum and internship, a statistically significant moderate positive correlation was found, $r(61) = .44, p < .001$. This suggests that exposure to trauma during practicum and internship was significantly related to the participants' level of compassion satisfaction.

To determine if STS was correlated to burnout and compassion satisfaction, Pearson's correlation coefficients were conducted (see Table 2). When participants' STSS scores were compared to burnout, the correlation produced a large positive correlation that was not statistically significant, $r(61) = .58, p = 1.43$. Similarly, when the participants' STSS scores were compared to compassion satisfaction subscale scores, a nonsignificant large correlation was found, $r(61) = .62, p = 1.08$.

Lastly, correlations were conducted to determine if participants' university training topics related to self-care, wellbeing, and responding to STS were related to STSS total scores, burnout, and compassion satisfaction subscale scores (see Table 2). Participants' exposure to STS-related topics in their coursework was compared to their STSS scores, which produced a small positive correlation that was not statistically significant, $r(61) = .22, p = .09$. Similarly, university training topics related to self-care,

wellbeing, and responding to STS was compared to burnout and produced a small positive correlation that was not statistically significant, $r(61) = .22, p = .09$. Lastly, university training topics related to self-care, wellbeing, and responding to STS was compared to compassion satisfaction, which produced a small positive correlation that was not statistically significant, $r(61) = .15, p = .24$.

Table 2

Summary of Correlations Between Predictor Variables and Outcome Variables

Variable	<i>n</i>	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. Exposure to Trauma	61	3.53	1.15	-				
2. STSS Score	61	41.6	11.4	.41*	-			
3. PQLS Burnout	61	33.8	4.22	.44*	.58	-		
4. PQLS Compassion Satisfaction	61	33.1	4.47	.44*	.62	-	-	
5. University Training Topics	61	2.5	0.89	-	.22	.22	.24	-

*Note: * $p < .05$.*

Multiple Linear Regressions

Multiple regressions were used for its explanatory and its predictive abilities to analyze multiple independent variable's influence on a dependent variable (Gravetter & Wallnau, 2005). For the first and tertiary hypotheses, multiple regressions were conducted to determine if exposure to trauma during participants' practicum and

internship and university training topics related to self-care, well-being, and responding to STS (predictor variables) explained a subsequent changes in the participants' STSS total score and PQLS burnout and compassion satisfaction scores (outcome variables). To approach these research questions, a multiple linear regression analysis was conducted to determine the predictive value of exposure to trauma during practicum and internship and training topics related to self-care, wellbeing, and responding to STS on STSS scores. A second multiple linear regression evaluated the predictive value of exposure to trauma during practicum and internship and university training topics on PQLS burnout scores. Lastly, a multiple regression analysis was conducted to determine the predictive value of exposure to trauma during practicum and internship and university training topics related to self-care, wellbeing, and responding to STS on PQLS compassion satisfaction scores.

A multiple linear regression was calculated to predict STSS scores based on participants' exposure to trauma during practicum and internship and exposure to university training topics related to self-care, wellbeing, and responding to STS (see Table 3). A significant regression equation was found ($F(1, 61) = 8.72, p < .001$), with an R^2 of .23). Participants predicted STSS scores equaled $34.78 - 3.33$ (university training) + 4.30 (exposure to trauma), where university training and exposure to trauma was converted from Likert Scale to numeric form and ranged from 1 (*Never*) to 5 (*Very Often*). Participants' STSS total scores decreased 3.33 points for every self-reported university training topic Likert scale point increase while participants' STSS total score increased 4.30 points for every self-reported exposure to trauma Likert scale point

increase. Similar results were found for both the second and the third multiple regression models conducted for this study.

The second multiple linear regression was calculated to predict PQLS burnout scores based on participants' exposure to trauma during practicum and internship and exposure to university training topics related to self-care, wellbeing, and responding to STS (see Table 3). A significant regression equation was found ($F(1, 61) = 10.16, p < .001$) with an R^2 of .51. Participants predicted PQLS burnout scores equaled $30.96 - 1.25$ (university training) + 1.70 (exposure to trauma), where university training and exposure to trauma was converted from Likert Scale to numeric form and ranged from 1 (*Never*) to 5 (*Very Often*). Participants' PQLS burnout total scores decreased 1.25 points for every self-reported university training topic Likert scale point increase while participants' PQLS burnout total score increased 1.70 points for every self-reported exposure to trauma Likert scale point increase.

Lastly, a third multiple linear regression was calculated to predict PQLS compassion satisfaction scores based on participants' exposure to trauma during practicum and internship and exposure to university training topics related to self-care, wellbeing, and responding to STS (see Table 3). A significant regression equation was found ($F(1, 61) = 8.72, p < .001$), with an R^2 of .23. Participants predicted PQLS compassion satisfaction scores equaled $29.24 - 0.99$ (university training) + 1.78 (exposure to trauma), where university training and exposure to trauma was converted from Likert Scale to numeric form and ranged from 1 (*Never*) to 5 (*Very Often*). Participants' PQLS

compassion satisfaction total scores decreased 0.99 points for every self-reported university training topic Likert scale point increase while participants' PQLS compassion satisfaction total score increased 1.78 points for every self-reported exposure to trauma Likert scale point increase. The results of the multiple regression analyses are explored further in the discussion section.

Table 3

Regression Coefficients Summary Table of Predictor Variables

Variable	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>	<i>95% CI</i>
STSS Scores					
Exposure	4.30	1.15	3.73	0.00	[1.99, 6.60]
University	-3.33	1.49	-2.23	0.02	[-6.31, -0.33]
PQLS Burnout					
Exposure	1.70	0.41	4.07	0.00	[0.86, 2.53]
University	-1.25	0.54	-2.31	0.02	[-2.33, -0.16]
PQLS Compassion					
Satisfaction					
Exposure	1.78	0.45	3.97	0.00	[0.88, 2.68]
University	-0.99	0.58	-1.70	0.04	[-2.16, 0.17]

Note: Exposure = exposure to trauma during practicum and internship experiences;

University = university training on topics related to self-care, wellbeing, and responding to STSS.

CHAPTER V

Discussion

The purpose of this study was to gain a better understanding of STS within a sample of school psychology graduate students who were completing practicum or internship as part of their graduate degree program. This chapter includes a discussion of the study's major findings as related to existing STS research with mental health professions and provides directions for future research. This is the first study, to this researcher's knowledge, to explore the impact of exposure to client and student trauma on school psychology practicum and internship students.

The following research questions were addressed by this study: Does exposure to traumatic experiences during school psychology students' practicum and internship year result in higher STSS and PQLS scores? To what degree does STS correlate with burnout and compassion satisfaction among school psychology practicum and internship students? To what degree does exposure to trauma and university training in self-care, wellness, and responding to STS predict STSS, PQLS burnout, and PQLS compassion satisfaction scores?

A multiple regression analysis was conducted to answer the first research question regarding the relationship between STSS scores and the participants' exposure to trauma during school psychology students' practicum and internship experiences. Additionally,

demographic information and means related to the participants' STSS scores were compared to previous research to provide further insight for this research question. To answer the second research question, the relationship between STSS scores and PQLS subscale scores was examined using a correlational analysis to determine if these variables were related and if predictions could be made based on their associations. Finally, data from a multiple regression was used to address the third research question. The multiple regression used exposure to trauma during practicum and internship and university training topics relating to self-care, wellness, and responding to STS to predict STSS scores, PQLS burnout scores, and PQLS compassion satisfaction scores.

Correlational analyses between STSS scores, PQLS burnout, and PQLS compassion satisfaction did not produce a significant relationship across variables. This indicates that each of the measures used to assess the school psychology students' scores are independent and unaffected by each other. Moreover, it was hypothesized that school psychology practicum and internship students who experienced higher levels of trauma exposure would generate higher STSS total scores and higher PQLS burnout and compassion fatigue scores. Multiple regression analyses indicated that exposure to trauma during practicum and internship experiences does predict a significant increase in STSS total scores, PQLS burnout scores, and PQLS compassion satisfaction scores. Additionally, results from the multiple regression indicated that school psychology practicum and internship students' exposure to trauma during participants' experiences significantly predicted an increase in participants' STSS total scores, participants' PQLS

burnout scores, and participants' PQLS compassion satisfaction scores. Finally, results from the multiple regression analyses significantly predicted that university training covering topics related to self-care, wellness, and responding to STS decreased all three outcome variables. The following three sections provide a more intensive discussion of each research question and how the findings of this study relate to prior research.

Research Question One

The first research question (does exposure to traumatic experiences during school psychology students' practicum and internship year result in higher STSS and PQLS scores?) was posed to determine if school psychology students experienced higher levels of STSS and PQLS scores after working with clients who experienced trauma. A multiple regression analysis between exposure to trauma during practicum and internship produced a significant effect that indicated a significant change in participants' STSS total score, PQLS burnout, and PQLS compassion satisfaction scores. Specifically, participants' exposure to clients with trauma significantly accounted for an increase in STSS scores, PQLS burnout scores, and PQLS compassion satisfaction scores. These findings are congruent with previous research that examined STS in mental health professions similar to school psychology (Becker & McCrillis, 2015; Bride, 2007; Cieslak et al., 2013; Makadia et al., 2017). The current study added to the STS research in two notable ways. First, no previous study explored these relationships within the field of school psychology. Second, only one other study (Makadia et al., 2017) used graduate students as participants, instead of professionals. The use of graduate students is

compelling as it suggests STS symptomology may become worse once students enter the field as school psychologists and accrue more time working with trauma. Research by Devilly et al. (2009) indicated that work-related stressors such as burnout and being new to the profession best predicted distress among mental health workers. Similarly, Bager et al. (2008) found that less experience and youth predicted trauma symptoms and distressed beliefs. This suggests that those that remain in the profession find effective coping mechanisms to counteract the STS they experience.

Results of the demographic questionnaire from this study indicated that more than 60% of the participants produced scores on the STSS that fell within the “Moderate,” “High,” or “Severe” range. The participants’ mean score on the STSS was 41.65, which is much higher than the mean score of 32.0 found among social workers (Bride, 2007), clinical psychology trainees ($M = 25.60$; Makadia et al., 2017), and mental health providers in the military ($M = 31.91$; Cieslak et al., 2013).

One possible explanation for why school psychology practicum and internship students experience general work-related stressors at higher rates than other similar professionals is the nature and setting of the profession. For example, school psychology practicum and internship students typically operate within a school setting. School settings are unique in that school personnel have the potential to interact with the client approximately 8 hours a day, five times a week. Other mental health professions, such as social workers, clinical psychology trainees, and mental health professionals in the military are more likely to set schedules where they meet with clients at scheduled times

throughout the month. In contrast school psychologists are routinely called to assist in deescalating students, to consult with teachers, and to respond to crises. In other words, the student/client never truly leaves the office. The one possible exception to this is social workers that work within a school setting. However, STS data regarding social workers who engage in school-based social work is very limited. For example, in Bride's (2007) research, only 4.7% of the sample were social workers who engaged in school-based social work. An additional contributing factor for higher STS among school psychology graduate students may be because the field of school psychology is facing a critical shortage of school psychologists (McCleary et al., in press), which means that many school psychologists are being given exceptionally high caseloads (Barbre, 2019) that are likely to result in greater exposure to trauma and general work stressors. Lastly, school psychology students may differ from social workers in that social workers may expect to work with clients of trauma when entering graduate school while school psychology students may instead expect to work with teachers, parents, and students on specific academic and behavioral issues.

Previous research examining similar professions shows that those who experience increased STS levels subsequently experience negative effects on mental, social, and physical health (Taylor et al., 2021). Likewise, this study provided evidence that school psychology students also experience these deleterious symptoms. As Ravi et al. (2021) posited, working with traumatized clients negatively impacted professionals'

performance, parenting styles, leisure activities, relationships, and sensitivity to environmental stimuli.

To conclude, the first hypothesis that school psychology student's exposure to trauma would predict an increase in STSS and PQLS scores was confirmed. Each of the variables (STSS total score, PQLS burnout, PQLS compassion satisfaction) were elevated as a result of exposure to trauma during practicum and internship experiences.

Research Question Two

The second research question addressed in this study was: To what degree does STS correlate with burnout and compassion satisfaction among school psychology practicum and internship students? In this study's analyses, STSS scores had a large positive correlation to PQLS burnout scores, but the relationship was not statistically significant. Similarly, STSS scores produced a large positive correlation to compassion satisfaction scores that were also not significant. These findings indicate that although the participants' STSS scores increased as a result of their work with trauma, their STSS scores were not significantly related to PQLS burnout scores or PQLS compassion satisfaction scores. As previously discussed, although the terms STS, burnout, and compassion fatigue were often used interchangeably (Meadors et al., 2010), there is an increasing body of evidence that demonstrates these outcomes are different in how they manifest in professionals that work with traumatized clients (Shoji et al., 2015). Findings produced in this study demonstrate the lack of correlation between STS, burnout, and compassion satisfaction, which supports Thomas and Wilson's (2004) position that each

term previously used interchangeably should be defined and studied as different phenomena.

This study's second research question of determining if STS, burnout, and compassion satisfaction were correlated was built on the research premise of Heritage et al. (2018) who believed there would be a positive correlation between each of these variables. Based on the work of Heritage et al. (2018), exposure to trauma as a result of working directly with traumatized clients was expected to be positively correlated with STS, burnout, and compassion satisfaction levels. However, results generated from the current study's correlational analysis found no statistical correlation between STS, burnout, and compassion satisfaction.

As previously mentioned, STSS total scores and PQLS burnout scores were not correlated. Although they are often considered related terms and some symptomology is similar (Taylor et al., 2021), experiencing either STS or burnout should not be thought of as good predictors of one another. As Shoji et al. (2015) demonstrated, burnout is more closely related to work-related factors than it is related to working with traumatized clients. Shoji et al. (2015) also demonstrated that burnout was not a good predictor of STS in their longitudinal study, which indicates that those who experience burnout may, in fact, never experience symptoms of STS. This indicates that although school psychology students may be experiencing elevated levels of STS, they are not likely also experiencing the effects of burnout and vice versa. This study adds support to these previous findings by demonstrating that although school psychology students work with

traumatized clients in their practicum and internship sites, they may not be experiencing elevated levels of burnout as a result of elevated STS. Furthermore, the conceptualization of these terms, as Shoji et al. (2015) suggest, are dissimilar and are influenced by different predictive variables.

There are some reasons that might explain why school psychology students who experience STS do not demonstrate a correlation to burnout. First, the average participant age was 26, indicating that participants' experience working with trauma is likely not as extensive as their professional counterparts. School psychology students in this study had not yet acquired a substantial number of hours in the field and so their perspective of how and why change occurs within systems is likely not yet fully developed. As students, they may rationalize their experiences with STS as simply a result of their not being seasoned enough to handle the situation. In contrast, early career professionals may instead equate prolonged experiences of STS as a result of systems-level issues that are resistant to change, thus resulting in burnout. As Bager et al. (2008) reported, youth and less experience working in mental health contributes to higher levels of burnout. These findings do not necessarily invalidate the premise set forth by Heritage et al. (2018), which stated that STS, burnout, and compassion satisfaction are often correlated; however, this suggests that STS was more rapid in affecting school psychology students than burnout, and perhaps more experience working in one's profession is required before symptoms of burnout can be detected by current measures. As Nunn and Issac (2019) reported, experience in the workplace takes considerable time and one must be

engaged in the profession for long periods of time for burnout to manifest. Although school psychology students engaged in many of the work practices outlined in Nunn and Issac's (2019) report, they likely had not engaged in them long enough to become evident when using the PQLS burnout subscale. It is also plausible that school psychology programs are more attuned to issues of burnout than they are to issues of STS. For example, many school psychology programs have classes related to working in schools as systems and how to operate as a change agent. The tools learned in these types of classes are likely to serve as protective factors against burnout.

In addition to the reduced work experience of the school psychology students and the low levels of reported burnout, an additional factor that may explain why the results were not significantly correlated is general work-related stress. In work presented by Nunn and Isaac (2019), Shoji et al. (2015), and Taylor et al. (2021), each set of researchers noted that work-related stressors such as high job demands, unhealthy work environment, supervisor support, and other professional related factors contributed to burnout as opposed to just working with clients of trauma. This is supported by the findings of this study as many of the participants indicated that although they worked with clients of trauma, they did not experience a significant increase in work-related stressors as measured by their burnout scores. As previously mentioned, participants of this study demonstrated increased levels of STSS scores, but their burnout scores were considered to fall within the average range (33.8) experienced by most professionals (Stamm, 2010). However, this study did not specifically examine the working conditions

of the school psychology students' practicum or internship sites, so no conclusions can be drawn as to how these conditions impacted their burnout scores. For example, participants' burnout scores could have been significantly impacted by specific types of work-related conditions they encountered, such as high work demands, diminished job resources, and poor supervisor support (Shoji et al., 2015). Additionally, other work conditions such as having a relaxed or peaceful work environment were shown to produce decreased levels of burnout (Nunn & Isaac, 2019).

The second hypothesis that significant positive correlations between STS, burnout, and compassion satisfaction exist was not confirmed. None of the correlations between STS, burnout, and compassion satisfaction were significant.

Research Question Three

The final research question examined by this study was: To what degree does exposure to trauma and university training in self-care, wellness, and responding to STS predict STSS, PQLS burnout, and PQLS compassion satisfaction scores? To answer this final research question, five variables were analyzed. The first independent variable was the participants' amount of university coursework that included topics related to self-care, well-being, or responding to STS. The second independent variable was the participants' amount of self-reported exposure to trauma during practicum and internship. The remaining dependent variables were the participants' total STSS scores, their PQLS burnout, and PQLS compassion satisfaction scores.

To answer this research question, a multiple regression was used that compared exposure to trauma during practicum and internship and university courses that included topics related to self-care, wellbeing, and responding to STS to STSS scores and PQLS burnout and PQLS compassion satisfaction scores. The results indicated that exposure to trauma during practicum and internship and university training topics related to self-care, wellbeing, and responding to STS produced a collective significant change in all three dependent variables (STS, burnout, and compassion satisfaction).

Using a multiple regression analysis, exposure to trauma during practicum and internship increased STSS total scores significantly while university training topics related to self-care, wellbeing, and responding to STS significantly decreased the participants' STS. The results of this analysis confirm previous research by both NASP (2017) and Hydon et al. (2015) who reported that engagement in trauma related work has a significant impact on the professional's personal life and can result in STS symptoms. However, the decrease in STSS scores associated with university training on topics related to self-care, wellbeing, and responding to STS did not outweigh the increase in STSS total scores associated with exposure to STS during practicum and internship. This means that even though some university training programs are providing training related to STS topics, it is not enough to counterbalance the increase in STS symptomology reported by practicum and internship students.

Similar to the changes this study noted for STSS total scores, the two predictor variables (exposure to STS and related university training) collectively produced a

significant change in the participants' PQLS burnout scores. Exposure to trauma during practicum and internship significantly increased PQLS total scores while university training topics related to self-care, wellbeing, and responding to STS significantly decreased participants' burnout scores. Again, these results are confirmatory with NASP's (2017) position that mental health professionals who are exposed to trauma may exhibit more symptoms of burnout. It was hypothesized that participants' exposure to trauma during practicum and internship would have a greater impact on the participants' burnout symptomology than university training's on related topics could counteract. This hypothesis was confirmed. Thus, care should be taken by training programs and by school districts to provide supports to help future school psychologists take care of themselves and not just those they are hired to serve.

Lastly, exposure to trauma positively increased the participants' total compassion satisfaction score while training topics related to STS resulted in a slight decrease in compassion satisfaction scores. This indicates that exposure to trauma during practicum and internship increased the participants' compassion satisfaction. Additionally, the results indicated that university training on topics related to self-care, wellbeing, and responding to STS significantly decreased the participants' overall compassion satisfaction. These results suggest that working directly with clients experiencing trauma increases compassion for the client. This finding is likely a result of perspective taking. By interacting with people experiencing trauma, hearing their stories, and seeing firsthand how the trauma has affected their lives, school psychologists are likely to be

more understanding of other's situations and thus more compassionate. Furthermore, Bober and Regher (2006) found that although mental health workers were aware of various methods and activities to reduce stress, they did not personally use these methods in response to their own stress. Meaning that although the participants of this study reported receiving university training that addressed self-care, wellness, and responding to STS symptomology, the increase in knowledge likely did not result in changes in behavior (i.e., they did not employ the interventions learned).

The reported lack of university training related to STS is not unique to the field of school psychology. Courtois and Gold (2009) found mental health training programs do not adequately address trauma in the curriculum because of insufficient resources. One way to interweave training related to trauma and wellbeing into program curricula is to tie it to practicum and internship courses, where students can actively practice the skills they are learning rather than simply acquiring knowledge that is often not put to use.

The third hypothesis that firsthand experience with trauma and training related to STS would predict a change in the participants STSS, burnout, and compassion satisfaction scores was confirmed. Specifically, experiencing trauma firsthand increased participants STSS, PQLS burnout, and PQLS compassion satisfaction scores while university training significantly decreased all three variables.

Strengths and Limitations

A strength of the study was that it was novel and drew from school psychology students located across the United States. As of the writing of this study, there were no

other currently reported studies that examined STS symptoms, burnout, and compassion satisfaction within school psychology graduate students that could be found.

Additionally, the study examined the amount of reported exposure to trauma and university training related to topics such as STS, self-care, and well-being. This allowed the researcher to understand the participants' perceptions of their exposure to trauma and determine if their training programs offered support for their field experiences involving STS. Knowing the prevalence of STS rates may serve as a catalyst for training programs to review their current pedagogy and increase the use of best practices to decrease some of the adverse effects of STS in their students and potentially prevent burnout from affecting their alumni. Examples of various interventions that can be utilized are presented by the National Child Traumatic Stress Network (NCTSN; NCTSN, 2011) and include training on caseload management, professional training, reflective supervision, peer supervision, external group processing, and incorporating mindfulness-based strategies and cognitive-behavioral strategies into practice.

The current study has notable limitations. For example, all the data collected was based on self-report measures. Limitations of self-report data include self-reporting bias (the deviation between self-reports and true values) and social-desirability bias (underreporting socially undesirable attitudes or behaviors and overreporting desirable attitudes or behaviors; Althubaiti, 2016). Additionally, the study's total sample size included in the analysis was 62. Larger sample sizes would provide more accurate mean values, identify outliers that could skew the data, and provide a smaller margin of error

(Gravetter & Wallnau, 2005). A larger sample size can reduce sampling bias and decrease variability, thereby increasing the accuracy of the sample's representation of the population (Gravetter & Wallnau, 2005).

Further, graduate programs contain different structures and areas of specific focus. As a result, the number of practicum and internship hours required, and topics covered can vary widely and may not reflect the organization of other programs. Similarly, students' self-reported perceptions of trauma exposure and university training topics related to trauma may vary widely based on the respondent's perception of the term "trauma." The way exposure to trauma work was measured also restricted the findings. Exposure to trauma was broadly defined, and the nature of the participant's trauma work was not investigated. Future research may benefit from participants' identifying the nature of their trauma work (e.g., direct therapy/counseling, indirect support, crisis response, working in self-contained classrooms, etc.) and rating the perceived severity of the client/student's trauma. Additionally, participants were predominately Caucasian and female; therefore, generalizing these results to other populations is not recommended. Additionally, many participants reported being from the Western (50% of participants) or Southeast regions (45% of participants) of the United States. This limits the generalizability the results of this study across other national regions that were not well represented. Further, all of those included in data analysis lived in United States, so no generalizations to school psychologists working in other countries can be made.

A final limitation of the study is the lack of examination of extraneous variables such as personal history of direct trauma exposure, type of trauma exposure (e.g., sexual, emotional, physical, etc.), and their possible effects on the participants. In some cases, participants either already experienced a traumatic event themselves or may be receiving treatment for either a traumatic event or STS. Questions related to whether the participant had experienced firsthand trauma themselves were not included in this study. Firsthand trauma could be affecting these students, and since STS and trauma share similar symptomology (Figley, 1995), there could be significant overlap in their STSS and PQLS scores. Additionally, Bride (2007) suggested that the various types of traumas could influence STSS scores. Lastly, this study did not examine whether those who experienced trauma firsthand received some form of treatment and subsequently responded to the survey differently than those who had not experienced personal trauma.

Theoretical Implications

Findings from this study indicate that the theoretical concept of STS proposed by Figley (1995) also exists within school psychology students and can manifest before one formally begins their professional career. Data from this study was sought in part to assist not only school psychology students' understanding of STS but also to assist those who engage in training and educating school psychology graduate students. Although interventions were not part of this study, recommendations for how to reduce the adverse effects of STS can be made. For example, Ravi et al. (2021) recommended organizations identify and privately approach those who may be experiencing STS symptoms, offer

professional development training to increase awareness, and provide information about STS's various manifestations. Additionally, organizations should ensure that those who are at risk be provided with adequate supervision, support on how to manage balancing work/life expectations, and access to resources that target their mental and physical health (Ravi et al., 2021).

Additional university instruction could intentionally target compassion satisfaction as participants reported university training in topics related to self-care, wellbeing, and responding to STS decreased participants' compassion satisfaction scores. The inclusion of university training topics that cover compassion satisfaction could be implemented at the training level. Doing so may increase compassion satisfaction among students. In particular, strategies such as those outlined by NASP (2017) such as psychoeducation, risk factors, and recognizing the warning signs of compassion fatigue and stress could be included. These strategies could be implemented within the program's pedagogy or the supervisor's training framework. In addition to altering the configuration of these programs to aid in students' wellbeing, other measures could be explored on the individual level. For instance, activities such as community involvement, counseling resources, and psychoeducation are methods that may provide defense against STS, burnout, and compassion fatigue. Additionally, engaging in physical self-care, emotional health management, self-calming strategies, spirituality, and advocacy for reduced workload are strategies recommended by NASP (2017) that may be effective at protecting against STS, burnout, and compassion fatigue.

Lastly, knowing that students are at risk for STS symptomology may incite educators, supervisors, and training programs to more closely monitor students' exposure to trauma. For example, training programs may regulate the amount of trauma work their students engage in, which could decrease adverse outcomes and increase favorable outcomes. Some favorable outcomes described by Armes et al. (2020) include personal health, work productivity, familial relationships, and academic performance. University training programs can establish clear lines of communication with their students to determine their students' level of exposure to trauma. A criterion or set of guidelines could be presented by the university and reviewed with the student and the site supervisor so all parties involved gain a better understanding of the expectations of the student with regards to trauma exposure. In doing so, each respective party can take responsibility for protecting and providing resources for the student in order to reduce adverse outcomes related to STS, such as physical health, mental health, drug abuse, levels of stress, and work performance (Bourke & Craun, 2014; Griffiths et al., 2018).

Recommendations for Future Research

Exploration of additional factors that contribute to the negative effects of STS in school psychology students and practitioners should be explored further. For example, researchers should examine the various types of trauma school psychology students are exposed to (e.g., complex, bullying, sexual, natural disasters, early childhood, community violence, medical, physical, emotional, etc.) to provide insight as to which specific trauma contributes to higher adverse STS effects and if different types of intervention are

more effective at addressing specific types of trauma. Factors that contribute to higher STS scores, such as being young, no training specific to trauma, increased caseload, being a practitioner in a trauma-laden area, and not using evidence-based strategies when faced with STS, should be explored. In doing so, researchers can add to the research base of what specific factors contribute to STS symptomology. Additional workload related factors (e.g., number of coursework/hours attempted, size of caseload, quantity and quality of supervision hours provided, etc.) could be assessed as well to determine their impact on school psychology practicum and internship students. Effectively addressing STS may also indirectly help reduce the critical shortage of school psychologists.

Researchers should also examine which trauma reducing strategies are the most beneficial at mitigating the symptoms of STS for school psychology students. Preventative factors such as self-care, support network, and coping techniques should be examined to determine if they are protective factors. Additionally, the specific mechanisms of trauma instruction and responding to STS should be explored. For example, comparing the effectiveness of presenting students with psychoeducational information related to self-care and well-being versus providing guided practice in how to use the techniques in classes such as practicum and internship, when students are most likely to experience STS.

Future studies may focus on a variety of factors that decrease trauma, PTSD, and STS symptoms by examining student and current mental health practitioners' level of engagement in mental wellness activities. In addition to attempting to prevent adverse

STS effects in school psychology students, it may be beneficial to examine STS symptoms in currently practicing school psychologists and methods they use in response to STS. These potential resiliency factors may be generalizable to graduate students and help researchers understand what strategies those with high resiliency developed.

This study found that school psychology graduate students reported higher rates of STS than social workers, clinical psychology trainees, and mental health workers in the military. It was hypothesized that this finding may be due to the nature of working in schools. Given the lack of research within school settings, researchers should examine whether STS is more prevalent among professionals that work within school settings (e.g., speech language pathologists, occupational therapists, counselors, educational diagnosticians, school-based social workers, school nurses) than those that work in other types of settings (e.g., clinic, hospital, military).

Culture and gender are also an important consideration. This study was limited in that the majority of participants were Caucasian's who identified as female. Given that some people's trauma is a direct result of how others treat them based on their color of skin, culture, sexual preference, or gender, it is important that future research examines these types of trauma and how STS of this nature may differentially impact the practitioner who also has firsthand experience with the same type of trauma. Relatedly, intersectionality of these issues should be examined, particularly if the field truly wishes to become more inclusive and include a more diverse workforce that is representative of those we serve.

Lastly, future researchers should explore STS in participants who experienced trauma firsthand to determine if working with traumatized clients during their training program influenced their STS symptomology. Those who experienced trauma themselves and sought professional assistance for it may possess a variety of interventions that target the negative effects of trauma exposure. This could help researchers determine if those who experienced trauma themselves experience different levels of STS, burnout, or lowered levels of compassion satisfaction.

Conclusions

This study sought to examine STS within school psychology practicum and internship students. Specifically, if school psychology practicum and internship students experienced elevated STS and burnout symptomology as a result of working with students of trauma. The results from this study demonstrated that the participants displayed elevations in both STS and burnout as a result of exposure to trauma during practicum and internship. Additionally, this study examined whether exposure to trauma during practicum and internship and if university training on topics related to self-care, wellbeing, and responding to STS were predictors of STSS scores (Bride et al., 2004), PQLS burnout, and PQLS compassion satisfaction scores (Stamm, 2010). Overall, the results of this study demonstrated that exposure to trauma during school psychology students' practicum and internship predicted an increase in STSS and PQLS burnout and compassion satisfaction scores. Additionally, university training covering topics relating to self-care, wellbeing, and responding to STS predicted a significant decrease in STSS

and PQLS burnout and compassion satisfaction scores. An additional hypothesis examined whether scores from the STSS and PQLS burnout and compassion fatigue subscales were correlated. The data gathered by this study did not demonstrate a significant correlation between any of the measures.

With the growing shortage of school-based mental health professionals nationwide, it is imperative that school psychologists find ways to prevent the adverse effects of working in highly stressful, trauma-laden environments. School psychology training programs across the country should take steps to understand the effects of secondary trauma on their future school psychology graduates and implement various measures to educate and protect their students from the detrimental effects of secondary trauma. Similarly, school psychology practicum and internship students should take responsible measures to ensure work related to trauma in their field does not produce adverse effects that could impact the longevity of their mental health and careers. In addition to disseminating knowledge of trauma and its effects on mental health practitioners, evidence-based practices and interventions should be utilized to assist students who experienced trauma-related work during their graduate experience. Lastly, it is imperative that school psychology trainers and workplaces foster an environment in which their students and employees feel comfortable discussing work-related trauma they are experiencing. In doing so, efforts could be made by all parties to reduce the detrimental effects of working directly with trauma.

REFERENCES

- Ahola, K., Honkonen, T., Isomets, E., Nykyri, E., Aromaa, A., & Lonnqvist, J. (2005). The relationship between job-related burnout and depressive disorders: Results from the Finnish health 2000 study. *Journal of Affective Disorders*, 88(1), 55–62. <https://doi.org/10.1016/j.jad.2005.06.004>
- Aisling, M., Aisling, D., & David, C. (2016). An assessment of psychological need in emergency medical staff in the northern health and social care trust area. *Ulster Medical Journal*, 85(2), 92-98. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4920499/>
- Althubaiti A. (2016). Information bias in health research: definition, pitfalls, and adjustment methods. *Journal of Multidisciplinary Healthcare*, 9, 211–217. <https://doi.org/10.2147/JMDH.S104807>
applications. Sage.
- Argentero, P., & Setti, I. (2010). Engagement and vicarious traumatization in rescue workers. *International Archives of Occupational and Environmental Health*, 84(1), 67-75. <https://doi.org/10.1007/s00420-010-0601-8>
- Armes, S. E., Lee, J. J., Bride, B. E., & Seponski, D. M. (2020). Secondary trauma and impairment in clinical social workers. *Child Abuse & Neglect*, 110(3), 104540. <https://doi.org/10.1016/j.chiabu.2020.104540>

- Bager, K., Royse, D., & Craig, C., (2008). Hospital social workers and indirect trauma exposure: An exploratory study of contributing factors. *Health and Social Work, 33*(1), 63-71. <https://doi.org/10.1093/hsw/33.1.63>
- Barbre, S. (2019). A report on the state of school psychology in Texas schools: 2017-2018 school year. *Research and Practice in the Schools, 6*(1), 1-10.
- Becker, R. W., & McCrillis, A. (2015). Health sciences librarians, patient contact, and secondary traumatic stress. *Journal of the Medical Library Association, 103*(2), 87-90. <https://doi.org/10.3163/1536-5050.103.2.006>
- Benuto, L. T., Yang, Y., Ahrendt, A., & Cummings, C. (2018). The secondary traumatic stress scale: Confirmatory factor analyses with a national sample of victim advocates. *Journal of Interpersonal Violence, 36*(5), 2572-2591. <https://doi.org/10.1177/0886260518759657>
- Bercier, M., & Maynard, B. (2015). Interventions for secondary traumatic stress with mental health workers: A systematic review. *Research on Social Work Practice, 25*(1), 81-89. <https://doi.org/10.1177/1049731513517142>
- Bober, T., & Regehr, C. (2006). Strategies for reducing secondary or vicarious trauma: Do they work? *Brief Treatment and Crisis Intervention, 6*(1), 1-9. <https://doi.org/10.1093/brief-treatment/mhj001>
- Bourke, M., & Craun, S., (2014). Coping with secondary traumatic stress: Differences between U.K. and U.S. child exploitation personnel. *Traumatology, 20*(1), 57-64. <https://doi.org/10.1037/h0099381>

- Breslau, N., Davis, G., Andreski, P., Peterson, E., & Schultz, L. (1997). Sex differences in post-traumatic stress disorder. *Archives of General Psychiatry*, *11*(1), 1044-1048. <https://doi.org/10.1001/archpsyc.1997.01830230082012>
- Bride, B. E. (2004). The impact of providing psychosocial services to traumatized populations. *Stress, Trauma, and Crisis*, *7*(1), 29-46. <https://doi.org/10.1080/15434610490281101>
- Bride, B. E. (2007). Prevalence of secondary traumatic stress among social workers. *Social Work*, *52*(1), 63–70. <https://doi.org/10.1093/sw/52.1.63>
- Bride, B. E., Jones, J. L., & Macmaster, S. A. (2007). Correlates of secondary traumatic stress in child protective services workers. *Journal of Evidence-Based Social Work*, *4*(3-4), 69-80. https://doi.org/10.1300/j394v04n03_05
- Bride, B. E., Robinson, M. M., Yegidis, B., & Figley, C. R. (2016). Development and validation of the secondary traumatic stress scale. *Research on Social Work Practice*, *14*(1), 27-35. <https://doi.org/10.1177/1049731503254106>
- Butler, L. D., Carello, J., & Maguin, E. (2017). Trauma, stress, and self-care in clinical training: Predictors of burnout, decline in health status, secondary traumatic stress symptoms, and compassion satisfaction. *Psychological Trauma*, *9*(4), 416-424. <https://doi.org/10.1037/tra0000187>
- Caringi, J., & Hardiman, E. (2012). Secondary traumatic stress among child welfare workers in the United States. An assessment of secondary traumatic stress in

- juvenile justice education workers. *International Journal of Child and Family Welfare*, 17(3), 208-17. <https://doi.org/10.1177/1078345811401509>
- Caringi, J., Hardiman, R., Weldon, P., & Fietcher, S. (2016). Secondary Traumatic Stress and Licensed Clinical Social Workers. *Traumatology* 23(2).
<https://doi.org/10.1037/trm0000061>
- Christodoulou-Fella, M., Middleton, N., Papathanassoglou, E. D. E., & Karanikola, M. N. K. (2017). Exploration of the association between nurses' moral distress and secondary traumatic stress syndrome: Implications for patient safety in mental health services. *BioMed Research International*, 1(2017), 1-19.
<https://doi.org/10.1155/2017/1908712>
- Cieslak, R., Anderson, V., Bock, J., Moore, B. A., Peterson, A. L., & Benight, C. C. (2013). Secondary traumatic stress among mental health providers working with the military: Prevalence and its work and exposure-related correlates. *The Journal of Nervous and Mental Disease*, 201(11), 917–925.
<https://doi.org/10.1097/nmd.0000000000000034>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. New York: Academic Press. <https://doi.org/10.4324/9780203771587>
- Courtois, C. A., & Gold, S. N. (2009). The need for inclusion of psychological trauma in the professional curriculum: A call to action. *Psychological Trauma: Theory, Research, Practice, and Policy*, 1(1), 3-23. <https://doi.org/10.1037/a0015224>

- Cragun, J. N., April, M. D., & Thaxton, R. E. (2016). The impact of combat deployment on health care provider burnout in a military emergency department: A cross-sectional professional quality of life scale v survey study. *Military Medicine*, 181(8), 730-734. <https://doi.org/10.7205/MILMED-D-15-00420>
- Craig, C., & Sprang, G. (2010). Compassion satisfaction, compassion fatigue, and burnout in a national sample of trauma treatment therapists. *Anxiety, Stress, and Coping*, 23(3), 319-339. <https://doi.org/10.1080/10615800903085818>
- Cunningham, M. (2014). Teaching social workers about trauma: Reducing the risks of vicarious traumatization in the classroom. *Journal of Social Work Education*, 40(2), 305-317. <https://doi.org/10.1080/10437797.2004.10778495>
- Devilly, G. J., Wright, R., & Varker, T. (2009). Vicarious trauma, secondary traumatic stress or simply burnout? Effect of trauma therapy on mental health professionals. *Australian and New Zealand Journal of Psychiatry*, 43(4), 373-385. <https://doi.org/10.1080/00048670902721079>
- Didham, S., Dromgole, L., Csiernik, R., Karley, M. L., & Hurley, D. (2011). Trauma exposure and the social work practicum. *Journal of Teaching in Social Work: Canadian Social Work Education*, 31(5), 523-537. <https://doi.org/10.1080/08841233.2011.615261>
- Eastwood, C., & Ecklund, K. (2008). Compassion fatigue risk and self-care practices among residential treatment center childcare workers. *Residential Treatment for Children and Youth*, 25(2), 103-122. <https://doi.org/10.1080/08865710802309972>

- Elwood, L. S., Mott, J., Lohr, J. M., & Galovski, T. E. (2011). Secondary trauma symptoms in clinicians: A critical review of the construct, specificity, and implications for trauma-focused treatment. *Clinical Psychology Review, 31*(1), 25-36. <https://doi.org/10.1016/j.cpr.2010.09.004>
- Faul, F., Erdfelder, E., Lang, A., & Buchner, A. (2007). GPower 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods, 39*(2), 175-191. <https://doi.org/doi:10.3758/BF03103146>
- Fendel, J. C., Bürkle, J. J., & Göritz, A. S. (2021). Mindfulness-based interventions to reduce burnout and stress in physicians: A study protocol for a systematic review and meta-analysis. *BMJ Open, 9*(11). <https://doi.org/doi:10.1136/bmjopen-2019-032295>
- Figley, C. (1995). *Compassion fatigue as secondary traumatic stress disorder: an overview. Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized*. Routledge
- Finkelhor, D., Turner H. A., Shattuck, A., & Hamby, S. L. (2013). Violence, crime, and abuse exposure in a national sample of children and youth: An update. *Journal of American Medical Association – Pediatrics, 167*(7), 614–621. <https://doi.org/:10.1001/jamapediatrics.2013.42>
- Gravetter, F., & Wallnau, L., (2005). *Essentials of statistics for the behavioral sciences*. Belmont, CA: Thomas/Wadsworth.

- Griffiths, A., Royse, D., Walker, R. (2018) Stress among child protective service workers: Self-reported health consequences. *Children and Youth Services Review*, 90(1), 46-53. <https://doi.org/10.1016/j.chidyouth.2018.05.011>
- Hallinan, S., Shiyko, M. P., Volpe, R., & Molnar, B. E. (2019). Reliability and Validity of the Vicarious Trauma Organizational Readiness Guide (VT-ORG). *American Journal of Community Psychology*, 64(3-4), 481-493. <https://doi.org/10.1002/ajcp.12395>
- Heritage, B., Rees, C., & Hegney, D. (2018). The proqol-21: A revised version of the professional quality of life (proqol) scale based on rasch analysis. *Plos One*, 13(2), <https://doi.org/10.1371/journal.pone.0193478>
- Higuchi, Y., Inagaki, M., Koyama, T., Kitamura, Y., Sendo, T., Fujimori, M., Yamada, N. (2016). A cross-sectional study of psychological distress, burnout, and the associated risk factors in hospital pharmacists in Japan. *Biomed Central Public Health*, 16(1), 534-8. <http://doi.org/10.1186/s12889-016-3208-5>
- Huggard, P., Law, J., & Newcombe, D. (2017). A systematic review exploring the presence of vicarious trauma, compassion fatigue, and secondary traumatic stress in alcohol and other drug clinicians. *Australasian Journal of Disaster and Trauma Studies*, 21(2), 65-72. http://trauma.massey.ac.nz/issues/2017-2/AJDTS_21_2_Huggard.pdf
- Huggard, P. K., Stamm, B. H., & Pearlman, L. A. (2013). Physician stress: Compassion satisfaction, compassion fatigue and vicarious traumatization. In C. R. Figley, P.

- K. Huggard & C. Rees (Eds.), *First do no self-harm: Understanding and promoting physician stress resilience* (pp. 127-145). Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780195383263.003.0007>
- Hwang, Y., Bartlett, B., Greben, M., & Hand, K. (2017). A systematic review of mindfulness interventions for in-service teachers: A tool to enhance teacher wellbeing and performance. *Teaching and teacher education*, 64(1), 26-42. <https://doi.org/10.1016/j.tate.2017.01.015>
- Hydon, S., Wong, M., Langley, A. K., Stein, B. D., & Kataoka, S. H. (2015). Preventing secondary traumatic stress in educators. *Child and Adolescent Psychiatric Clinics of North America*, 24(2), 319-333. <https://doi.org/10.1016/j.chc.2014.11.003>
- Institute for Education Sciences. (2015). *Digest of educational statistics*. National Center for Education Statistics. https://nces.ed.gov/programs/digest/2015menu_tables.asp
- Institute for Education Sciences. (2018). *Digest of educational statistics*. National Center for Education Statistics. https://nces.ed.gov/programs/digest/2018menu_tables.asp
- Itzick, M., & Kagan, M. (2017). Intention to leave the profession: Welfare social workers compared to health care and community social workers in Israel. *Journal of Social Service Research*, 43(3), 346-357. <https://doi.org/10.1080/01488376.2016.1246402>
- Ivicic, R., & Motta, R. (2017) Variables associated with secondary traumatic stress among mental health professionals. *Traumatology*, 23(2) 196-204. <https://doi.org/10.1037/trm000065>

Jorgensen, L. B. (2012). *The experiences of licensed mental health professionals who have encountered and navigated through compassion fatigue* [Unpublished doctoral dissertation]. Oregon State University.

<https://www.semanticscholar.org/paper/The-Experiences-of-Licensed-Mental-Health-Who-Have-J%C3%B8rgensen/7c375f65ce126d39078ffdaaa3e82a3188fb7a30>

Kalhari, S. H., Mohammadkhani, S., Hasani, J., Akbar, M., & Moghadasin, M. (2019).

Psychometric properties of the Persian version of professional quality of life scale among nurses. *Ufuq-i Dānish*, 25(2), 139-145.

https://www.researchgate.net/publication/327097584_Persian_Translation_and_Psychometric_Properties_of_Professional_Quality_of_Life_Scale_ProQOL_for_Health_Care_Providers

Kellogg, M. B., Knight, M., Dowling, J. S., & Crawford, S. L. (2018). Secondary traumatic stress in pediatric nurses. *Journal of Pediatric Nursing*, 43(1), 97.

<https://doi.org/10.1016/j.pedn.2018.08.016>

Kitchingman, T., Caputi, P., Woodward, C., & Wilson, I. (2018). The impact of their role on telephone crisis support workers' psychological wellbeing and functioning: Quantitative findings from a mixed methods investigation. *Public Library of Science*, 13(12), 1-23. <https://doi.org/10.1371/journal.pone.0207645>

Science, 13(12), 1-23. <https://doi.org/10.1371/journal.pone.0207645>

- Laurent, N., & Wright, K. (2020). A trauma-informed approach to managing archives: A new online course. *Archives and Manuscripts*, 48(1), 1-8.
<http://doi.org/10.1080/01576895.2019.1705170>
- Lee, J., Ruth, G., & Bride, B. (2018). Exposure to client trauma, secondary traumatic stress, and the health of clinical social workers: A mediation analysis. *Clinical Social Work Journal*, 46(3), 1-8. <https://doi.org/10.1007/s10615-0170638-1>
- Leiken, S. J. (2020). Discussion of Dr. Anderson's case with a focus on transference and countertransference. *The Psychoanalytic Study of the Child*, 73(1), 146-150.
<https://doi.org/10.1080/00797308.2020.1690892>
- Makadia, R., Sabin-Farrell, R., & Turpin, G. (2017). Indirect exposure to client trauma and the impact on trainee clinical psychologists: Secondary traumatic stress or vicarious traumatization? *Clinical Psychology and Psychotherapy*, 24(5), 1059-1068. <http://doi.org/10.1002/cpp.2068>
- Maslach, C., Schaufeli, W., & Leiter, M. (2001). Job burnout. *Psychological Annual Review*, 52(1), 397-422. <https://doi.org/10.1146/annurev.psych.52.1.397>
- McCain, S., McKinley, N., Dempster, M., Campbell, J., & Kirk, J. (2018). A study of the relationship between resilience, burnout and coping strategies in doctors. *Postgraduate Medical Journal*, 94(1107), 43-47.
<http://doi.org/10.1136/postgradmedj-2016-134683>

- McCann, L., & Pearlman, A. (1990). Vicarious traumatization: A framework for understanding the psychological effects of working with victims. *Journal of Traumatic Stress, 3*(1), 131-149. <http://doi.org/10.1007/BF00975140>
- McCleary, D. F., Clark, F. J., Dawes, J., Flowers, J. M., & Ellis-Hervey, N. (in press). Going digital to address the school psychologist shortage [Special issue]. *Contemporary School Psychology*. <https://doi.org/10.1007/s40688-020-00327-4>
- Meadors, P., Lamson, A., Swanson, M., White, M., & Sira, N. (2010). Secondary traumatization in pediatric healthcare providers: Compassion fatigue, burnout, and secondary traumatic stress. *Omega: Journal of Death and Dying, 60*(2), 103-128. <http://doi.org/10.2190/om.60.2.a>
- Mearns, J., Cain, J. (2003). Relationships between teachers' occupational stress and their burnout and distress: Roles of coping and negative mood regulation expectancies. *Anxiety, Stress & Coping, 16*(1), 71-82. <https://doi.org/10.1080/1061580021000057040>
- Microsoft Corporation. (2018). *Microsoft excel* (Version 16.0.14131.20278). Retrieved from <https://office.microsoft.com/excel>
- Middleton, S., & Potter, C. (2015). Relationship between vicarious traumatization and turnover among child welfare professionals. *Journal of Public Child Welfare, 9*(2), 195-216. <https://doi.org/10.1080/15548732.2015.1021987>

- Mizuno, M., Kinefuchi, E., Kimura, R., & Tsuda, A. (2013). Professional quality of life of Japanese nurses/midwives providing abortion/childbirth care. *Nursing Ethics*, 20(5), 539-550. <http://doi.org/10.1177/0969733012463723>
- Morse, G., Salyers, M. P., Rollins, A. L., Monroe-DeVita, M., & Pfahler, C. (2012). Burnout in mental health services: A review of the problem and its remediation. *Administration and Policy in Mental Health*, 39(5), 341-352. <https://doi.org/10.1007/s1048801103521>
- Najjar, N., Davis, L., Beck-Coon, K., & Doebbeling, C. (2009). Compassion fatigue: A review of the research to date and relevance to cancer-care providers. *Journal of Health and Psychology*, 14(1), 267–277. <http://doi.org/10.1177/1359105308100211>
- National Association of School Psychologists (NASP). (2016). *Shortages in school psychology resource guide*. <https://www.nasponline.org/resources-and-publications/resources-and-podcasts/school-psychology/shortages-in-school-psychology-resource-guide>.
- National Association of School Psychologists. (2017). *Care for the caregiver: Guidelines for administrators and crisis teams*. [Handout]. <https://www.nasponline.org/resources-and-publications/resources-and-podcasts/school-climate-safety-and-crisis/mental-health-resources/care-for-caregivers-tips-for-families-and-educators/care-for-the-caregiver-guidelines-for-administrators-and-crisis-teams>.

National Association of School Psychologists. (2020, March 18). *Graduate educators: Update regarding graduate intern hours in response to school closures*. [Press release]. <https://www.nasponline.org/resources-and-publications/graduate-educators/guidance-regarding-graduate-intern-hours-in-response-to-school-closures>.

National Child Traumatic Stress Network (NCTSN). (2011). *Secondary traumatic stress: A fact sheet for child-serving professionals*. <https://www.nctsn.org/resources/secondary-traumatic-stress-fact-sheet-child-serving-professionals>.

Netermeyer, R.G., Bearden, W. O., & Sharma, S. (2003). *Scaling procedures: Issues and*
Nunn, K., & Isaacs, D. (2019). Burnout. *Journal of Paediatrics and Child Health*, 55(1),
5. <https://doi.org/10.1111/jpc.14331>

Panagioti, M., Panagopoulou, E., Bower, P., Lewith, G., Kontopantelis, E., Chew-Graham, C., . . . Esmail, A. (2017). Controlled interventions to reduce burnout in physicians: A systematic review and meta-analysis. *JAMA Internal Medicine*, 177(2), 195. <https://doi.org/10.1001/jamainternmed.2016.7674>

Pearlman, L. A., & Caringi, J. (2009). *Vicarious traumatization and complex trauma*. In C. A. Courtois & J. D. Ford (Eds.), *Complex traumatic stress disorders: An evidence-based clinician's guide*. Guilford Press.

- Pearlman, L. A., & Saakvitne, K. W. (1995). *Trauma and the therapist: Countertransference and vicarious traumatization in psychotherapy with incest survivors*. W. W. Norton.
- Perez-Chacon, M., Chacon, A., Borda-Mas, M., & Avargues-Navarro, M. L. (2021). Sensory processing sensitivity and compassion satisfaction as risk/protective factors from burnout and compassion fatigue in healthcare and education professionals. *International Journal of Environmental Research and Public Health*, 18(2), 611. <https://doi.org/10.3390/ijerph18020611>
- Pines, A., & Maslach, C. (1978). Characteristics of staff burnout in mental health settings. *Hospital & Community Psychiatry*, 29(4), 233–237. <https://doi.org/10.1176/ps.29.4.233>
- Pryce, J. G., Shackelford, K. K., & Pryce, D. H. (2007). *Secondary Traumatic stress and the child welfare professional: Training manual*. Lyceum Books.
- Ravi, A., Gorelick, J., & Pal, H. (2021). Identifying and addressing vicarious trauma. *American Family Physician*, 103(9), 570-572. <https://www.aafp.org/afp/2021/0501/p570.html>
- Salston, M., & Figley, C. Secondary traumatic stress effects of working with survivors of criminal victimization. *Journal of Traumatic Stress*, 16(2), 167–174. <https://doi.org/10.1023/A:1022899207206>
- Schaufeli, W., & Enzmann, D. (1998) *The burnout companion to study and practice: A critical analysis*. CRC Press.

- Shanafelt, T. D., Dyrbye, L. N., & West, C. P. (2017). Addressing physician burnout: The way forward. *Journal of the American Medical Association*, 317(9), 901.
<https://doi.org/10.1001/jama.2017.0076>
- Shoji, K., Lesnierowska, M., Smoktunowicz, E., Bock, J., Luszczynska, A., Benight, C., & Cieslak, R. (2015). What comes first, job burnout or secondary traumatic stress? Findings from two longitudinal studies from the U.S. and Poland. *PloS One*, 10(8). <http://doi.org/10.1371/journal.pone.0136730>
- Sodeke-Gregson, A., Holttum, S., & Billings, J. (2013). Compassion satisfaction, burnout, and secondary traumatic stress in UK therapists who work with adult trauma clients. *European Journal of Psychotraumatology*, 4(1), 2-10.
<http://doi.org/10.3402/ejpt.v4i0.21869>
- Sprang, G., James, J., Clark, A., & Whitt-Woosley, A. (2007). Compassion fatigue, compassion satisfaction, and burnout: Factors impacting a professional's quality of life. *Journal of Loss and Trauma*, 12(3), 259-280.
<https://doi.org/10.1080/15325020701238093>
- Stamm, Hudnall. (2010). *Professional quality of life: Compassion satisfaction and fatigue version 5*. <https://proqol.org>
- Swords, A., & Ellis, V. (2017). Burnout and vigor among health service psychology doctoral students. *The Counseling Psychologist*, 45(8), 1141-1161.
<http://doi.org/10.1177/0011000017747548>

- Taylor, S. G., Roberts, A. M., & Zarrett, N. (2021). A Brief Mindfulness-based Intervention (bMBI) to Reduce Teacher Stress and Burnout. *Teaching and Teacher Education, 100*. <http://doi.org/10.1016/j.tate.2021.103284>
- Teel, J., Reynolds, M., Bennett, M., Roden-Foreman, W., McShan, E., Hamilton, R., & Warren, M. (2019). Secondary traumatic stress among psychiatrists treating trauma patients. *Proceedings - Baylor University Medical Center, 32*(2), 209-214. <http://doi.org/10.1080/08998280.2018.1559694>
- Thatch, L. (1995). Using electronic mail to conduct survey research. *Educational Technology, 35*(2), 27-31. <http://www.jstor.org/stable/44428960>
- Thomas, B., & Wilson, P. (2004). Issues and controversies in the understanding and diagnosis of compassion fatigue, vicarious traumatization, and secondary traumatic stress disorder. *International Journal of Emergency Mental Health, 6*(2), 81. <https://pubmed.ncbi.nlm.nih.gov/15298079/>
- Ting, L., Jacobson, M., & Sanders, S. (2011). Current levels of perceived stress among mental health social workers who work with suicidal clients. *Social Work, 56*(4), 327–336. <https://doi.org/10.1093/sw/56.4.327>
- Tyson, J. (2007). Compassion fatigue in the treatment of combat-related trauma during wartime. *Clinical Social Work Journal, 35*(3), 183-192. <https://doi.org/10.1007/s10615-007-0095-3>

- Walsh, B. & Walsh, S. (2001). Is mental health work psychologically hazardous for staff? A critical review of the literature. *Journal of Mental Health, 10*(1), 121-129.
<https://doi.org/10.1080/0963823012342>
- Wright, K. B. (2006). Researching internet-based populations: Advantages and disadvantages of online survey research, online questionnaire authoring software packages, and web survey services. *Journal of Computer-Mediated Communication, 10*(3), 1-12. <https://doi.org/10.1111/j.1083-6101.2005.tb00259>
- Yang, C. (2021). Online teaching self-efficacy, social-emotional learning (SEL) competencies, and compassion fatigue among educators during the COVID-19 pandemic. *School Psychology Review. 50*(4), 505-518.
<https://doi.org/10.1080/2372966X.2021.1903815>
- Zhang, Y., Zhang, C., Han, X., Li, W., & Wang, Y. (2018). Determinants of compassion satisfaction, compassion fatigue and burn out in nursing: A correlative meta-analysis. *Medicine (Baltimore), 97*(26).
<https://doi.org.10.1097/MD.0000000000011086>

APPENDIX

Demographic Questionnaire

Please indicate your sex.

- Male
- Female
- Other: _____
- Prefer not to answer

What is your age in years?

- Please specify: _____
- I prefer not to answer.

Ethnicity

Which categories best describes you? Select all that apply to you:

- American Indian or Alaska Native—For example, Navajo Nation, Blackfeet Tribe, Mayan, Aztec, Native Village of Barrow Inupiat Traditional Government, Nome Eskimo Community
- Asian—For example, Chinese, Filipino, Asian Indian, Vietnamese, Korean, Japanese
- Black or African American—For example, Jamaican, Haitian, Nigerian, Ethiopian, Somalian
- Hispanic, Latino or Spanish Origin—For example, Mexican or Mexican American, Puerto Rican, Cuban, Salvadoran, Dominican, Columbian

- Middle Eastern or North African—For example, Lebanese, Iranian, Egyptian, Syrian, Moroccan, Algerian
- Native Hawaiian or Other Pacific Islander—For example, Native Hawaiian, Samoan, Chamorro, Tongan, Fijian, Marshallese
- White—For example, German, Irish, English, Italian, Polish, French
- Other race, ethnicity, or origin, please specify: _____
- I prefer not to answer.

Where do you live?

- Midwest—Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, Ohio, North Dakota, South Dakota, Wisconsin
- Northeast—Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont
- South—Arkansas, Alabama, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia
- West—Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming
- Puerto Rico or other U.S. territories
- Canada
- Other, please specify: _____

Education

Which categories describe you? Select all that apply to you:

- Some high school
- High school diploma or equivalent
- Vocational training

- Some college
- Associate's degree (e.g., AA, AE, AFA, AS, ASN)
- Bachelor's degree (e.g., BA, BBA BFA, BS)
- Some post undergraduate work
- Master's degree (e.g., MA, MBA, MFA, MS, MSW)
- Specialist degree (e.g., SSP, EDs)
- Applied or professional doctorate degree (e.g., MD, DDC, DDS, JD, PsyD, Pharm D)
- Doctorate degree (e.g., EdD, PhD)
- Other, please specify: _____

Please select the answer that best defines your current university training program.

- Master's Level Program (e.g., MA, MS, MEd)
- Certificate of advanced graduate studies (CAGS)
- Specialist Level Program (e.g., SSP, EdS, PsyS, CAS)
- Doctoral Level Program (e.g., PhD, PsyD, EdD)

Please select your current status (year) in your program:

- 1st year
- 2nd year
- 3rd year
- 4th year
- 5th year
- 6th year
- 7th year and beyond
- Other, please specify: _____

On average, how many hours do you engage in school psychology-related work, including time at an office, during practicum, internship, field experience, or working at home?

- 20 hours or less
- 20 – 35 hours
- More than 35 hours or full-time

Which of the following categories best describes the setting in which you currently engage in psychological experience?

- Rural or small setting (population size less than 528)
- Urban or large setting (population size of 528 or more)

Practicum Hours

Please select the amount of practicum hours you have currently completed

- 0-99
- 100-299
- 300-499
- 500-799
- 800-999
- 1000+

During your training, how often were in-depth topics related to self-care, wellbeing, and/or responding to secondary traumatic stress as a student/practitioner discussed in your classes?

- Never
- Rarely
- Occasionally
- Often
- Very often

Were you or are you active in a school psychology graduate student organization at the time of your training?

- Never
- Rarely
- Occasionally
- Often
- Very often

Have you worked with a student/client/patient that has experienced trauma?

- Never
- Rarely
- Occasionally
- Often
- Very often

Secondary Traumatic Stress Scale (Bride et al., 2004)

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

Professional Quality of Life Scale (Stamm, 2010)

1. I am happy.
2. I am preoccupied with more than one person I [help].
3. I get satisfaction from being able to [help] people.
4. I feel connected to others.
5. I jump or am startled by unexpected sounds.
6. I feel invigorated after working with those I [help].
7. I find it difficult to separate my personal life from my life as a [helper].
8. I am not as productive at work because I am losing sleep over traumatic experiences of a person I [help].
9. I think that I might have been affected by the traumatic stress of those I [help].
10. I feel trapped by my job as a [helper].
11. Because of my [helping], I have felt "on edge" about various things.
12. I like my work as a [helper].
13. I feel depressed because of the traumatic experiences of the people I [help].
14. I feel as though I am experiencing the trauma of someone I have [helped].
15. I have beliefs that sustain me.
16. I am pleased with how I am able to keep up with [helping] techniques and protocols.
17. I am the person I always wanted to be.
18. My work makes me feel satisfied.
19. I feel worn out because of my work as a [helper]
20. I have happy thoughts and feelings about those I [help] and how I could help them.
21. I feel overwhelmed because my case [work] load seems endless.
22. I believe I can make a difference through my work.
23. I avoid certain activities or situations because they remind me of frightening experiences of the people I [help].
24. I am proud of what I can do to [help].
25. As a result of my [helping], I have intrusive, frightening thoughts.
26. I feel "bogged down" by the system.
27. I have thoughts that I am a "success" as a [helper].
28. I can't recall important parts of my work with trauma victims.
29. I am a very caring person.
30. I am happy that I chose to do this work.

VITA

John Burnett graduated from Sam Houston State University with a Bachelor of Science degree in Psychology in 2014 and would later go on to earn a Specialist in School Psychology degree from Sam Houston State University in 2017. John became a nationally certified school psychologist and licensed specialist in school psychology who worked in the Texas public school system before enrolling in Stephen F. Austin State University to pursue his doctoral degree. While enrolled at Stephen F. Austin State University, John completed research focused on disciplinary procedures and racial disproportionality in students which was presented at national conferences. In the future, John plans to explore his research interests further while providing psychological services to students in both the school and private sectors.

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