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The Predictive Nature of Vicarious Trauma in School Counselors

Connie J. Honsinger
Walden University

Walden University

College of Counselor Education & Supervision

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Connie Honsinger

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Review Committee
Dr. Theodore Remley, Committee Chairperson, Counselor Education and Supervision Faculty
Dr. Walter Frazier, Committee Member, Counselor Education and Supervision Faculty
Dr. Gregory Hickman, University Reviewer, Counselor Education and Supervision Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
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Abstract

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Connie Honsinger

MEd, Virginia Commonwealth University, 2003

BSEd, University of Nebraska-Lincoln, 1986

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

In the past decade, the counseling profession has begun to recognize the impact of vicarious trauma on counselors who provide services to individuals who have experienced trauma. The constructivist self-development theory asserts that interpersonal frameworks can determine healthy versus unhealthy coping styles and impact a counselor's susceptibility to vicarious trauma. Researchers have explored vicarious trauma in a number of professions such as mental health counseling and social work however they have not examined potential risk factors specific to school counseling. The purpose of this correlational study was to investigate variables associated with vicarious trauma in school counselors. The research focused on the relationship between vicarious trauma and the level of exposure to student trauma, history of trauma in the counselor's personal life, self-other differentiation, level of school, and amount of trauma education. An electronic questionnaire was sent to 654 school counselors in four school districts in Virginia and was returned by 217. The survey included the Vicarious Trauma Scale, Self-Other Differentiation Scale, Adverse Childhood Experiences Inventory-Revised, and demographic survey. Data analysis conducted using multiple regression revealed a significant negative relationship between scores on the Self-Other Differentiation Scale and scores on the Vicarious Trauma Scale indicating counselors with less emotional differentiation from clients are more likely to have higher levels of vicarious trauma. Results of the study may be used to reduce the risk of vicarious trauma in school counselors so they can continue to support students who have been exposed to trauma.

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Dedication

This research project is dedicated to all of the compassionate and committed individuals I have been so fortunate to work with and learn from on this journey. Your passion for helping those impacted by trauma inspires me daily. You hold the hands of those who have been hurt and lead the way to healing until they are able to move forward on their own. This work often takes a personal toll, yet you continue to serve those in need. My hope is this research project will contribute to the development of resilience and personal well-being for all helping professionals who bear witness to the pain trauma survivors have endured. You make a difference in the lives of many and you deserve to be cared for and supported.

Acknowledgements

I would like to thank my family for their love and support during this process. To my husband, Pete, thank you for your patience, understanding, and most of all for stepping up to cover more than your share while I pursued this dream. To my children, Jeffrey and Rachael, thank you for your encouragement and allowing me to be both mom and student. To my father, mother, and father-in-law, your belief in me and support carried me through the times I doubted myself and pushed me to continue. To my brother and sisters, who have always been my role models for achievement and perseverance, you paved the way and were my inspiration.

I would also like to recognize and thank my dissertation chair, Dr. Theodore Remley, my methodologist, Dr. Walter Frazier, and my University Research Reviewer, Dr. Gregory Hickman, for your guidance and support through the dissertation process. Dr. Remley, your positive encouragement and calm demeanor helped to keep me on track and gave me the added determination to push through obstacles and challenges. My work is better because of all of you. I hope this study will positively contribute to the field of research in trauma and vicarious trauma.

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Chapter 1: Introduction to the Study

Introduction

Providing services to clients who have experienced trauma can be a significant occupational hazard and compromise both school counselors and the students with whom they work (Branson, Weigland, & Keller, 2014). Elementary, middle, and high school counselors, already under tremendous pressure due to large caseloads, program accountability, and a lack of professional supports, can be particularly susceptible to vicarious trauma (Holcomb-McCoy, Gonzalez, & Johnston, 2009). Working with the vulnerable population of students ranging in ages from 5 to 18 can further increase the risk of vicarious trauma (Figley, 1995). Counseling literature lacks information regarding studies of vicarious trauma in school counselors as well as risk and predictive factors.

According to Newell and MacNeil (2010), the best defense against the development of vicarious trauma is education. Information about vicarious trauma, risk and protective factors, and self-care could be infused into the curriculum for counselors-in-training as well as continuing education for practicing school counselors. Increasing counselor awareness of their potential personal and professional limitations is an ethical responsibility and adheres to the standards of the American Counseling Association (ACA) and the Council for Accreditation of Counseling and Related Educational Programs (CACREP). The results of this research study have the potential to increase school counselor awareness of the possible risk factors for the development of vicarious

trauma as well as contribute information that could increase counselor wellness and performance.

This chapter will feature information regarding the history and development of vicarious trauma, important distinctions between this term and related concepts, and the theoretical framework for the study. The gap in knowledge regarding vicarious trauma when applied to school counselors will be presented, as well as the problem statement and research questions. Additionally, the nature, scope, and limitations of the study as well as its potential significance to the school counseling profession will be discussed.

Background

McCann and Pearlman (1990) defined vicarious trauma as reactions that can occur in a helping professional as a result of working with individuals with trauma and the exposure to often graphic and detailed disturbing events or acts of cruelty experienced by the client. A mental health professional can become vulnerable to negative transformations that may include physical, emotional, and cognitive symptoms similar to those experienced by their clients (Harrison & Westwood, 2009). Empathic engagement between the counselor and client, while necessary for the development of an effective therapeutic relationship, has also been identified as the experience most responsible for excessive identification with another and can result in personal distress as well as avoidance (Saakvitne, 2002). The effects of vicarious trauma can present as a disruption of self-protective beliefs about safety, control, and predictability, cynicism, anxiety, and depression, and loss of hope (Sexton, 1999).

Previously, most attention in research studies has focused on the impact of traumatic events on those who have experienced it firsthand as opposed to those who work with the victims and are exposed secondarily to the distressing traumatic material. Research on the impact of working with individuals who have experienced trauma has primarily focused on counselors and other professionals working in settings outside of schools. Some examples of previous research have included mental health professionals, trauma therapists, psychologists, social workers, and other helping professionals as well as first responders, trauma nurses, welfare professionals, and crisis support volunteers (see Branson et al., 2014; Brockhouse, Cohen, Msetfi, & Joseph, 2011; Cohen & Collens, 2013; Devilly, Wright, & Varker, 2009; Hernandez, Engstrom, & Gangsei, 2010; Howlett & Collins, 2014; Jankoski, 2010; Michalopoulos & Aparicio, 2012; Newell & MacNeil, 2010; Setti & Argentero, 2014; VonRueden et al., 2010).

School counselors provide professional services to the most vulnerable population, children from early childhood to young adults who often have experienced significant levels of trauma (Steele & Malchiodi, 2012). According to the U. S. Department of Health and Human Services (DHHS) (2013), an estimated 679,000 children were victimized by maltreatment that included neglect, physical, sexual, and psychological abuse and the overall rate of children who received a response from Child Protective Services increased from 40.3 to 42.9 per 1,000 children in the population since 2009. Nearly a half million children are placed into foster care each year due to physical and sexual abuse and neglect (Dwyer & Noonan, 2005). The Centers for Disease Control and Prevention (CDC) in Van Der Kolk (2014) has shown an estimated one in five

Americans was sexually molested as a child, one in four was beaten by a parent, one in eight children witnessed their mother being physically assaulted, and nearly a quarter of those surveyed grew up with alcoholic relatives.

Many of the children who attend elementary, middle, and high school have previously or will experience some type of trauma that may impact cognition, behavior, and relationships (Van Der Kolk, 2014). Often, these experiences can translate to diminished concentration, memory, organization, and language skills children need to be successful in the school setting (Gurwitch, Silovsky, Schultz, Kees, & Burlingame, 2002). According to the National Child Traumatic Stress Network (NCTSN) (2016), difficulties displayed by children impacted by trauma can include trouble focusing and learning, poor social skills, increased aggression, inability to trust, dysregulation, fearfulness, anxiety, and avoidant behaviors, as well as physiological symptoms such as stomach and headaches, poor sleep habits, and encopresis (bedwetting).

Parents, school staff, and students often look to the school counselor for assistance when there are individuals who are having difficulty functioning in the classroom (American School Counselor Association [ASCA], 2010). School counselors have an ethical as well as professional responsibility to promote the welfare of individual students and collaborate with them to address educational, academic, career, and personal social needs (ASCA, 2010). School counselors take the time to build relationships with students while employing empathy, listening skills, and working with students who have experienced trauma to provide appropriate supports which in turn can leave counselors at risk for vicarious trauma (Gurwitch & Schonfeld, 2011). This study is important to

identify potential variables that may increase or predict a school counselor's vulnerability to vicarious trauma as well as contribute to school counselor awareness and education as previous studies on the subject have not examined this professional group.

Problem Statement

There is a positive connection between counseling individuals who have experienced trauma and the development of vicarious trauma in counselors (Cohen & Collens, 2013). Vicarious trauma, compassion fatigue, and secondary traumatic stress are all terms that have been used to explain the psychological effects of exposure to another's traumatic experiences (Figley, 1995; McCann & Pearlman, 1990). Research related to vicarious trauma and its development in a variety of helping professions has shown both long and short-term levels of distress, changes in cognitive schemas, and symptoms in counselors that may parallel those of their clients (Cohen & Collens, 2013; Michalopoulos & Aparicio, 2012). Although research regarding vicarious trauma illuminates important findings, I have found no research that has examined predictor variables associated with levels of vicarious trauma in school counselors at the elementary, middle, and high school levels. Given such, further research is warranted that could examine potential predictor variables of vicarious trauma in school counselors in an effort to address school counselors' vulnerability to vicarious trauma as well as contribute to school counselor awareness and education.

Traumatic events can have a significant impact on the emotional and physical well-being of individuals who have experienced them as well as those who care for them (Van Der Kolk, 2014). Current research has brought much needed attention to the

importance of recognizing the impact of trauma on child development and its potential to be educationally disruptive (Ahlers, Stanick, & Machek, 2016; Goodman, Miller, & West-Olatunji, 2012). An estimated one in four children will experience some type of trauma during childhood or adolescence, and given these children spend a large portion of their time in the school environment, it stands to reason school counselors would be the primary professionals to work with students who are impacted by traumatic reactions (Keller-Dupree, 2013). Goodman et al. (2012) identified a need for school counselors to be educated about screening and interventions for psychological trauma, fostering supportive relationships with children who have experienced trauma, and providing education to families and other school personnel in order to establish safe, supportive environments in a child's life when appropriate. However, school counselors typically receive little or no training or continuing education about the impact of trauma on children, appropriate interventions, or its potential effects on the counselor (Ahlers et al., 2016; Ko et al., 2008). Furthermore, counselors who may have their own personal history of trauma in addition to a lack of awareness of risk and protective factors could potentially be at an even higher risk of vicarious trauma (Nelson-Gardell & Harris, 2003; Newell & MacNeil, 2010).

Previous research has primarily focused on helping professionals outside of the school environment, particularly those who work with crises on a routine basis (see Abassary & Goodrich, 2014; Branson et al., 2014; Brockhouse et al., 2011; Choi, 2011; Cohen & Collens, 2013; James & Gilliland, 2013; Knight, 2010; Middleton, 2015). Helping professionals included trauma workers, counselors, therapists, sexual violence

workers, trauma therapists, social workers, and behavioral health clinicians. Helping professionals outside of the school often work with children and adolescents who have experienced significant trauma. Exposure to this vulnerable population has been shown to put counselors at risk of vicarious trauma. School counselors work with children and adolescents in the school environment and spend a significant amount of time with those who have trauma histories and struggle with issues of self-regulation, anxiety, relationships, social skills, regressive behaviors, and academic achievement (Keller-Dupree, 2013; Perry, 2009. School counselors therefore are likely to be at risk of vicarious trauma.

Purpose of the Study

School counselors work with populations of students who are increasingly at risk for victimization (Finkelhor, Turner, Ormrod, & Hamby, 2010). Exposure to detailed stories and the aftermath of traumatic events experienced by children can result in the development of vicarious trauma in counselors (Harrison & Westwood, 2009). Not all counselors who work with victims of trauma experience vicarious trauma, which implies there are risk and protective factors that contribute to the development of vicarious trauma (Newell & MacNeil, 2010). Information that can assist in building a culture of wellness can prevent or mediate the impact of vicarious trauma on school counselors as well as increase the effectiveness of school counselors with students they serve.

The purpose of this quantitative research study was to examine the degree to which selected variables (counselors' personal history of trauma, degree of exposure to trauma of student clients, ability to establish boundaries with others, level of school

[elementary, middle, and high], and type of education counselor has received related to trauma or trauma counseling) are predictive of vicarious trauma for practicing school counselors. The findings of this study can add to an understanding of how counselor educators can better prepare and support counseling graduate students as well as provide continued support and training to practicing school counselors to reduce their risk of developing vicarious trauma.

Research Question

RQ1: What is the relationship between vicarious trauma and (a) the degree of exposure to trauma of student clients; (b) history of trauma in counselor's personal life; (c) ability to establish boundaries with others; (d) level of school (elementary, middle, or secondary); and (e) amount of education counselor has received related to trauma or trauma counseling amongst school counselors?

Hypotheses

Null Hypothesis (H0): The following variables, individually or in combination with each other, will not predict vicarious trauma scores on the Vicarious Trauma Scale (VTS) of school counselors: (a) the score on a degree of exposure to trauma of student clients instruments; (b) the score on a history of trauma in counselor's personal life instrument; (c) the score on an ability to establish boundaries with others instrument; (d) level of school (elementary, middle, or secondary) where the participant is employed; and (e) amount of education counselor has received related to trauma or trauma counseling.

Alternative Hypothesis (HA): The following variables, individually or in combination with each other, will predict vicarious trauma scores on the VTS of school

counselors: (a) the score on a degree of exposure to trauma of student clients instruments; (b) the score on a history of trauma in counselor's personal life instrument; (c) the score on an ability to establish boundaries with others instrument; (d) level of school (elementary, middle, or secondary) where the participant is employed; and (e) amount of education counselor has received related to trauma or trauma counseling.

Theoretical and/or Conceptual Framework for the Study

The constructivist self-development theory addresses concepts related to vicarious trauma and can help to frame the identified research questions and hypotheses. According to constructivist self-development theory, individuals construct their realities based on perceptions, previous experiences, and individuality (McCann & Pearlman, 1990). According to Adams and Riggs (2008) psychological defense styles can determine healthy versus unhealthy coping styles of counselors working with clients who have experienced trauma and whether or not the material can be integrated and transformed or becomes disruptive and harmful.

The five components of this theory are frame of reference, self-capacities, ego resources, psychological needs, and cognitive schemas, and they represent intrapsychic frameworks in which distorted beliefs and symptomology can materialize (Pearlman & Saakvitne, 1995a). An individual's frame of reference is responsible for interpreting events and the world. Disruptions in a frame of reference can create problems in processing information, which can in turn result in distorted thinking that can negatively impact the therapeutic relationship (McCann & Pearlman, 1990). Self-capacities allow the individual to maintain a sense of identity and protect against disruptions in belief

systems. Counselors who have difficulty maintaining differentiation from client trauma are susceptible to vicarious trauma and interpersonal difficulties (Trippany, White-Kress, & Wilcoxon, 2004). Other components of CSDT include psychological needs, resources to self-protect, and cognitive schemas all of which can contribute to the development of vicarious trauma and will be addressed in greater detail in Chapter 2.

Vicarious trauma describes an alteration in a counselor's thinking resulting from working with individuals who have experienced trauma, which can impact worldview, belief systems, identity, psychological needs, and memory (McCann & Pearlman, 1990). These cognitive shifts can have a negative impact on both personal and professional functioning and diminish a counselor's ability to attend to the needs of the client (Trippany et al., 2004). Counselors who, for example, have a personal history of trauma may avoid discussions of traumatic events, or do the opposite by pushing clients to discuss trauma prematurely (Williams, Helm, & Clemens, 2012). Compromised boundaries, inattention, lack of commitment, and difficulty maintaining a therapeutic stance may all indicate distorted perceptions due to the impact of vicarious trauma (Pearlman & Saakvitne, 1995b).

Individuals seek to make sense of the world and repeated exposure to traumatic life events by adapting their perceptions based on their own cognitive schemas, self-capacities, ego resources, and psychological needs (McCann & Pearlman, 1990). Exposure to trauma either personally or secondarily can challenge world views, identity, and beliefs particularly about safety (Pearlman & Saakvitne, 1995b). Counselors may have difficulty integrating traumatic material with previous experiences because of the

emotional and perceptual elements that tend to be very prominent in trauma stories. (Van Der Kolk, 2002) Professionals with a personal history of trauma or those who may have difficulty differentiating themselves from others may interpret stories of trauma in a different way than counselors who do not.

Cognitive schemas or beliefs about self and the world reflect how individuals process information related to safety, trust, esteem, intimacy and control (Baird & Kracen, 2006). School counselors who are affected by vicarious trauma may risk disrupting their ability to connect with students and meet individual needs. Furthermore, counselors may suffer negative effects personally such as becoming overly cautious, distrusting, anxious, depressed, disengaged, and confused (Williams et al., 2012). Ego resources include an individual's ability to conceive consequences, set boundaries, and self-protect which contribute to how information about self and others is processed (McCann & Pearlman, 1995). It is therefore important to understand variables that may impact a counselor's ability to protect from potential risk factors of vicarious trauma such as the amount of time a school counselor spends with students who have experienced trauma, the level of education he or she has received regarding trauma and its impact, and even the school level in which the counselor works. Different age groups of students may differ in the degree of which they are willing to share experiences of trauma. Counselors who are aware of and able to set healthy boundaries as well as implement self-protective strategies may have a diminished risk for the negative effects of vicarious trauma.

The constructivist self-development theory is based on the constructivist framework, which asserts individuals interpret, create, and restructure their realities based on perceptions of events and experiences in order to adapt to their environment (McCann & Pearlman, 1995). This study tested whether the constructivist self-development theory applies to vicarious trauma as related to a school counselor's differentiation between self and others, personal history of trauma, and ability to self-protect when exposed to students who have experienced trauma. Self-protection may include self-development such as education and training that could provide a school counselor with increased awareness of risk factors for VT. A counselor who understands potential risk factors may have a greater ability to restructure perceptions and care for his or her own individual psychological needs for safety, trust, esteem, intimacy, and control. So they will be better equipped to address student needs.

Nature of the Study

This study was a quantitative nonexperimental design because it did not allow for random group assignment or manipulation of variables. A regression analysis was conducted in order to investigate the relationship between the identified variables and the development of vicarious trauma. The variables were selected because theory and research suggested there may be a relationship to vicarious trauma. Regression analysis uses a statistical measure to establish the degree of the relationship between the dependent variable (level of vicarious trauma) and the independent or predictor variables (personal history of trauma, degree of exposure to students with trauma histories, ability to establish boundaries with others, level of school, and amount of trauma education;

McMillan & Schumacher, 2001). It is important to collect data using reliable and valid instruments to determine potential relationships. Multiple surveys that have already been proven to be reliable will be used to explore the relationships among the variables including the Self-Other Differentiation Scale, Adverse Childhood Experiences Inventory-Revised, and the Vicarious Trauma Scale (Finkelhor, Shattuck, Turner, & Hamby, 2015; Olver, Aries, & Batgos, 1989; Vrklevski & Franklin, 2008).

The strengths of this design included its cost and time effective approach as well as its ease of administration. It was a more appropriate design in order to understand potential risk factors for VT given the limited research available with this group. Other benefits of using multiple regression analysis were that both continuous and categorical or nominal independent variables can be used, it allowed examining trends or patterns in the data, it provided more flexibility and the potential to increase statistical power against Type II error (retaining a false null hypothesis), and it helped to understand where statistically significant mean differences are occurring (Davis, 2010).

Definitions

Boundaries: Ability to differentiate clearly between thought and feeling and have a definite sense of personal space and clear autonomous sense of self. Professional boundaries recognize the separateness between clients and mental health professionals, avoid excessive identification with the client and foster the safety necessary for client self-disclosure (Harper & Steadman, 2003; Hartman, 1997)

Burnout: The psychological strain of working with difficult populations (McCann & Pearlman, 1990).

Cognitive schemas: Mental frameworks that include beliefs, expectations, and assumptions about the self and world which enable individuals to make sense of their experiences (Cohen & Collens, 2013; McCann & Pearlman, 1990).

Constructivist self-development theory: A theoretical model for understanding psychological responses to victimization that includes information regarding how individuals construct their realities based on perceptions, previous experiences, and individuality (McCann & Pearlman, 1990).

Compassion fatigue: The overall experience of emotional and physical fatigue that social service professionals experience due to the chronic use of empathy when treating patients who are suffering (Figley, 2002).

Countertransference: The activation of the mental health professional's unresolved or unconscious conflicts or concerns (McCann & Pearlman, 1990).

Differentiation of self: A process by which individuals have a sufficiently developed sense of individuality and are able to maintain their independence as well as interdependence within the context of a relationship (Skowron & Friedlander, 1998).

Ego resources: An individual's ability to meet his or her psychological needs through awareness, growth, and personal relationships (Pearlman & MacIan 1995).

Frame of reference: A set of criteria responsible for processing and interpreting events and the world (McCann & Pearlman, 1990).

Negative transformations: The physical, emotional, and cognitive symptoms experienced by helping professionals that are similar to those experienced by their clients (Harrison & Westwood, 2009).

Psychological needs: An individual's need for safety, dependency/trust, power, esteem, intimacy, independence, and frame of reference (McCann & Pearlman, 1995).

Secondary traumatic stress: The natural and consequential behaviors and emotions that result from exposure to trauma experienced by a significant other or client and the stress that emerges from wanting to help (Figley, 1995).

Self-capacities: Involving one's identity and differentiation of self from others through three important tasks: Formation and maintenance of meaningful relationships, maintenance of a stable sense of personal identity and self-awareness, and ability to tolerate and manage strong emotions (Briere & Runtz, 1997; McCann & Pearlman, 1990).

Trauma: Psychological distress that develops after exposure to frightening, often dangerous or violent events or conditions that are experienced as overwhelming (American Psychiatric Association [APA], 2013; National Child Traumatic Stress Network [NCTSN], 2016).

Vicarious trauma: An alteration of thinking or distortions in beliefs that develop over time, the effects of which can be disruptive and painful as a result of direct practice with individuals who have been exposed to trauma (McCann & Pearlman, 1990; Pearlman & MacIan, 1995).

Assumptions

Participants in this research study were volunteers and understood anonymity and confidentiality as well as the option to withdraw from the study, which was addressed in the informed consent form. Truthful responses were assumed but could not be

demonstrated to be true. Participants were given the opportunity to complete the survey in a setting and time of their choosing, which potentially assisted in the honest disclosure of information, particularly regarding more sensitive topics such as experiences related to a personal history of trauma. The connection between a personal history of trauma and the development of vicarious trauma has been well documented and was determined to be an important variable to be included in this study with school counselors. A pilot study was performed to assure the demographic survey was designed in a way that elicited information that helped the researcher to answer the research questions.

Assumptions of the linear regression model that were used in the study had to be met in order to cross-validate the model and generalize findings. Main assumptions included additivity and linearity (the outcome variable is related to the predictors), independent errors (the assumption of independence), homoscedasticity (predictors should have the same variance), and normally distributed errors. Other assumptions included that no external variables correlated with the predictors, all predictor variables and outcome variable had to be quantitative, there was no perfect relationship between two or more of the predictors, and the predictors had some variation in value.

Scope and Delimitations

A nonprobability convenience sampling strategy was employed in this study and targeted full-time school counselors working at the elementary, middle, or high school levels in four school districts in Virginia. Counselors working part-time were excluded because their exposure to students who have experienced trauma would most likely be limited. Counselors practicing outside of the school system were also excluded as most

research to date has included this population as opposed to those working in the schools. A survey including three validated and reliable instruments (Self-Other Differentiation Scale, Adverse Childhood Experiences Inventory-Revised, and the Vicarious Trauma Scale) as well as a demographic questionnaire was administered to test the degree of relationship between a counselor's personal history of trauma, degree of exposure to students who have experienced trauma, ability to establish boundaries with others, level of school, and amount of trauma education with levels of vicarious trauma (Finkelhor, Shattuck, Turner, & Hamby, 2015; Olver, Aries, & Batgos, 1989; Vrklevski & Franklin, 2008) . Literature was reviewed and determined potential connections between the chosen independent variables and outcome variable.

This research focus was chosen for a number of reasons including personal interest, an absence of literature involving school counselors and vicarious trauma, and a desire to improve professional standards in the field. A quantitative approach was selected in order to investigate the relationship between the identified variables and VT as well as to establish statistically significant conclusions in an area of study that has essentially excluded school counselors. The quantitative study offered a broader view of the phenomenon of vicarious trauma and could potentially be replicated and generalized to other populations of school counselors. The quantitative approach and findings contributed to the validation of the constructivist self-development theory as it applied to school counselors' self capacities (ability to tolerate strong emotions, and set healthy boundaries) and vicarious trauma.

Limitations

The weakness or limitation of this type of study was the use of some of the techniques that can be complex and confusing to the researcher. The statistical analysis was conducted using the Statistical Package for Social Sciences (SPSS) software program to ensure accurate results. The aim was to be able to use a formula to make predictions about the dependent variable (vicarious trauma) based on observed values of the independent variables. This type of study cannot determine causation of VT, however, because of the many variables that can affect an outcome. It will be difficult to generalize the results of this study given only school counselors in one demographic area were surveyed. Results may only suggest they can be applied to a larger population. The instruments used in this survey were considered valid and reliable; however, they did rely on participant self-reporting. The potential limitations included honesty and accuracy of self-reporting, the time of year in the study was conducted in regards to the school calendar, and whether or not the information gathered from the instruments was able to answer the research questions. The study was conducted in all four school districts at a similar time during the year under similar conditions, ensuring anonymity and confidentiality.

It is important to address potential bias that can limit a study and cause inaccurate estimates of association between variables (Pannucci & Wilkins, 2011). Although this survey study did not employ random sampling, selection of participants did include an opportunity for the school counseling departments in each district to participate in the surveys, so recruitment for each group was the same. Confounding variables can be

controlled through the use of a well-planned design with sound operationalization practice (Skelly, Dettori, & Brodt, 2012). In this study, the variables examined were strictly defined and measured using empirically validated instruments. This can increase the quality of results and allow for replication of the study using statistical analysis. Multiple linear regression analysis was used to account for covariates and helped to clarify relationships between the independent and dependent variables.

Significance

Trauma is a significant factor in an estimated 82% to 94% of individuals who seek counseling (Bride, 2004). Crime statistics often underestimate the amount of violence and trauma that are experienced in the home, which has been referred to as one of the most dangerous places in America (Perry, 2001). One in five Americans was sexually molested as a child and one in four was beaten by a parent (Van Der Kolk, 2014). Domestic violence is prevalent in one in three couples (Van Der Kolk, 2014). According to the U.S. Department of Justice (DOJ) (2005), more than half of family violence offenders were imprisoned for crimes against children under the age of 18 and one-third against a child under age 13. Among children who attend schools in the United States, nearly four million have a diagnosable mental disorder, 15 million are exposed to homes with domestic violence, and untold others experience complex trauma that can impair their ability to develop trusting relationships and put them at risk for academic failure as well as other long-term consequences such as an increased risk of depression, suicide, and substance abuse disorders (O'Neill, Guenette, & Kitchenham, 2010; Thompson & Trice-Black, 2012). It is feasible then to assume children with high levels

of exposure to trauma, particularly at the hands of trusted adults, attend schools and will likely require additional assistance. Helping professionals who work with children who have experienced trauma are particularly vulnerable to the effects of vicarious trauma (Figley, 1995).

According to the ASCA (2012), school counselors are expected to spend at least 80% of their time working directly with students, implementing both preventive and responsive services to support the academic, career, and personal-social development of students. School counselors are also trained to recognize and report indicators of abuse, understand how different types of trauma can affect behavior and learning, and assist with interventions that can mitigate this impact (Brown, Brack, & Mullis, 2008). Trauma in children can extend beyond incidents of abuse and include other adverse childhood factors such as poverty, divorce, homelessness, incarceration of a family member, mental health diagnosis, traumatic injury, or illness among others (CDC, 2010).

Adverse childhood experiences or trauma can lead to disrupted neurodevelopment, social, emotional, and cognitive impairments as well as an increased risk for future health-related problems (CDC, 2014). School counselors are often involved with students who have a trauma history and display behaviors or concerns that require more targeted and long-term interventions (Adelman & Taylor, 2010). It stands to reason school counselors may be a segment of the helping professions who are also at risk of developing vicarious trauma. Empirical studies are needed to understand this risk as well as identify protective factors that could impact the wellness of school counselors.

Summary

The concept of vicarious trauma has been well documented in research and supported through numerous studies of mental health professionals in a variety of settings. School counselors, however, have not been previously included in these studies although they work with vulnerable populations of children and adolescents who often experience significant traumas. This quantitative study was conducted to address the problem of the negative effects of vicarious trauma on school counselors that may result from working with students who have experienced trauma. Potential predictor variables that were examined included a personal history of trauma, degree of exposure to students with trauma experiences, level of school, ability to establish boundaries with others, and the amount of education the counselor had received related to trauma. The constructivist framework and constructivist self-development theory were the theoretical foundations applied to this study. A more extensive literature review regarding the conceptual framework, theoretical foundation, and key variables and concepts will be presented in Chapter 2.

Chapter 2: Literature Review

Introduction

It is likely that most counselors will work with individuals who have experienced trauma (Sommer, 2008; Van Der Kolk, 2014; Williams et al., 2012). The impact of this work has the potential to disrupt beliefs, expectations, and assumptions about the self, others, and the world (Pearlman & Saakvitne, 1995b). Vicarious trauma, secondary traumatic stress, compassion fatigue, and burnout are all terms that have been used, often interchangeably, to identify symptoms resulting from exposure to client trauma and the potential negative impact on a counselor's personal as well as professional relationships (Branson et al., 2014; Figley, 1995). Vicarious trauma, however, is a term which describes the impact on a counselor or helping professional that extends beyond the natural consequences of helping individuals who are suffering from symptoms such as emotional exhaustion, job-related stressors, and indications of intrusion, arousal, and avoidance (Devilly et al., 2009; Sexton, 1999). Vicarious trauma can result from witnessing the stories of clients who have experienced pain, fear, and terror associated with traumatic events (Figley, 1995).

Vicarious trauma, first identified by McCann and Pearlman (1990), described more specifically the psychological effects of exposure to client-presented trauma on the helping professional. According to Bride (2007), psychological effects of trauma can extend beyond those directly impacted resulting in physical, emotional, and cognitive symptoms. Professionals may experience symptoms similar to those who have been traumatized which can become cumulative and transformative (Devilly et al., 2009).

Vicarious traumatization represents a loss of safety, control, predictability, and protection, and can interfere with ongoing empathic engagement with clients as well as result in pervasive and enduring alterations in cognitive schemas that can be destructive to the helping professional (Saakvitne & Pearlman, 1996).

Research on vicarious trauma has increased in the past decade and has included an examination of its impact on a variety of helping professions including mental health workers, social workers, trauma therapists, crisis support volunteers, nurses, and first responders, among others. Literature has been inconsistent regarding the extent of exposure required as well as personal and organizational factors that may increase the risk level of developing vicarious trauma. No studies, however, have been found that evaluate the predictive variables associated with levels of vicarious trauma in school counselors at the elementary, middle, and high school levels.

School counselors work with a diverse population of students who are increasingly at risk for victimization, and subsequently secondary exposure to the traumatic experiences of students is a significant risk. Children and adolescents spend a significant amount of time in the school environment and it has been estimated that as many as one in four will experience a traumatic event during this developmental period (Keller-Dupree, 2013). Addressing the risks of working with students who have experienced trauma demands attention not only for personal health but to ensure ethical and competent service delivery to students in schools (Aparicio, Michalopoulos, & Unick, 2013). Therefore, this study examined the negative effects of vicarious trauma on

school counselors that might result from working with students who had experienced traumatic events.

This chapter includes information regarding the scope of literature, search strategy, databases, and engines used to gather sources relevant to this topic. The theoretical foundation applied to this study is explained in detail including a rationale for its use and an analysis of how this theory has been previously applied in ways similar to the current study. Key concepts and definitions are provided as well as summaries of the findings of seminal researchers in the development and application of vicarious trauma. Additionally, literature is presented related to the selection of variables, research questions, and what remains to be studied.

Literature Search Strategy

I used the EBSCOHost search engine to identify full-text articles in data bases such as PsycINFO, PsyArticles, SocINDEX, ERIC, and Academic Search Complete. In addition, I used Google Scholar, the *Mental Measurements Yearbook*, PsycTESTS, PsycBOOKS, ebrary, the Diagnostic and Statistical Manual of Mental Disorders online, books, and dissertations. I used the Internet to access professional organizations, school district counselor and research department information, the U.S. Department of Education (DOE), and websites such as the National Child Traumatic Stress Network that focus on research regarding trauma in children and adolescents. The key terms I used in my search included *vicarious trauma, vicarious traumatization, vicarious experiences, secondary traumatic stress, compassion fatigue, constructivist self-development theory, trauma, childhood trauma, school, school counselors, counselor boundaries, self-other*

differentiation, *therapeutic boundaries*, *traumatic life experiences*, *adverse childhood experiences*, and *personal history of trauma*.

Results of my searches over the past 2 years have yielded an abundance of articles on the topic of vicarious trauma as well as its impact on a variety of helping professions that included medical personnel and first responders, social workers, psychologists, clinicians, mental health therapists, trauma therapists, crisis responders, supervisors, and graduate students. None, however, have specifically focused on school counselors. More recently, literature has begun to focus on the need for educators and other school personnel to implement trauma-informed practices in schools and classrooms recognizing the continued rise in trauma exposure for children and adolescents (Steele & Malchiodi, 2012; Van Der Kolk, 2014).

Constructivist Self-Development Theory

Constructivist self-development theory provided a perspective for understanding individuals and how realities are constructed from personal beliefs, assumptions, and expectations about self, others, and the world (Cohen & Collens, 2013; McCann & Pearlman, 1990). Mental frameworks or schemas include beliefs, assumptions, and expectations that help to interpret events and can provide the context necessary to understand the varying effects of exposure to trauma on belief systems as well as explain differences between a counselor who is negatively impacted and one who is more resilient and able to continue trauma work with a strong therapeutic relationship. Counselors can experience disruptions in beliefs about personal safety, self-efficacy, and worldview based on personal experiences and social and cultural frameworks (Pearlman

& Saakvitne, 1995b). According to McCann and Pearlman (1990), changes in cognitive schemas can be subtle or evident, leading to irrational beliefs and increased levels of distress. Changes in these cognitive frameworks may serve as a protective mechanism but may also lead to personal vulnerability, making it difficult to listen to traumatic material, manage emotions, demonstrate empathy, and maintain positive connections with clients as well as other social supports (Knight, 2010; Newell & MacNeil, 2010).

Adaptation to trauma depended upon several fundamental psychological needs that included safety, dependency or trust, power, esteem, intimacy, and control (McCann & Pearlman, 1990; Trippany et al, 2004; Williams et al., 2012). Helping professionals are often involved with individuals who have been threatened or harmed, which can cause feelings of vulnerability and concerns regarding their own safety and power (McCann & Pearlman, 1990). Work with victims, particularly children, can disrupt schemas about trust, leading to cynicism and a lack of trust of others (McCann & Pearlman, 1990).

According to the constructivist self-development theory, there are five main components that encompass the development of self: Frame of reference, self-capacities, ego resources, psychological needs, and cognitive schemas that include memory and perception (Pearlman & Saakvitne, 1995b). Saakvitne and Pearlman (1996) suggested symptoms indicative of vicarious trauma would be reflected in these areas of the self, given an individual's unique history determines the adaptation to trauma. Symptoms are viewed as normal adaptations an individual may use in order to manage traumatic experiences rather than pathological (Pearlman & Saakvitne, 1995b).

An individual's frame of reference explains the need to understand why events occur and encompasses one's identity, world view, and belief system which can become destructive if the frame of reference takes the form of blaming the client, loss of hope, or disrupts a client's ability to process the trauma (Harrison & Westwood, 2009). Experiences, particularly traumatic events, can cause alterations to an individual's frame of reference and result in a view of the world that may change from safe to suspect or even dangerous. Symptoms of vicarious trauma may manifest as a disruption of personal beliefs about safety, predictability, and control or in counseling may appear as avoidance or excessive identification reactions (Sexton, 1999). Figley (1995) described disruptions in counselor identity resulting from vicarious trauma that included a persistent arousal, avoidance or numbing of reminders, and re-experiencing of trauma events. Values related to spirituality may also have a significant impact on one's world view and deepest beliefs particularly when faced with horrific stories of abuse, violence, and other trauma experiences (Pearlman & McKay, 2008).

Self-capacities develop early in life through relationships with caregivers and contribute to self-regulation of emotions that allow individuals to maintain connections with others as well as a sense of self-worth (Pearlman, 1998). Securely attached relationships help to develop positive self-capacities whereas abusive or neglectful relationships do not (Bowlby, 1988). Self-capacities can be disrupted when a counselor experiences vicarious trauma which may result in difficulty regulating emotions, avoidance of traumatic material, self-doubt, self-destructive behaviors, or an inability to

meet the needs of not only the individuals they work with but their significant others (Pearlman, 1998; Trippany et al., 2004).

Ego resources, described as a component of constructivist self-development theory, allow individuals to meet their needs as well as relate to others (Pearlman & Saakvitne, 1995b). A counselor's ability to understand consequences, set boundaries, and use resources for self-protection are essential to the therapeutic relationship (Trippany et al, 2004). Counselors who may struggle with personal vulnerability, emotional numbing, and avoidance behaviors may begin to question their own competence and potentially undermine a client's work in recovery (Adams & Riggs, 2008). Additionally, ethical concerns arise when there is maladaptive coping, difficulty maintaining an empathic stance, and poor self-care (ACA, 2014).

Psychological needs include the need for safety, trust, esteem, intimacy, and control (Pearlman & Saakvitne, 1995b). Counselors who have been exposed to the trauma of clients may begin to experience the world as unsafe which could result in changes in their own behavior. Feelings of trust may be disrupted resulting in self-doubt or suspicions of others and impair their ability to work with clients or feel connected or intimate with others (Trippany et al., 2004). Esteem needs include self-esteem as well as regard for others and can be compromised with the realization that people can be violent and harmful, making work with clients challenging and perhaps intimidating for fear they will not be able to help. Additionally, exposure to incidents of trauma may trigger feelings of helplessness resulting in a greater need for control (Trippany et al., 2004).

The memory systems of helping professionals can be altered by the trauma of others similar to victims who have directly experienced traumatic events. Cognition, imagery, affect, physical sensations, and interpersonal memory all impact an individual's perception (Pearlman & Saakvitne, 1995a). Trauma experiences can be difficult to integrate and cause disruptions in memory systems such as irritability, anxiety, and depression (affect), fatigue, somatic symptoms (physical), intrusive thoughts (imagery), and avoidance or difficulty concentrating (interpersonal) (Trippany et al., 2004). Disruptions in cognitive schemas can leave counselors vulnerable to the effects of vicarious trauma and cause challenges to their identity and world view as well as impact their work with clients (Munroe, 1995). Some or all of the identified need areas can be impacted depending on a number of variables and one's own personal and psychological history (Stamm, 1999).

The constructivist self-development theory describes important elements in the development of vicarious trauma in helping professionals as well as psychological responses to victimization. According to McCann and Pearlman (1990), beliefs, expectations, and assumptions about the world are central to the effects of victimization. The relationship between cognitive structures and the environment is essential to understanding the way in which trauma is experienced for each individual (McCann & Pearlman, 1990). Changes in cognitive schemas and memory systems can provide information that is particularly applicable to the development of vicarious trauma making this theoretical framework appropriate for the current research study (McCann & Pearlman, 1990; Stamm, 1999).

Vicarious Trauma in Counseling

The percentage of counselors impacted by vicarious trauma has been difficult to determine due in part to the confusion of terms such as vicarious trauma, compassion fatigue, secondary traumatic stress, burnout, and post-traumatic stress disorder and their distinguishing characteristics (Williams et al., 2012). Figley (1995) first identified compassion stress as the symptoms and feelings described by those knowing about and trying to help individuals who have experienced traumatic events. He later referred to this experience as secondary traumatic stress disorder so that he could highlight similarities to symptoms of post-traumatic stress disorder such as re-experiencing, avoidance, and persistent arousal (Figley, 1995). Differences between the terms refer to the point of exposure with post-traumatic stress disorder attributed to the traumatic situation and secondary traumatic stress disorder attributed to the exposure to the traumatized individual (Figley, 2002).

Figley (1995) contended secondary traumatic stress was a natural consequence of emotions and behaviors resulting from exposure to traumatic experiences, and he also suggested that one does not have to directly experience a traumatic event to suffer the impact. Numerous studies have analyzed the effects of working with individuals who have experienced trauma and consistently revealed a pattern of secondary stress reactions that included sadness, anger, fear, frustration, helplessness, powerlessness, despair, intrusion, and shock as well as somatic responses such as numbness and nausea, irritability, avoidance, and insomnia leading to difficulty performing their work (Clemens, 2004; Cohen & Collens, 2013; Smith, Kleijn, Trijsburg, & Hutschemaekers,

2007). Devilly et al. (2009) asserted symptoms of secondary traumatic stress disorder could develop following just one incident while Trippany et al. (2004) theorized symptoms develop as a result of prolonged exposure.

Cognitive, emotional, and behavioral concerns identified in the workplace, particularly within human service professions, have often been attributed to burnout (Schaufeli, Leiter, & Maslach, 2009). Burnout has been described as a gradual process leading to emotional exhaustion, negative perceptions, and feelings of reduced professional competence (Schaufeli et al., 2009). Conversely, vicarious trauma and secondary traumatic stress disorder can have a sudden onset with little warning making it more difficult to accurately identify and address (Figley, 2002). Burnout is a multidimensional construct that has been associated with work stressors and a lack of accomplishment but has also stimulated research in the area of emotional labor, symptom contagion, and social exchange (Newell & MacNeil, 2010; Schaufeli et al., 2009). Secondary traumatic stress has been defined as the psychological effects, including symptoms similar to post-traumatic stress disorder, which can result from working with traumatized populations (Bride, 2007; Devilly et al., 2009; Stamm, 1999).

Vicarious trauma and secondary traumatic stress disorder share some similarities; however, vicarious trauma is unique due to the significant cognitive change process with transformative effects on an individual's belief system and world view particularly in the areas of trust and safety (Harrison & Westwood, 2009; Newell & MacNeil, 2010). The term vicarious trauma was first developed by McCann and Pearlman (1990) within the context of their new constructivist self-development theory to describe unique responses

in helping professionals who work with traumatized individuals. These reactions can be short term or alterations that could extend long term depending largely on an individual's own process of integration and transformation of traumatic material (Harrison & Westwood, 2009). According to the constructivist self-development theory, adaptation to trauma involves a dual emphasis on characteristics of the stressor or event and personal characteristics such as psychological needs, coping styles, personal history of trauma, professional development, and current stressors and supports (Pearlman & MacIan, 1995).

Empathic engagement with clients is one of the most important components of the therapeutic relationship but also what most likely can put counselors at risk for vicarious trauma (Pearlman & Saakvitne, 1995a). Empathy allows the counselor to enter the client's world and requires communicating an understanding of the client's perception which can facilitate therapeutic work while also leaving the counselor more vulnerable (Sabo, 2006). According to Harrison and Westwood (2009), the cumulative experience resulting from empathic engagement can have a negative impact on physical, emotional, and mental health. Therapeutic intervention with those who have experienced trauma often involves having the client relive the traumatic event sometimes slowly, with great detail, and repeatedly which naturally increases the exposure to the helping professional (Bride, 2007). It is important to emphasize the view of vicarious trauma as one that is not pathological but in need of additional research to identify protective elements for those engaged in this caring work (Sabo, 2006).

The construct of vicarious trauma has been validated through an examination of its psychometric properties and the development of the VTS (Aparicio, 2013). The VTS is a brief screening tool that measures the emotional and cognitive impact of exposure to trauma or traumatic material and has been used in practice as well as educational settings (Aparicio et al., 2013). Vicarious trauma has been further validated by its inclusion in the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.) (American Psychiatric Association, 2013) criterion to diagnose post-traumatic stress disorder with direct experience of the traumatic event no longer the only identifying factor as secondary exposure to details of traumatic events has more recently been included in diagnostic criterion A. Diagnostic criteria A for post-traumatic stress disorder in adults include the following:

> Exposure to actual or threatened death, serious injury, or sexual violence in one or more of the following ways:
>
> 1. Directly experiencing the traumatic event(s).
>
> 2. Witnessing, in person, the event(s) as it occurred to others.
>
> 3. Learning that the traumatic event(s) occurred to a close family member or close friend. In cases of actual or threatened death of a family member or friend, the event(s) must have been violent or accidental.
>
> 4. Experiencing repeated or extreme exposure to aversive details of the traumatic event(s) (e.g., first responders collecting human remains; police officers repeatedly exposed to details of child abuse) (APA, 2013, p. 271).

According to Sexton (1999), vicarious trauma can manifest as signs and symptoms of anxiety, depression, and post-traumatic stress disorder, disruption of self-protective beliefs about safety, control, predictability, and attachment as well as self-destructive behaviors and a loss of hope. Much attention in the past has been focused on caring for victims of trauma and less on the impact on our helping professionals. It is therefore important to continue to explore risk and protective factors associated with the development of vicarious trauma in order to support those who care for some of our most vulnerable victims.

Research has increased over the past two decades in the area of trauma and its impact on survivors as well as on helping professionals who work with these individuals (Cohen & Collens, 2013; National Child Traumatic Stress Network, 2014). According to Saakvitne (2002), each of us responds differently to traumatic events based on our own personal experiences and psychological needs. Previous studies have begun to examine those who are resilient versus individuals who may develop symptoms that have a profound cognitive, emotional, or behavioral impact that may be long lasting and decrease daily functioning (Cohen & Collens, 2013; Cohen, Mannarino, & Deblinger, 2006; Van Der Kolk, 2014).

Providing services to clients who have experienced trauma has been referred to as a significant occupational hazard so it stands to reason that school counselors serving students who have experienced trauma would also fall into that risk category (Branson et al., 2014). Elementary, middle, and high school counselors, already under tremendous pressures from large caseloads, program accountability, and a lack of professional

supports could be particularly susceptible to vicarious trauma (Holcomb-McCoy et al., 2009). According to Tyler (2012), counselors working in an organization where there are insufficient supports and high caseloads have a tendency to deny strong emotions and little opportunity to process the trauma they have been exposed to which can lead to physiological changes, flawed decision making, and risks of mirroring the symptoms of their clients. Working with the vulnerable population of students ranging in ages from 5 to 18 can further increase the risk of vicarious trauma (Figley, 1995). Counseling literature lacks information regarding studies of vicarious trauma in school counselors as well as risk and predictive factors.

According to Newell and MacNeil (2010), the best defense against the development of vicarious trauma is education. Information about vicarious trauma, risk and protective factors, and self-care could be infused into the curriculum for counselors in training as well as continuing education for practicing school counselors. Increasing counselors' awareness of their potential personal and professional limitations is an ethical responsibility and adheres to the standards of the ACA (2014) and CACREP (2009). The results of this research study have the potential to increase school counselor awareness of the potential risk factors for the development of vicarious trauma as well as contribute information that could increase counselor wellness and performance (Kozina et al., 2010).

Vicarious Trauma Research

Pearlman and MacIan (1995) examined 188 self-identified trauma therapists and questioned them about their exposure to client trauma as well as their own experiences and found those with a personal history of trauma were more likely to show negative effects from the work than those who did not have a personal history. Schauben and Frazier (1995) examined members of a psychologist organization and sexual violence counselors and found those with a higher percentage of survivors of domestic violence on their caseloads reported greater disruptions in personal beliefs as well as exhibited more symptoms of post-traumatic stress disorder. Additional studies have explored the impact of trauma work on therapists, mental health professionals, police officers, nurses, and crisis volunteers and the majority of these have used a quantitative approach using a variety of instruments to measure vicarious trauma as well as potential predictor variables (Follette, Polusny, & Milbeck, 1994; Kassam-Adams, 1995; Vrklevski & Franklin, 2008). Weaknesses of some previous studies have been due to the use of instruments that lacked reliability and validity, small sample sizes, and targeted recruitment of individuals who worked specifically with victims of trauma, as well as differences related to profession and work settings (Vrklevski & Franklin, 2008).

It is important for helping professionals to identify and understand potential risk factors associated with the development of vicarious trauma in order to minimize their effects. Newell and MacNeil (2010) and Knight (2010) found social workers with less education, a trauma history, particularly with child abuse and neglect, and those with high

caseloads had a greater use of maladaptive coping skills and were at higher risk for vicarious trauma. Adams and Riggs (2008) explored vicarious trauma among therapist trainees and found a correlation between personal history of trauma, experience level, lack of formal coursework, and maladaptive defense styles were associated with symptoms of vicarious trauma. Williams et al. (2012) looked at a more comprehensive model of vicarious trauma examining the combined influence of variables (childhood trauma, personal wellness, supervisory working alliance, and organizational factors) and found therapists who experienced childhood trauma were more likely to report symptoms of vicarious trauma but also benefited from the mediating effects of personal wellness. Numerous studies have identified a personal history of childhood trauma as an important factor related to the development of vicarious trauma.

Research suggests that one may be able to mitigate the effects of vicarious trauma depending upon personal and occupational risk and protective factors. Beck (2011) identified negative coping strategies, personal stress, gender (women have a higher risk), and a personal history of trauma with higher levels of vicarious trauma. Trippany et al. (2004) suggested that continuing education, personal coping mechanisms, peer supervision, caseload limits, and spirituality could limit the risk of vicarious trauma. Other studies that described risk factors associated with an increased risk of vicarious trauma included a lack of education, exposure to trauma work, personal history of trauma, pre-existing anxiety or mood disorder, maladaptive coping skills, lack of supervision/peer support, and high caseloads (Devilly et al., 2009; Figley, 2002, Hernandez et al., 2010; Knight, 2020; Newell & MacNeil, 2010). Vicarious trauma has

also been examined from the perspective of personal wellness, supervision, and organizational factors as potential mediating variables (Bober & Regehr, 2006; Bride, 2004; Pearlman & MacIan, 1995; Schauben & Frazier, 1995; Way, VanDeusen, & Cottrell, 2008). A study by Williams et al. (2012) found, however, that the supervisory working alliance was not associated with a decrease in vicarious trauma nor did organizational factors such as high workload increase vulnerability for vicarious trauma. Although there have been empirical findings linking vicarious trauma to a number of variables, a personal history of trauma, exposure to client trauma, and education have consistently been associated with an increased risk level in helping professionals.

The ability to establish and maintain healthy boundaries has repeatedly been identified as an important component as well as ethical requirement in the counselor-client relationship, particularly when working with clients who are our most vulnerable such as minors and those with significant impairments (ACA, 2014). According to Olver, Aries, and Batgos (1989), individuals who have experienced trauma as well as have had a history of poor emotional attachment may be more at risk to becoming overinvolved with clients who violate boundaries due to their own emotional needs. Counselors therefore must be particularly careful when working with individuals who have experienced trauma and should be able to focus on the therapeutic work while maintaining their own sense of self (Hartman, 1997). A number of studies have examined differentiation of self as a significant factor related to the development of vicarious trauma (Adams & Riggs, 2008; Dombo & Gray, 2013; Hernandez et al. 2010; Newell & MacNeil, 2010; Shepard, 2013). All counselors are expected to maintain their

own psychological health in order to uphold their primary obligation which is to promote the welfare of their clients (ACA, 2014). Although much information is available about the predictive profile for the development of vicarious trauma in a number of helping professions, no such studies have been conducted examining variables associated with vicarious trauma in practicing school counselors.

Personal History of Trauma

Numerous studies have indicated a personal history of trauma is a significant risk factor for the development of vicarious trauma (Follette et al., 1994; Ghahramanlou & Brodbeck, 2000; Ivicic & Motta, 2016; Kassam-Adams, 1995; McCann & Pearlman, 1990; Meichenbaum, 2007; Pearlman & MacIan, 1995; Way et al., 2008; Williams et al., 2012). McCann and Pearlman (1990) found a therapist's own history of trauma could trigger thoughts and feelings by personalizing the traumatic experiences of the client. According to Williams et al. (2012), however, studies regarding the connection between childhood trauma and the experience of vicarious trauma have been inconclusive. Pearlman and MacIan (1995) as well as Bride (2004) found significant correlations between a history of trauma and the development of vicarious trauma in therapists, while Schauben and Frazier (1995) and Dunkley and Whelan (2006) found no relationship.

Ivicic and Motta (2016) investigated variables associated with secondary traumatization in a group of psychologists, social workers, mental health counselors, and creative arts therapists and found a significant connection between personal history of trauma and relatively high levels of vicarious trauma. According to Branson et al. (2014), victims of trauma often carry with them imagery of the event that may include

imagery, sounds, and smells which may in turn cause negative emotions to resurface in counselors with their own history of trauma. Additionally, research has shown a disproportionate number of individuals who enter the helping professions with unresolved trauma histories (Cieslak et al., 2011). Although research has not been found regarding school counselors impacted by vicarious trauma, it is safe to assume the variable of personal history of trauma is worthy of exploration because it has been associated with many other groups of helping professionals.

Degree of Exposure to Trauma

Organizational factors such as caseloads and support systems are thought to have an impact on the potential development of vicarious trauma (Pearlman & Saakvitne, 1995a; Williams et al., 2012). According to Williams et al. (2012), workload, percentage of traumatized clients, administrative support, and organizational culture contribute to higher levels of vicarious trauma in counselors. One area of focus in research has been the examination of counselors who work primarily with trauma survivors. Schauben and Frazier (1995) measured disruptions in cognitive schemas of 148 mental health counselors and found those with a higher number of clients with trauma histories correlated to greater disruptions in their personal belief systems and more than half (56%) of the sample believed limiting these numbers could be helpful.

Ewer, Teesson, Sannibale, Roche, and Mills (2015) measured the prevalence of secondary traumatization among 412 counselors who assessed and treated alcohol and other drug dependent clients and found a high caseload of traumatized clients was a significant predictor. Ivicic and Motta (2016) examined variables associated with

traumatic stress among mental health professionals and found increased levels of cognitive intrusions for exposure to threat-related material and trauma-relevant words such as molest, neglect, abuse, violence, and stress. Other studies suggested diversifying roles and managing trauma workloads could be beneficial in mitigating the risk of vicarious trauma (Benatar, 2000; Harrison & Westwood, 2009; Iliffe & Steed, 2000). Additionally, a number of other studies have indicated the amount of exposure to the traumatic material of clients increased a therapist's risk of developing vicarious trauma and therefore the variable of exposure to traumatic material is appropriate for investigation in this study as it applies to school counselors (Black, 2008; Cohen & Collens, 2013; Ivicic & Motta, 2016; Newell & MacNeil, 2010; Meichenbaum, 2007).

Professional Boundaries

"It is important to be an ally to oppressed people without trying to take on their oppression." (Shepard, 2013, p.10). The ability to manage and maintain appropriate boundaries within the therapeutic relationship is an ethical obligation important not only for the client but for the counselor (ACA, 2014). Professional boundaries can become blurred when working with clients who have experienced trauma, particularly children, where the therapist may feel a greater sense of responsibility or may want to fulfill a need to rescue the client (Campesino, 2007; Mailloux, 2014). McKim and Smith-Adcock (2014) examined the individual characteristics of mental health professionals as well as workplace conditions and found over involvement with clients to be a significant risk factor for the development of compassion fatigue. Trippany et al. (2004) found supports such as supervision and sharing experiences could assist in the prevention of vicarious

trauma by helping the counselor to manage and normalize feelings related to the trauma work and could provide opportunities to examine perspectives related to boundaries.

According to Collins and Long (2003), the availability of supervision can assist in examining counselor and client relationships to ensure they are positive and professional. Experienced professional school counselors often serve as supervisors for counseling interns and mentor new counselors to the field in their first year; however, once employed, regular supervision is not provided to counselors at any school level. School counselors are typically supervised and evaluated by a school administrator who is not likely to understand the impact working with children and adolescents who have experienced trauma has on the counselor. This type of supervision would typically include observation of a classroom lesson or other duties within the building but not assess or provide opportunities to process more significant aspects related to professional boundaries.

According to Schnarch and Regas (2012), individuals who have healthy boundaries are able to balance their own individuality while maintaining stable relationships. Poorly differentiated people or those who lack appropriate boundaries struggle with a fear of rejection, strive to make everyone happy with their performance, and tend to be involved in negative relationships (Skowron & Friedlander, 1998). Counselors have a responsibility to maintain their own personal and emotional needs while attending to the needs of their clients which can be particularly challenging when working with individuals with significant trauma histories that can result in cognitive shifts in beliefs and thinking (Newell & MacNeil, 2010).

Olver et al. (1989) developed the Self-Other Differentiation Scale (SODS) and assessed aspects such as deferring to the wishes of others, taking on the interests and orientation of others, reliance on others for criteria of worth, vulnerability to evaluation by others, and a lack of independent judgment. Individuals with poor or thin boundaries may be extremely sensitive resulting in even minor traumas having a greater influence on them and increasing their potential for vicarious trauma as opposed to counselors with good boundaries who would be more capable of focusing and keeping things out (Olver et al., 1989). It seems appropriate then to investigate school counselor boundaries as a potential variable of vicarious trauma given the connection between increased vulnerability and the risk of developing vicarious trauma.

Training and Education in Trauma

The Council for Accreditation of Counseling and Related Educational Programs (2009) standards emphasized the importance of understanding the impact working with clients who have experienced trauma has on practitioners and required counselor education programs to provide trauma-specific training. According to Rourke (2007), education on the impact of trauma was considered a useful strategy for preventing vicarious trauma. Additional studies have found counselor education a significant factor in managing potential negative outcomes of vicarious trauma by addressing coping strategies and techniques (Cohen & Collens, 2012; Harrison & Westwood, 2009). Self-care strategies were found to be one of the most effective in combating vicarious trauma by assisting with emotion regulation through activities such as exercising to relieve

stress, healthy eating, and resting (Naturale, 2007; Splevins, Cohen, Joseph, Murray, & Bowley, 2010).

According to Figley (1995), the emotional impact of listening to a client's traumatic experiences can occur during the time with the client, immediately following, or for a length of time after the initial exposure. A number of variables have been associated with the development of vicarious trauma however many reference the importance of educating professionals as well as organizations to address the emotional costs and work-related distress that can accompany vicarious trauma (Cohen & Collens, 2012). The American Counseling Association *Code of Ethics* (2014) addresses the need for continuing education to acquire and maintain a reasonable level of awareness of current scientific and professional information as well as monitor themselves for signs of impairment. Supervision has been validated as an important process to enhance counselor skills and increase wellness; however, given the absence of this type of support for school counselors it is important to consider other avenues that may or may not be in place to provide this type of education regarding vicarious trauma (Harrison & Westwood, 2009). Michalopoulos and Aparicio (2012) found reduced levels of vicarious trauma in social workers who received greater education and support while Jordan (2010) identified training as an important factor impacting the severity of vicarious trauma symptomology. Howlett and Collins (2014) researched risk and resilience in crisis support workers and found the need for more emphasis on training, particularly in the area of self-care, in order to reduce the impact of vicarious trauma. Current research also supports the need to establish trauma competencies that include knowledge, skills, and

attitudes helpful in mitigating the impact of working with clients who have trauma histories (Cook & Newman, 2014; Layne et al., 2014; Sleet et al., 2011). Literature supports the need to investigate the amount of education school counselors may or may not receive specifically related to trauma. Given the lack of supervision provided for this group, education could be a significant mitigating factor in the development of vicarious trauma and should be explored.

Level of School

Previous research has been conducted exploring levels of vicarious trauma in settings such as counseling agencies, social service agencies, and those typical of health care workers and first responders. Individuals in these settings could potentially work with clients that include a wide range of ages whereas school counselors by virtue of their employment are designated to very specific levels such as elementary, middle, and high school. According to Sanders and Simon (2002), there are similarities at each level as well as some significant differences that could impact how school counselors interact with these individuals and the degree of exposure to traumatic experiences.

School counselors are vital members of the educational team who understand and respond to challenges presented by an increasingly diverse student population (ASCA, 2016a). It is the primary responsibility of school counselors to assist students to become productive and well-adjusted adults. According to the U.S. Department of Education and National Center for Education Statistics (2014), the maximum recommended counselor to student ratio is 250:1 (250 students to one counselor); however, in Virginia the average in 2014 was 381:1 (U.S. Department of Education, 2014). Student to counselor ratios vary

in Virginia according to levels with elementary being 500 students to one counselor, middle school 400 student to one counselor, and high school 350 students to one counselor (ASCA, 2016b). These numbers are significant because they reflect the high number of students on individual counselor caseloads and within those numbers the potential exposure to students who have experienced trauma. Additionally, the ASCA (2016a) recommended school counselors spend most of their time in direct service to students and contact with them.

A number of factors may influence the types and duration of student and counselor interaction at the varying levels. For example, many families decrease their involvement in school as children grow and mature or due to other factors such as low-income and lack of transportation which may in turn increase the need to speak with the school counselor. Sanders and Simon (2002) reported high schools typically see the lowest levels of family involvement, increasing the need for counselors. High school students face increased pressures regarding high-risk behaviors involving sex, alcohol and drugs, and boundaries which can leave this population particularly vulnerable to traumatic experiences (ASCA, 2016a). Research indicates middle schoolers turn more frequently to their peers for understanding and comfort and therefore may reduce the number of interactions held with the counselor (ASCA, 2016a). Early identification and intervention of children's social and emotional as well as academic needs is essential in order to remove barriers to learning and provide a foundation for future success. Elementary counselors work with a younger and increasingly more vulnerable population of students with one in five sexually molested as a child, one in four beaten by a parent,

and one in three living in a home with domestic violence (Van Der Kolk, 2014). It is likely school counselors may experience different levels of exposure to students with trauma at the elementary, middle, and high school levels given how their roles are defined, the areas of focus, and the needs of the students.

Summary and Conclusions

Unlike decades ago, violence and trauma are now recognized as a major health problem (Sleet et al., 2011). The impact is felt not only on those who have directly experienced these events but those helping professionals who work with and witness stories of human suffering (Figley, 1995; McCann & Pearlman, 1990). The distress resulting from client trauma has been referred to as an occupational hazard (Branson et al., 2014). Long and short-term changes in cognitive schemas as well as symptoms have been identified in a variety of helping professionals including medical personnel, first responders, social workers, clinicians, psychologists, supervisors, and graduate students (Branson et al., 2014; Brockhouse et al., 2011; Cohen & Collens, 2013; Howlett & Collins, 2014; Michalopoulos & Aparicio, 2012). No research has been found, however, that investigates predictive variables of vicarious trauma in school counselors despite the recognized rise in child trauma exposure (Van Der Kolk, 2014).

The construct of vicarious trauma has been repeatedly validated as well as included in the latest edition of the *Diagnostic and Statistical Manual of Mental Disorders* (American Psychiatric Association, 2013) criteria describing secondary exposure to traumatic events and the diagnosis of posttraumatic stress disorder. A number of variables as well have been explored to understand their connection to the

development of vicarious trauma including a personal history of trauma, maladaptive coping skills including poor boundaries, exposure to clients with trauma histories, lack of education related to trauma exposure, experience level, supervision, and organizational factors (Adams & Riggs, 2008; Dombo & Gray, 2013; Hernandez et al., 2010; Ivicic & Motta, 2016; Knight, 2010; Newell & MacNeil, 2010; Shepard, 2013). No such studies have been done investigating predictive variables of vicarious trauma in school counselors.

Children and adolescents are among our most vulnerable population with more than half of family violence offenders committing crimes against those under the age of 18 (U.S. Department of Justice, 2005). Complex trauma including mental illness, sexual abuse, and domestic violence impacts millions of children each year resulting in impaired ability to trust, develop relationships, and succeed academically (O'Neill et al., 2010; Thompson & Trice-Black, 2012). School counselors who are expected to spend a majority of their time in direct services with students are often the ones who identify and work with students who have been impacted by trauma and have difficulty functioning in the school setting (ASCA, 2013). It stands to reason school counselors would also be impacted by this secondary exposure to the trauma histories of students with whom they work very closely. This study will fill this gap in research as well as extend knowledge of predictor variables or risk factors of vicarious trauma.

Survey research methodology is necessary for my study goals given a number of other studies have been reported by researchers who have conducted similar work. Devilly et al. (2009) used an online questionnaire to investigate the relationship between

trauma work and the constructs of vicarious trauma, secondary traumatic stress, and burnout in mental health therapists engaged in clinical work. Way et al. (2008) examined the relationships between gender, age, maltreatment history, and vicarious trauma using a national survey. Additional survey research has examined the role of personal trauma history, social support, experience level, trauma-specific training, and defense style in the development of vicarious trauma in social workers, crisis support volunteers, mental health workers, legal professionals, and therapist trainees (Adams & Riggs, 2008; Howlett & Collins, 2014; Ivicic & Motta, 2016; Michalopoulos & Aparicio, 2012; Vrklevski & Franklin, 2008). Survey research methodology will be useful in describing characteristics of the school counselor population and can offer anonymity which may provide more candid and accurate information given the more sensitive nature of some of the questions (Rovai, Baker, & Ponton, 2013).

I will provide more specific information in Chapter 3 regarding the target population of school counseling professionals for this study as well as the sample and sampling procedures. The recruitment, participation, and data collection section will include procedures used for the pilot study in order to validate survey questions. The variables chosen for the study will be explained in detail and will include the degree of exposure to trauma of clients/students, self-other differentiation, education in trauma, level of school/work setting, and personal history of trauma as well as information provided regarding instrumentation. Multiple regression analysis was applied and explained to understand any potential relationships between selected variables and the development of vicarious trauma. Additionally, information will be provided about

ethical procedures, confidentiality, informed consent, and risks as well as benefits of the study.

Chapter 3: Research Method

Introduction

I conducted a quantitative study for the purpose of identifying predictive variables associated with levels of vicarious trauma in school counselors at the elementary, middle, and high school levels. I used a survey instrument containing preexisting and validated questionnaires and a demographic form to gather information from participants. In addition, I conducted a pilot study to assess the demographic form prior to its use with counselors. In this chapter, I will define multiple variables and provide information regarding the instrumentation used to measure selected variables. Also in this chapter, I will provide data collection procedures, assumptions, and limitations and delimitations, and will discuss ethical considerations including confidentiality, informed consent, risks, and benefits of this study.

Research Design and Rationale

I applied a quantitative cross-sectional design and utilized an electronic questionnaire to measure the variance among study participants. I selected groups based on identified criteria rather than random allocation. I used multiple regression analysis and a forward entry method where predictors are entered one at a time beginning with the predictor with the highest correlation with the dependent variable l to examine how much variance the independent variables accounted for the outcome or dependent variable of interest (levels of vicarious trauma). The function of the analysis was to identify those predictor variables that may account for the variance in the response variable (McDonald, 2014). The use of this type of design choice and analysis was to help identify significant

predictor variables related to the development of vicarious trauma in school counselors. School counselors could use this information to identify and manage factors that may put them at greater risk. Counselor educators who prepare school counselors might also address the issue of vicarious trauma to help school counselors implement techniques such as self-care strategies that can serve to mitigate the effects of vicarious trauma and avoid problems such as recurrent intrusive imagery, detachment, hypervigilance, and boundary issues (Parker & Henfield, 2012; Sommer, 2008).

Population

The target population was licensed professional school counselors in Virginia. According to the Virginia School Counselor Association (2016), there are over 3,000 individuals in the Commonwealth who have a school counseling license. School counselors in Virginia adhere to the ASCA national model and support the standards of learning by assisting students in their academic, career, and personal social development (Virginia Department of Education (VDOE), 2016a). Students who have experienced trauma can have difficulty meeting the demands of school, and therefore require school personnel such as the school counselor to provide mental and behavioral health supports in order to improve outcomes (Steele & Malchiodi, 2012). More positive academic, social, and emotional outcomes are associated with positive school climates, adequate mental and behavioral health supports, and a workforce that is trained in supporting students as well as maintaining their own wellness (Virginia Department of Education, 2016b). It is therefore important to explore levels of vicarious trauma in school

counselors as well as potential predictive variables associated with these levels that may impact school counselor wellness.

Sample and Sampling Procedures

The sampling frame was all school counselors currently employed in four school districts in Virginia from which I drew my sample. The school counselors I chose to survey worked in four school districts in Virginia with a combined geographically diverse population of approximately 236,000 students in 267 schools (Niche, 2017). I employed a nonprobability convenience sampling strategy in this study because of the cost and time effectiveness as well as ease to use with a large sampling. The close proximity of the school districts to me made access to the school counselors and schools convenient in order to provide the potential for informational workshops as a follow up to survey participation. The inclusion of all 132 school districts in Virginia would have required applications to each research department for approval and exceeded the time and resources available to me. A complete list of school counselors across the state would most likely not have been available or approved to survey, and therefore it would have been difficult to know the exact size and effect of the sampling error.

Researchers have not studied vicarious trauma among school counselors. The school counselors in this study (N = 654) included those who served elementary (n = 228), middle (n =165), and high school (n = 261) students. They were invited to participate in the survey in an effort to obtain a sufficient number of participants that approximated the characteristics of the larger population of school counselors in Virginia.

Sample size calculation is significant to the effect size, confidence level, and the power of the treatment effect (Field, 2013). I used G*power 3.1 to calculate sample size given the power and alpha size are identified. For the purposes of this study, I used the alpha size 0.05 because it has been identified as an acceptable margin of error for social research. The acceptable power 0.80 and effect size of 0.15, considered medium, was used and the number of variables or predictors entered (5) which provided an appropriate sample size of $n = 92$. Green (1991) and Tabachnick and Fidell (1996) recommended a minimum of 50 samples in addition to 8(k) or 8 multiplied by the number of independent variables (k = 5), for testing an overall regression model. According to this calculation, 50 + 8(5) = 90, which aligns with the G*power 3.1 calculation of 92 and confirms the number of participants in the sampling frame provided a sufficient number for my sample.

Recruitment, Participation, and Data Collection

I filed applications with the research departments of each of the four school districts and school counseling supervisors to conduct electronic survey research with all currently employed K-12 school counselors in full and part-time positions. Use of the electronic survey methodology provides a more financially feasible and time efficient way to access large numbers of school counselors as opposed to mailing paper surveys (Andrews, Nonnecke, & Preece, 2003). Additional advantages of Web-based surveys include additional privacy and convenience, automatic verification, survey responses captured in databases, and potentially higher response rates (Hohwu et al., 2013).

Upon Institutional Review Board (IRB) and school district approval, I recruited participants via an email message sent through the school counseling supervisor in each division to introduce the study and invite individuals working as professional school counselors at all school levels to participate in the anonymous Web-based questionnaire examining the impact of working with students who have experienced trauma. According to Andrews et al. (2003), a short prenotification email can generate interest in the study, explain the usefulness of the questionnaire, and potentially increase participation rates. I requested and received a current account of all school counselors at each elementary, middle, and high school from the school counseling supervisors in order to identify the potential sample pool. I also requested the counseling supervisors be the individuals who distributed the email notifications and link to the survey to their division counselors.

One week following the prenotification email, an invitation email was sent to all potential participants. The invitation email provided details about the study, data collection, and the researcher as well as confidentiality and the benefits and risks of voluntary participation. Those who chose to participate were taken to a page that restated information regarding confidentiality and provided the contact email and phone number of the researcher in case of questions or concerns. The next page took participants to the informed consent document (see Appendix A) where they were directed to select "Yes" if they agreed to participate, which allowed them to proceed to the Web-based online survey, including the demographic questionnaire (see Appendix B), Self-Other Differentiation (SODS) (see Appendix C), Adverse Childhood Experiences (ACE)

Inventory-Revised (see Appendix D), and Vicarious Trauma Scale (VTS) (see Appendix E). A selection of "No, I do not agree to participate" ended the survey access. Additionally, I did not offer incentives or include penalties for participation or declining participation in the survey. The informed consent document stated the participant could cease participation at any point in the survey. Personal or identifying information such as names and school placement was not required from participants, thus keeping all collected information anonymous.

A follow-up e-mail was sent 2 weeks after the initial invitation e-mail as a reminder in hopes of increasing participation rates. I sent one final reminder e-mail 2 weeks after the reminder e-mail indicating the date the opportunity to participate in the survey would end. Data collected from the survey were downloaded from SurveyMonkey into an Excel spreadsheet onto my password-protected computer following the closing date. I entered the data into the IBM SPSS Statistics for Windows program by importing the Excel spreadsheet with collected data.

Variables

Potential predictor variables for this study were selected based on previous research in vicarious trauma and its impact on mental health counselors and social workers. Variables examined included the counselor's personal history of trauma, degree of exposure to trauma of student clients, ability to establish boundaries with others, level of school (elementary, middle, and high), and amount of education a counselor has received related to trauma or trauma counseling. The criterion or outcome variable of the study is the level of vicarious trauma reported by school counselors as measured by

scores on the VTS (Vrklevski & Franklin, 2008). Data for the variables were collected from participants using a demographic instrument I developed and two published instruments, the Self-Differentiation Other Scale and the ACE Inventory-Revised.

Operational Definition of all Variables

Degree of exposure to trauma of clients: The estimated percentage of students the school counselors have worked with in their current workplaces that have had a trauma history or specific types of trauma exposure as defined by the National Child Traumatic Stress Network (NCTSN) (2008).

Differentiation of self: The ability to establish healthy boundaries with others (Bowen, 1978; Skowron & Friedlander, 1998). Differentiation of self is a process by which individuals have a sufficiently developed sense of individuality and are able to maintain their independence as well as interdependence within the context of a relationship (Olver et al., 1989; Skowron & Friedlander, 1998). Highly differentiated people are able to invest in relationships while also maintaining a sense of self, whereas poorly differentiated people are incapable of maintaining individuality and relationship investment (Bowen, 1978). Olver et al. (1989) identified individuation as a significant criteria for healthy psychological as well as relationship development. A person with firm self-other boundaries should be likely to maintain a distinct separation between their emotional experience and those persons with whom they interact.

Education in trauma: The estimated number of hours of education received specifically related to trauma (e.g., graduate level college courses, workshops,

professional development, speakers, conference session, book study) excluding training focused on risk/threat assessment over the course of the school counselor's career.

Level of school/work setting: The public school level setting where school counselors are employed and include elementary school (typically preschool through the Grade 5), middle school or junior high school (typically Grades 6 through 8), and high school (typically Grades 9 through 12) (Virginia Department of Education, 2016c).

Adverse childhood experiences: According to the NCTSN (2008), exposure to traumatic situations, chronic stressors, or specific traumatic events experienced before the age of 18 account for a personal history of trauma and may include the following: physical or sexual abuse; abandonment; neglect; the death or loss of a loved one; life-threatening illness in a caregiver; witnessing domestic violence; automobile accidents or other serious accidents; bullying; life-threatening health situations or painful medical procedures; witnessing or experiencing community violence (e.g., shootings, stabbings, robbery, or fighting at home, in the neighborhood, or at school); witnessing police activity; having a close relative incarcerated; life-threatening natural disasters; acts or threats of terrorism (viewed in person or on television); or living in chronically chaotic environments in which housing and financial resources are not consistently available. Traumatic experiences are more common than many realize and can have a negative impact on cognitive schemas particularly beliefs about the world, self, and others (Kubany et al., 2000; McCann & Pearlman, 1990).

Vicarious trauma: An alteration of thinking or distortions in beliefs that develop over time and whose effects can be disruptive and painful as a result of direct practice

with individuals who have been exposed to trauma (McCann & Pearlman, 1990; Pearlman & MacIan, 1995).

Instrumentation

I used pre-existing, psychometrically sound assessment tools and a demographic survey to measure the variables of interest. Pre-existing instruments included the SODS, the ACE Inventory-Revised, and the VTS. The instruments are described in detail in the following section.

Self-Other Differentiation Scale

I used the SODS to measure school counselors' ability to establish healthy boundaries (Olver et al., 1989). The 11-item measure assesses the degree to which the person experiences a separate sense of self in his or her relationships with others by exploring aspects such as deferring to the wishes of others and reliance on others for a sense of worth (Olver et al., 1989). Respondents are instructed to read example items such as "If someone close to me finds fault with what I do, I find my self-evaluation lowered" and "I feel very vulnerable to the criticism of others" and then decide whether or not the statements describe them (Olver et al., 1989). Participants provide a true/false response (true = 0 and false = 1) and scores can range from 0 to 11 with higher scores indicating greater differentiation of self from others.

The SODS was evaluated using samples of college-aged men and women and students enrolled in introductory psychology courses. All items had item-scale correlations >.20, satisfactory internal consistency (alpha coefficients .76 for university sample and .72 for college sample) (Olver et al., 1989). The scale takes approximately 5

to 10 minutes to complete and the scores will be sufficient for use in this study as a measure of a school counselor's ability to establish healthy boundaries critical for psychological health, relationship development, and upholding ethical standards of the profession (ASCA, 2010; Bodenhorn, 2006). The SODS is an appropriate instrument for use in this study as individuation has been identified as a significant criteria for healthy psychological as well as relationship development (Olver et al., 1989). Counselors who do not have firm boundaries have been found to have difficulty maintaining a distinct separation between their emotional experience and those persons with whom they interact leaving them with a potentially increased risk of vicarious trauma (Adams & Riggs, 2008).

Adverse Childhood Experiences Inventory-Revised

I used the ACE Inventory-Revised (Finkelhor, Shattuck, Turner, & Hamby, 2015) to assess the experience of trauma exposure of the counselor separate from experiences reported to the counselor by students. The survey was developed from the original Adverse Childhood Experiences Scale (Felitti et al., 1998) and the National Survey of Children's Exposure to Violence, with a sample of 1,949 children and adolescents aged 10-17 years and their caregivers (Finkelhor et al., 2015). The original scale included 10 items, five concerning child maltreatment (physical abuse, psychological abuse, sexual abuse, physical neglect, and emotional neglect) and five other concerns involving parental or family incapacities (parental loss through divorce, death or abandonment, parental imprisonment, parental mental illness, parental substance abuse, and violence against the mother (Felitti et al., 1998). Evidence suggests other adversities in childhood

may also create negative long-term effects such as bullying, peer victimization, peer rejection, poverty and deprivation, and exposure to community violence (Finkelhor et al., 2015). The revised inventory includes items that closely match the 10 previously defined categories of childhood adversity with four additional categories created to capture other potentially traumatic experiences.

Participants completed the 14-item inventory in approximately 10 minutes. Individuals coded answers with a (0) if never experienced the event and a (1) if experienced at any time in life emotional abuse, physical abuse, sexual assault, emotional neglect, mother treated violently, household substance abuse, household mental illness, parental separation or divorce, incarcerated household member, low socioeconomic status (new category), peer victimization (new category), peer isolation/rejection (new category), and exposure to community violence (new category) (Finkelhor et al., 2015). The statement "prior to your 18th birthday" is printed at the beginning of the inventory followed by the question and then selection of a yes/no response. A sample question from the inventory reads, "Did a parent or other adult in the household often or very often swear at you, insult you, put you down, or humiliate you or act in a way that made you afraid that you might be physically hurt?" The participant entered a "1" if the response was "yes" and left it blank if the response was "no." I calculated individual score totals by adding all of the items entered with a "1" for a possible total score ranging from 0-14 with 0 indicating no adverse childhood experiences and numbers greater than 0 indicating greater exposure to traumatic events in childhood (Finkelhor et al., 2015). The

instrument is considered reliable with valid internal consistency as indicated by the Cronbach's alpha 0.81 (Finkelhor et al., 2015).

Vicarious Trauma Scale

The VTS is a brief 8-item measure designed to assess subjective levels of distress related to working with clients who have experienced trauma (Vrklevski & Franklin, 2008). This instrument previously has been used to investigate the impact of working with traumatized clients on members of the legal profession versus those working with nontraumatized clients and with licensed social workers (Aparicio et al., 2013; Vrklevski & Franklin, 2008). The VTS has the potential as a screening tool for vicarious trauma in both practice and educational settings and would be appropriate to measure levels of distress in school counselors who work with students who have experienced trauma (Aparicio et al., 2013). Participants can complete the survey in about 10-15 minutes. A 7-point Likert scale rates items from 1 (strongly disagree) to 7 (strongly agree) with total scores ranging from 8 to 56 and higher scores indicating higher levels of distress (Vrklevski & Franklin, 2008). Sample items include "My job involves exposure to distressing material and experiences" and "It is hard to stay positive and optimistic given some of the things I encounter in my work" (Vrklevski & Franklin, 2008).

There is a significant correlation (.261) between the VTS and the Impact of Event Scale-Revised ($p < .01$). The Impact of Event Scale-Revised (Weiss & Marmar, 1997) is a standardized instrument designed to parallel criteria for Post-Traumatic Stress Disorder and measures distress in three areas that include avoidance, intrusions, and hyperarousal (Vrklevski & Franklin, 2008). According to Aparicio et al. (2013), the VTS has good

internal consistency and reliability (Cronbach's alpha = .77). Mean-square fit statistics demonstrated good fit for all items. Item response models and confirmatory factor analysis indicated good psychometric properties suggesting it has potential as a screening tool for exposure to traumatic material and could be a good measure of the affective and cognitive impact of such exposure in practice and educational settings (Aparicio et al., 2013).

Demographic Items

I developed a demographic questionnaire to assess situational factors that may influence levels of vicarious trauma in school counselors. The demographic survey collected information from participants related to the amount of education they had received specifically related to trauma or trauma counseling and the level of exposure to trauma of students. In addition, information was collected from school counselor participants regarding their current workplace setting (elementary, middle, or high school level). The items in the demographic questionnaire were used as predictor variables (the degree of exposure to students who have experienced trauma, level of school, and amount of trauma education) in addition to an individual's history of trauma (as measured by the ACE Inventory-Revised) and ability to establish boundaries with others (as measured by the SODS) to determine their association with levels of vicarious trauma (the outcome variable).

Degree of Exposure to Trauma of Student Clients

Vicarious trauma in counselors is associated with a number of variables including the degree of exposure to clients who have experienced trauma (Cohen & Collens, 2012).

According to Stamm (1999), increased percentages of trauma clients in a caseload were associated with increased levels of symptoms associated with vicarious trauma such as dissociation, anxiety, sexual abuse trauma symptoms, and intrusion. Therapist behaviors related to safety schemata were also reported to be impacted by the amount of time spent with clients who had experienced trauma (McCann & Pearlman, 1992).

For the purposes of this study, I asked school counselors to estimate the percentage of students they have seen in their current workplace who have experienced trauma using a demographic survey. The item "Please estimate the percentage of students you have seen in your current workplace who have experienced trauma and shared those experiences with you" was asked followed by specific examples of traumatic experiences to consider that have been identified by the NCTSN (2008). The demographic survey included two additional items: (a) the level of school placement, and (b) type of education related to trauma. The demographic survey portion that included questions about training in trauma and exposure to client trauma was estimated to take approximately 2 minutes to complete. I conducted a pilot study to determine the construct validity as well as the degree of reliability of the survey. I also asked a panel of experts familiar with the construct to review and validate the instrument. This information helped to determine the degree of exposure school counseling professionals experience and how that may impact levels of vicarious trauma.

Level of School

School counselors work to address all students' academic, career, and social/emotional development needs (ASCA, 2016a). They are considered professional

educators with a mental health perspective who plan a comprehensive school counseling program, support safe learning environments, promote equity and access, and are able to identify and respond to student challenges at all levels (ASCA, 2016a). There are similarities as well as differences in the role of the school counselor at the elementary, middle, and high school levels (Bodenhorn, 2006; Hardesty & Dillard, 1994). Passage from childhood to adolescence and then to adulthood can come with unique and diverse challenges both personally and developmentally (Wood, 2007).

According to Sanders and Simon (2002), differences found primarily between high schools and other levels emphasized a significant decrease in family involvement as students progressed from elementary to secondary schools as well as a change in the nature of student relationships with adults due to constraints on time and resources. There may also be differences in the types and severity of trauma experiences shared by students at the different school levels as older children are at an elevated risk for violence as well as mental and physical health problems (Jaycox, Langley, & Dean, 2009). Trauma that causes emotional or psychological damage to children can result in the adoption of behaviors and patterns of thinking that put individuals at an even greater risk for further trauma (NCTSN, 2008). School counselors who work at elementary, middle, and high school levels were surveyed in order to investigate potential differences in reported experiences of vicarious trauma at these different school setting levels. Information regarding the school counselor's school setting level was recorded using a demographic survey.

Education Related to Trauma or Trauma Counseling

Today incidents of trauma that include interpersonal violence, self-directed violence, and collective violence are recognized as significant health concerns whereas 30 years ago the words *violence* and *health* were rarely used together (Sleet et al., 2011). The Substance Abuse and Mental Health Services Administration (U.S. Department of Health and Human Services, 2011) identified the need for improved mental health services and strategies for individuals who suffer from traumatic stress due to the significant increase in this population and its impact on public health. Counselor education programs nonetheless are lacking in education regarding specific knowledge, skills, and attitudes of trauma-informed competence (CACREP, 2009; Courtois & Gold, 2009; Layne et al, 2014; Lonergan, O'Halloran, & Crane, 2004).

A demographic survey was used to gather information regarding the type of trauma training school counselors have received in their careers. Participants were asked to choose the response that best described their experience ranging from (a) none – no training specifically related to trauma; (b) limited – read article(s) or book(s) about working with individuals with a trauma history; (c) moderate – attended a workplace training, professional development, online training or continuing education focused on working with individuals who have experienced trauma; and (d) extensive–academic coursework, advanced degree program specializing in trauma, supervised internship in an agency or setting primarily serving individuals with a trauma history. Responses were constructed based on research in professional development as well as experiences of the researcher and dissertation committee members.

Pilot Study

I conducted a pilot study using the demographic survey as well as one additional question allowing for overall feedback to ensure the form was comprehensible and the questions were well-defined, clearly understood, and presented in a consistent manner (Lancaster, Dodd, & Williamson, 2004). The piloting process included a review by a knowledgeable analyst to examine question completeness and relevancy as well as scale and format appropriateness followed by implementation with a small group of 10 participants typical of the proposed study (Andrews et al., 2003). The pilot group of participants included school counselors at all three levels that worked outside of the school districts targeted in the study.

I was able to recruit participants using the Virginia School Counselor Association directory and sent a link to the entire survey for those participants who volunteered to participate in the pilot. Upon receipt of the link, counselors were instructed to "think out loud" while completing the survey and write any questions, comments, or concerns related to the survey items in the space provided under each question. For example, participants could write statements such as "I don't understand this question," "The option I want isn't available," "That question makes me uncomfortable," or "The survey is too long." I included a section after each question for participants to type any thoughts or concerns that came to mind while taking the survey,

The design of the demographic survey is significant as wording, form, and order of questions can impact the type of responses obtained (Kelley, Clark, Brown, & Sitzia, 2003). Upon completion of the pilot study, responses were reviewed by the researcher

and committee members to ensure the questions and the instructions were understood and whether or not the meaning was the same for all respondents. Members of my dissertation committee and I did review all comments and made minor wording revisions in one question that was necessary for clarity, to minimize bias in the results, and to be able to estimate specific parameters in the school counseling population (Kelley et al., 2003). The changes made to the survey were submitted to the Walden Institutional Review Board and modifications were approved prior to the survey distribution.

Data Analysis

Multiple regression analysis was selected for this study because it is a statistical measure used to establish the degree of the relationship between the dependent variable (level of vicarious trauma as measured by the VTS) and the five identified independent or predictor variables. The variables examined included (a) personal history of trauma as measured by the ACE (b) degree of exposure to trauma clients measured by the demographic survey, (c) ability to establish boundaries as measured by the SODS, (d) level of school measured by demographic survey, and (e) amount of trauma education and training measured by demographic survey (Finkelhor, Turner, Shattuck, Hamby, & Kracke, 2015; Olver et al., 1989; Vrklevski & Franklin, 2008). Researchers suggested through theory and research findings there may be a relationship between the identified variables and the development of vicarious trauma (Figley, 1995; Holcomb-McCoy et al., 2009; Nelson-Gardell, & Harris, 2003; Newell & MacNeil, 2010; Pearlman & Saakvitne, 1995a). Assumptions that must be met in order to use multiple regression analysis include: (a) the dependent variable must be measured on a continuous scale, (b) there

must be two or more independent variables which should be measured at the continuous or categorical level, (c) the relationship between the independent and dependent variables needs to be linear, (d) there should be multivariate normality, (e) there should be no multicollinearity, and (f) no homoscedasticity, and no autocorrelation (Field, 2013).

The computer program IBM SPSS Statistics was used for data analysis, screening, and cleaning (IBM, 2011). The method of regression that was used in this study was a forward entry regression. The computer program first calculated a correlation analysis of all independent variables to find which were highly correlated and then ran a model with the variable that has the highest simple correlation that best predicts the dependent or outcome variable (Field, 2013). The analysis was repeated with each of the remaining predictors to determine how much variance had occurred from strongest to least significant (Field, 2013). This method supported the purpose of the study which was to conduct a correlation analysis and identify which independent variables, if any, were highly correlated and may predict the outcome variable or the development of vicarious trauma in school counselors.

The model was assessed for multicollinearity (a strong correlation between two or more predictors) which can lead to standard errors and difficulty in assessing the importance of a predictor (Field, 2013). The data were cleaned by removing outliers (cases that differ substantially from the main trend of the data), dealing with missing data, and assessing for normality. A Pearson correlation was used and a decision was made to remove one of any pair of predictor variables that have a significant correlation (Field, 2013). Univariate outliers are those with a standard deviation of $> \pm 3.29$ from the mean

which can be observed using frequency distributions or by standardizing the scores of a variable (Field, 2013). Graphs were useful to assess normality by selecting measures of central tendency (mean, mode, median, standard deviation, and variance) and measures of variability (range) to see the values of kurtosis and skewness (Field, 2013). Prior to assessing for multicollinearity and before performing the regression, transformations were used to remedy any problems identified with normality if needed (Field, 2013).

Results were interpreted using SPSS® descriptive statistics. Parameters were estimated using the least squares method, Pearson's correlation coefficient between every pair of variables ($p < .05$ is generally accepted) gave the size of the effect each variable had on the dependent variable, and R-squared of the regression gave the fraction of the variation in the dependent variable that is accounted for by the independent variables (Field, 2013). The Durbin-Watson statistic informed whether or not the assumption of errors was justifiable (the closer to 2 the value is the better) and the *F*-ratio was greater than 1 if the model was a good fit.

Research Question: Multiple Regression Analysis

RQ1: What is the relationship between vicarious trauma and a) the degree of exposure to trauma of student clients, b) history of trauma in counselors' personal life, c) ability to establish boundaries with others, d) level of school (elementary middle, or secondary, and e) amount of education received related to trauma or trauma counseling among school counselors?

Hypotheses

Null Hypothesis (H0): The following variables, individually or in combination with each other, will not predict vicarious trauma scores on the Vicarious Trauma Scale (VTS) of school counselors: (a) the score on a degree of exposure to trauma of student clients instruments; (b) the score on a history of trauma in counselor's personal life instrument; (c) the score on an ability to establish boundaries with others instrument; (d) level of school (elementary, middle, or secondary) where the participant is employed; and (e) amount of education counselor has received related to trauma or trauma counseling.

Alternative Hypothesis (HA): The following variables, individually or in combination with each other, will predict vicarious trauma scores on the VTS of school counselors: (a) the score on a degree of exposure to trauma of student clients instruments; (b) the score on a history of trauma in counselor's personal life instrument; (c) the score on an ability to establish boundaries with others instrument; (d) level of school (elementary, middle, or secondary) where the participant is employed; and (e) amount of education counselor has received related to trauma or trauma counseling.

Threats to Validity

Threats to validity can call into question the results of a study and whether or not an instrument actually measures what it was designed to measure (Field, 2013). Potential internal threats to validity for this study included selection bias, extraneous and confounding variables, regression, selection, and mortality (Creswell, 2009). Although participants were not selected randomly, they were recruited from four large Virginia school districts with geographic diversity and included all school counselors at the

elementary, middle, and high school levels which yielded a potential pool of 654 total participants. Using a large sampling frame can address mortality and account for dropouts as well as eliminate the possibility of selecting those who have certain characteristics that may predispose them to have a certain outcome (Creswell, 2009). Extreme scores have a tendency to move or regress toward the mean or average so those scores will be addressed by eliminating those scores > ± 3.29 from the mean (Field, 2013).

Threats to external validity can compromise whether or not we can say with confidence that our results can be applied to other groups (Cohen et al., 2003). One potential threat to external validity in this study might have been due to the narrow characteristics of participants (Creswell, 2009). The participant pool might have had a low number of males, for example, so I restricted claims about how the results could be generalized. The same might have been true for the setting in this study because it was conducted with school counselors who work in very large school districts where there are often multiple counselors in some larger schools and only one counselor in schools with a smaller population. The timing of this study might have impacted external validity because there are times during the school year when school counselors may feel more overwhelmed or have seen higher numbers of students who have experienced trauma more recently. In this study the survey was sent at the beginning of the school year prior to students arriving so this may have helped to avoid more recent exposure to the trauma of students. Care had to be taken to guard against construct and statistical conclusion

validity by using inadequate definitions and measures of variables or drawing inaccurate conclusions from the data that are not statistically supported (Creswell, 2009).

Ethical Procedures

Agreements were obtained from each school district selected and approval gained to conduct the study with school counselors at the elementary, middle, and high school levels that chose to participate. These agreements were contingent upon approval of the Institutional Review Board application. Information was shared about the researcher, the institution, how participants were selected, purpose of the research study, as well as potential risks and benefits to participants.

Ethical considerations were addressed relevant to conducting research in my own work setting. Procedures were put in place to minimize challenges such as social desirability, cognitive priming, personal agendas, perceived coercion to participate, and confidentiality breaches. The provision of voluntary participation and anonymity addressed several of these concerns as well as allowing for the completion of the survey outside of the workshop or work hours and providing the link to the survey through the district supervisor rather than directly from the researcher. The district supervisors did not have access to any information that identified individual participants or their survey results. Information provided in the informed consent clarified the risks and benefits of the research project as well as the importance of data integrity as opposed to cognitive priming or the advancement of a personal agenda. In addition, I do not work directly with the other school counselors in the school district because they are based at different school sites. There is contact with other elementary counselors at some counselor

meetings but not with other middle or high school counselors in the district. General results of the overall study as well as a preliminary copy of any publications from the research will be shared with the participating school districts upon completion.

Confidentiality

Data collected from surveys were anonymous because names or other identifying information were not collected and therefore not associated with responses during the coding and recording process. Access to the computer and computer program used to record and analyze the data was restricted to me as the researcher. My doctoral committee members did have access to the data during analysis and interpretation to assist in assuring the accuracy of the results. Data once analyzed will be kept for a period of 5 years as recommended and then discarded appropriately so not to be accessed by others for potential misuse (Creswell, 2009).

Informed Consent, Voluntary Participation, and Anonymity

Participants were provided with an electronic informed consent document prior to entering the online survey site. Informed consent included an emphasis on the voluntary nature of the study, an individual's ability to terminate participation at any point, and procedures to protect anonymity during collection, analysis, and storage of data as well as risks and benefits associated with the study. Participants were not asked to give any identifying information such as name, address, or e-mail. Individuals who chose to participate indicated their consent by selecting "Yes I agree," which took them to the survey site.

Information about the research study was sent out via each district counseling supervisor to minimize coercion, further ensuring the protection of anonymity of the participants, and supporting individual decisions as to when and where they would like to complete the survey. I sent two additional follow-up e-mails to all school counselors inviting them to participate in the study via the counseling supervisor in an effort to increase participation and to remind potential participants of the upcoming closing date for the survey. My contact information was also provided to address any questions or concerns.

Risks and Benefits

Potential risks might have been involved depending on the participant's personal history. Individuals were asked as part of the survey to recall potentially traumatic life events from their past which could in turn cause some levels of distress (Vrklevski &

Franklin, 2008). Concerns have been raised regarding the appropriateness of asking respondents about an abuse history, however strong evidence has been presented regarding the importance of understanding the connection between early traumatic experiences and a broad range of adverse outcomes including impaired physical and mental health (Edwards, Anda, Gu, Dube, & Felitti, 2007). Further evidence suggests survivor vulnerability has been overemphasized and 92% of participants who were asked about a past history of abuse indicated they felt the questions should have been asked (Becker-Blease & Freyd, 2006; Black, Kresnow, Simon, Arias, & Shelley, 2006).

Potential benefits to participation in the study included increasing school counselor awareness of the impact of working with students who have experienced trauma as well as risk and protective factors associated with the development of vicarious trauma. In addition, participants could benefit from an understanding of how personal history may impact current health as well as work performance. Participation in the survey was voluntary and participants were notified they could choose to discontinue the survey at any time should they feel the need to do so further minimizing potential risks to participants. Information from the study may also contribute to improved work environments, counselor supports, and professional development for school counselors.

Time and Resource Constraints

Consultation with individual school district research departments and counseling supervisors were required to gain permission as well as follow the appropriate protocol for conducting research within the school systems selected. Surveys were not distributed prior to this approval process. Timing of the survey distribution was a significant

concern that was considered as certain parts of the school year may be more or less conducive to participation. I consulted with school all counseling supervisors from the four school districts in an effort to plan the distribution timeline and avoid busier times such as scheduling, college application, and state standardized testing windows. All supervisors suggested and agreed upon the week counselors returned from summer vacation but prior to the return of students. Survey costs were minimal given the survey instrument was completed using a link to an online version rather than multiple mailings of paper copies.

Summary

The purpose of this research study was to understand if the development of vicarious trauma in school counselors may be related to a personal history of trauma, degree of exposure to trauma clients, ability to establish boundaries, level of school, and amount of trauma education. The sample included in excess of the minimum 92 school counselors at the elementary, middle, and high school levels required to ensure sufficient power and be representative of the population. The number of completed surveys was 217. Assessments designed to measure traumatic life events, self-other differentiation, and levels of vicarious trauma had been previously determined to be valid and reliable. A demographic survey provided information about the school level and amount of trauma education completed by the school counselor participants. Surveys were conducted via an online survey tool, results analyzed using the SPSS software computer program, and the hypothesis tested using multiple regression analysis. The results of this study may lead to increased knowledge of risk and protective factors for the development of

vicarious trauma in school counselors as well as improved professional development, self-care practices, and support systems. Results of this study will be discussed in the next chapter.

Chapter 4: Results

Introduction

The purpose of this quantitative research study was to examine the degree to which selected variables (a counselor's personal history of trauma, degree of exposure to trauma of student clients, ability to establish boundaries with others, level of school [elementary, middle, and high], and type of education counselor has received related to trauma or trauma counseling) are predictive of vicarious trauma for practicing school counselors. In this chapter, I review the initial research question and hypotheses and discuss recruitment procedures for participants, the pilot study, and the process of data collection. I then discuss the study results including descriptive statistics, assumptions, findings, and tables and figures to illustrate results, and then I summarize answers to the research questions.

Research Question

RQ1: What is the relationship between vicarious trauma and (a) the degree of exposure to trauma of student clients, (b) history of trauma in counselors' personal life, (c) ability to establish boundaries with others, (d) level of school (elementary middle, or secondary, and (e) amount of education received related to trauma or trauma counseling among school counselors?

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Null Hypothesis (H0): The following variables, individually or in combination with each other, will not predict vicarious trauma scores on the Vicarious Trauma Scale (VTS) of school counselors: (a) the score on a degree of exposure to trauma of student

clients instruments; (b) the score on a history of trauma in counselor's personal life instrument; (c) the score on an ability to establish boundaries with others instrument; (d) level of school (elementary, middle, or secondary) where the participant is employed; and (e) amount of education counselor has received related to trauma or trauma counseling.

Alternative Hypothesis (HA): The following variables, individually or in combination with each other, will predict vicarious trauma scores on the VTS of school counselors: (a) the score on a degree of exposure to trauma of student clients instruments; (b) the score on a history of trauma in counselor's personal life instrument; (c) the score on an ability to establish boundaries with others instrument; (d) level of school (elementary, middle, or secondary) where the participant is employed; and (e) amount of education counselor has received related to trauma or trauma counseling.

Pilot Study

I conducted a pilot study using the demographic survey as well as one additional question allowing for overall feedback to ensure the form was comprehensible and the questions were well-defined, clearly understood, and presented in a consistent manner. The piloting process included a review by the dissertation committee methodologist, a knowledgeable analyst, to examine question completeness and relevancy as well as scale and format appropriateness followed by implementation with a small group of 10 participants typical of the proposed study. The pilot group of participants included school counselors at the elementary, middle, and high school levels who worked outside of the school districts targeted in the study.

I was able to recruit participants using the Virginia School Counselor Association directory and sent a link to the pilot survey for the 10 participants (three elementary, five middle school, and two high school counselors) who volunteered to participate in the pilot. Upon receipt of the link, counselors were instructed to think out loud" while completing the survey and write any questions, comments, or concerns related to the survey items in the space provided under each question. I included a section after each question for participants to type any thoughts or concerns that came to mind while taking the survey.

Upon completion of the pilot study, the researcher and committee members reviewed the responses to ensure the questions and instructions were understood and determine whether or not the meaning or interpretation of the questions was the same for all respondents. Members of my dissertation committee and I reviewed all comments and made minor wording revisions in one question that was necessary for clarity. We also discussed the results of the second question in the pilot study that asked counselors to select the type of education they had received specifically related to trauma because all 10 respondents chose the same answer: Moderate. We made the decision to continue with the question as previously stated in the survey given the number of participants was low and identify any possible changes to that response. The changes made to the survey were submitted to the Walden University IRB and modifications were approved prior to the survey distribution.

Data Collection

I completed applications to conduct research in five school divisions in Virginia and was approved to distribute my surveys in four of the five. Following approval by the school districts and the IRB of Walden University (Approval #06-07-17-0305549), I contacted each district school counseling supervisor to discuss the most appropriate time to distribute surveys to the counselors. All supervisors agreed the best time to distribute the survey would be the week counselors returned to school for the next academic year as opposed to sending it out while a majority were still on summer break. As a result, I began data collection on August 22, 2017 and ended on September 22, 2017.

On August 22, I sent a prenotification email to the previously identified school counseling supervisors who then distributed it to a total of 654 school counselors working at elementary, middle, and high school levels in four different school districts in Virginia. In addition, school counseling supervisors offered to highlight the survey opportunity to their school counselors in their back to school group meetings the following week. On August 28, 2017, I sent the live survey link in an email to the school counseling supervisors who then forwarded it to all 654 school counselors in the four school districts. I sent a reminder e-mail for distribution on September 14 and explained the closing date of the survey would be on September 22, 2017. I closed the survey on September 22, 2017 at 11:59 p.m.

A total of 246 counselors participated in the online survey. Of these participants, 29 were incomplete and therefore I removed them from the study, leaving 217 total participants and yielding a response rate of 33.2%. The target population to which I

hoped to generalize research findings was licensed school counselors in Virginia. In Virginia, school counselors are licensed by the Virginia State DOE. According to the VSCA (2016), there were over 3,000 individuals in the Commonwealth who had a school counseling license. It was difficult to determine an accurate number of school counselors in Virginia in order to identify how representative the sample was of the population of interest due to the fact that not all of those licensed were currently employed in schools. The school districts I worked with, however, did represent a geographically and socioeconomically diverse population sample in both large and smaller school districts in Virginia.

Of the total 217 participants who completed the survey, there was a good representation of each level with 81 at the elementary level, 65 at the middle level, and 71 at the high school level (see Table 1). The majority of participants (167) indicated they had received a moderate level of education specifically related to trauma. The second highest reporting category with (38) counselors indicated they had a limited amount of education in trauma. Interestingly, very few (4) school counselors reported no education in trauma and a very small number (7) reported extensive or the highest level of education specifically related to trauma. School counselors reported significant amounts of exposure to students with trauma histories with 58 reporting 10% or less, 71 reporting between 10-25%, 55 reporting 25-50%, and 33 reporting as 65% or higher.

Table 1

Demographic Characteristics of Study Sample (N = 217)

Variable	*n*	%
School level:		
Elementary	81	37.3
Middle	65	29.9
High	71	32.7
Trauma education:		
None	4	1.9
Limited	38	17.6
Moderate	167	77.3
Extensive	7	3.2
Estimated student trauma exposure:		
10% or less	58	26.7
10%-25%	71	32.7
25%-50%	55	25.4
65%	33	15.2

Data Cleaning

Prior to analyzing the data, I screened for missing data, univariate outliers, and multivariate outliers. I screened for univariate outliers by transforming raw scores into z-scores and comparing z-scores to a critical value of +/-3.29, $p < .001$ (Tabachnick & Fidell, 2012). A review of z-scores indicated there were no scores that exceeded the critical value, so no scores were excluded from the analysis. Multivariate outliers were evaluated using Mahalanobis distance. Frequency for Mahalanobis distance with five predictors indicated no cases were above a distance greater than 11.07 ($p = .05$) or 15.09 ($p = .01$) which would have been cause for concern (Field, 2013). A visual inspection of the residuals scatterplot indicated no obvious outliers (see Figure 1).

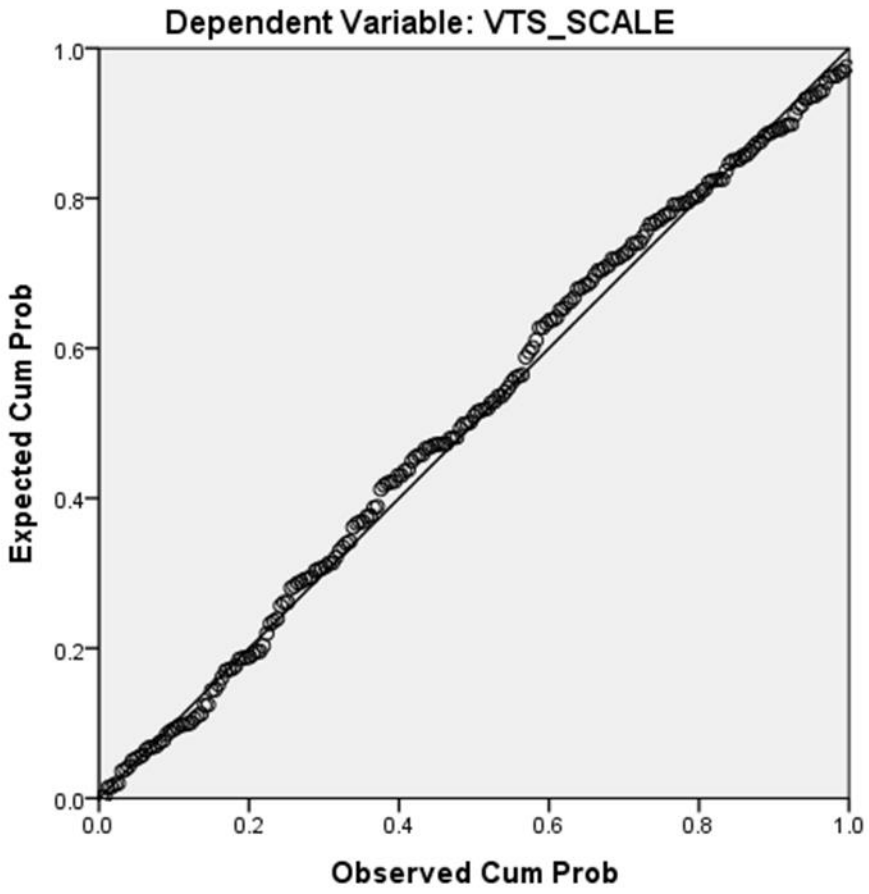

Figure 1. Sample of normal p-p plot of regression standardized residual used to assess if the data set is normally distributed.

I condensed several raw data points into one when using the standardized questionnaires in order to calculate subscale scores rather than analyzing each of the questions separately. I transformed the VTS, SODS, and the ACE-Revised into subscale scores with the following coding; VTS_SCALE, SODS_SCORE, and ACE_SCORE. In addition, it was necessary to create dummy variables for the categorical variables used as predictors as a way to represent all the groups. I created several new variables keeping in mind there needed to be one less than the number of groups I was recoding (Field, 2013). I represented the estimated percentage of students with a trauma history as Student

Trauma 25, Student Trauma 50, and Student Trauma 65 leaving 10% of students with trauma as 0 or the baseline. Similarly, I represented level of trauma education as Limited, Moderate, and Extensive, leaving out none as 0 or the baseline. Finally, I identified the level of the work site as Middle and High, leaving elementary as 0 or the baseline. Once all variables had been recoded, I ran descriptive statistics (Table 2).

Table 2 presents descriptive information for all study variables. An initial review of participants' characteristics suggested there was some evidence of vicarious trauma demonstrated by an average VTS score of 35 out of a possible 56, indicating that participants had higher levels of distress. Participant ACE scores were low with an average 1.8 out of a possible 14 indicating that participants had minimal exposure to traumatic events in childhood. The SODS scores were relatively high with an average 7.4 out of a possible 11 points indicating that participants had a relative high level of differentiation of self. The majority of participants (77%) indicated they had received a moderate level of education specifically related to trauma. Estimates of the percentage of students participants had worked with who had a trauma history and shared those experiences with them indicated 32% of respondents estimated this exposure between 10-25% of the students on their caseloads and 25% indicated this range to be as high as 25-50%.

Tests of Normality

I assessed basic parametric assumptions prior to analyzing data to test the hypotheses. A rule of thumb generally used for regression analysis requires at least 20 cases per independent variable (Field, 2013). In this study, there were 5 independent variables and a total of 217 participants, which exceeded this general rule. According to Field (2013), the relationship between the dependent variable and independent variables needs to be linear.

Table 2

Descriptive Statistics

Variable	Mean	*SD*	*N*
VTS Scale	35.3825	8.09299	217
SODS Score	7.3917	3.02283	217
ACE Score	1.8341	2.31943	217
Student Trauma 25	.3272	.47027	217
Student Trauma 50	.2535	.43600	217
Student Trauma 65	.1198	.32550	217
Limited	.1751	.38094	217
Moderate	.7696	.38094	217
Extensive	.0323	.17709	217
Middle	.2995	.45912	217
High	.3272	.47027	217

I tested this assumption using scatterplots of standardized residuals against standardized predicted values which demonstrated the assumptions of linearity and homoscedasticity had been met because the residuals of the regression were normally distributed (Field, 2013). I checked for multivariate normality by examining a histogram which indicated a normal distribution (Figure 2). I used a correlation matrix to check for

multicollinearity in the data and found all correlation coefficients to be less than .80 which met the assumption there was no strong correlation between two or more predictors (Field, 2013). It was appropriate to proceed with the regression analysis given the assumptions had been met.

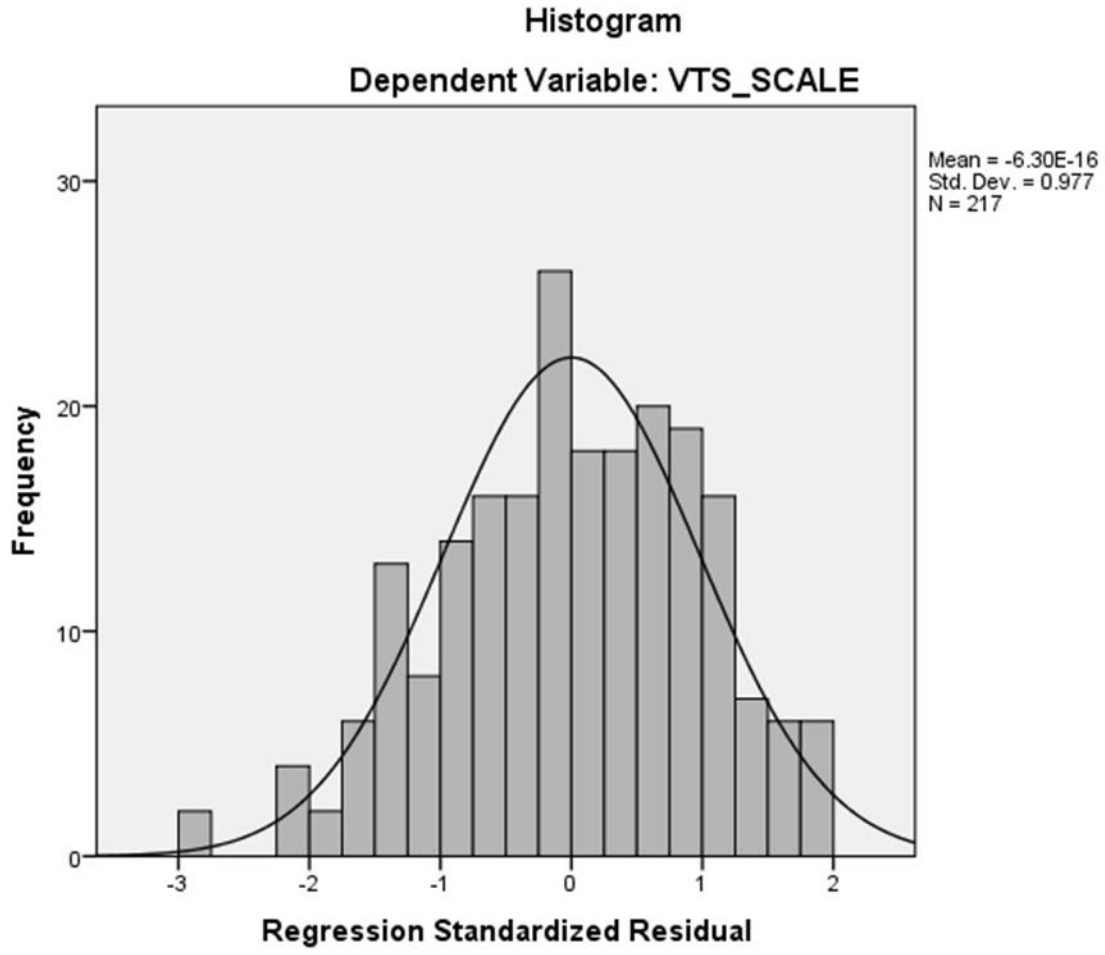

Figure 2. Histogram: Sample distribution with vicarious trauma as dependent variable with exposure to student trauma, personal history of trauma, self-other differentiation, level of education related to trauma, and level of school as independent variables.

Regression Analysis

All analyses were completed using IBM SPSS® Version 24 to investigate the relationship between the dependent variable, vicarious trauma (VTS_Scale) and the five independent variables. It was necessary to further define the five independent variables into separate categories in order to conduct the analysis: (a) the degree of exposure to trauma of student clients (Student Trauma [baseline = 0], Student Trauma 25, Student Trauma 50, Student Trauma 65); (b) history of trauma in counselor's personal life [ACE_Score]; (c) ability to establish boundaries with others [SODS_Score]; (d) level of school (elementary [baseline = 0], middle, or high); and (e) amount of education counselor received related to trauma or trauma counseling among school counselors (None [baseline = 0], Limited, Moderate, Extensive). I assessed vicarious trauma as the dependent variable against all 10 independent variables using the enter method. The resulting correlation analysis examined the effect of each independent variable on the dependent variable while holding the effect of other variables constant (Field, 2013). According to the model summary (Table 3), the R =.430 indicates the linear combination of the independent variables predicted about 43% of the actual dependent variable. R Square (R^2) indicated the proportion of variance that could be explained in the dependent variable by the combination of independent variables, which in this case was only 18.5% and the adjusted R^2 was 14.6%, a much more conservative number.

Table 3

Model Summary

Model	R	R square	Adjusted R square	Std. error of the estimate
1	.430	.185	.146	7.48106

Note. a. Predictors: (Constant), High, Limited, Student Trauma 25, SODS_ Score, Extensive, ACE_Score, Student Trauma 65, Middle, Student Trauma 50, Moderate; b. Dependent Variable: VTS_Scale.

The ANOVA (Table 4) provided the results of a test of significance for R and R square using the *F*-statistic. In the analysis for this study, the *F* value was greater than one ($F = 4.678$) and indicated a good fit with the regression model meaning it significantly improved the ability to predict the outcome variable. The *p*-value was well below the value .05 ($p < .00l$), and therefore I concluded there was a statistically significant difference between groups as determined by one-way ANOVA $F(10,206) = 4.678$, $p = .000$).

Table 4

Analysis of Variance Test (ANOVA)

Model		Sum of squares	*df*	Mean square	*F*	Sig.
1	Regression	2618.196	10	261.82	4.678	.000[b]
	Residual	11529.057	206	55.966		
	Total	14147.253	216			

a. Dependent Variable: VTS_Scale; b. Predictors (Constant): High, Limited, Student Trauma 25, SODS_Score, Extensive, ACE_Score, Student Trauma 65, Middle, Student Trauma 50, Moderate.

Model Parameters

The coefficients table provided the B-values, collinearity diagnostics, and the part and partial correlations. The b-values indicated the individual contribution of each predictor to the model. Positive values indicated a positive relationship between the predictor variable and the outcome variable and negative b-values indicated a negative relationship. As can be seen in Table 5, the SODS had a negative Pearson correlation, r = -.368, n = 217, which was significant at the 0.00 level.

Table 5

Correlations

	SODS score	ACE score	Stud 25	Stud 50	Stud 65	Lim	Mod	Ext	Mid	High
VTS_Scale										
Pearson Corr.	-.368*	.102	-.015	.144*	.000	.028	.050	-.086	-.051	.129*
Sig. (1-tailed)	.000	.067	.414	.017	.499	.342	.230	.103	.228	.029

Note. *p < 0.05; Pearson correlation coefficients (N = 217).

The negative correlation indicated the lower the SODS score of the participant (meaning lower differentiation of self from others), the more likely they were to have higher levels of vicarious trauma. As scores on the VTS increased by one unit, scores on the SODS decreased by -.940 units. The *t*-statistic test associated with the b-value indicated this predictor (SODS_Score) was making a significant contribution to the model. The variable Student Trauma 50 (estimated exposure to student trauma between 25%-50%) had a positive Pearson correlation, r = .144, n = 217, which was significant at .017. There was a positive correlation, r = .129, between counselors who worked in a

high school setting and vicarious trauma which was significant at .029, and indicated high school counselors reported more vicarious trauma than counselors in elementary and middle schools. None of the other predictor variables were found to significantly contribute to the model as all had values of $p > .05$.

Relationship Between Vicarious Trauma and Predictors

The research question I asked was to determine the relationship between vicarious trauma and (a) the degree of exposure to trauma of student clients; (b) history of trauma in counselor's personal life; (c) ability to establish boundaries with others; (d) level of school (elementary, middle, or secondary); and (e) amount of education counselor has received related to trauma or trauma counseling amongst school counselors. I assessed vicarious trauma as the dependent variable and all others as the independent variables. The null hypotheses (H0) indicated the independent variables, individually or in combination with each other would not predict vicarious trauma scores on the VTS of school counselors. The alternative hypotheses indicated the independent variables, individually or in combination with each other would predict scores on the VTS of school counselors. A review of the data analysis (Table 6) indicated to what degree each predictor affected the outcome, vicarious trauma, when all other predictors were held constant.

The model coefficient table (see Table 6) reported the coefficients for the independent variables: SODS_score, ACE_score, Student trauma 25, Student trauma 50, Student trauma 65, Limited, Moderate, or Extensive training, Middle, and High school along with the significance value. The SODS_Score, with a significance value $p = < .01$

indicated there was very strong evidence of a negative linear relationship between differentiation of self and vicarious trauma. The value, *standardized* β = −.35, indicated that as scores on the SODS decreased by .35, scores on the VTS increased by one standard deviation *SD* = 3.02. The null hypotheses (H_0) was therefore rejected and the alternative hypotheses (H_a) accepted given the independent variable, self-other differentiation, was found to be highly significant at $p < .01$ and indicated school counselors with lower differentiation of self had more vicarious trauma. The remaining independent variables showed little or no evidence in support of the alternative hypotheses.

Table 6

Coefficients

	Unstandardized Coefficients		Standardized coefficients		
	B	Std Error	Beta	*t*	Sig.
(Constant-VT)	35.68	3.68		9.69	.000
SODS_score	-.94	.17	-.35	-5.50	.000
ACE_score	.16	.23	.05	.69	.490
Student Tr. 25	.52	1.31	.03	.39	.694
Student Tr. 50	2.57	1.45	.14	1.78	.077
Student Tr. 65	.84	1.79	.03	.47	.640
Limited	5.06	3.59	.24	1.41	.160
Moderate	4.76	3.46	.25	1.37	.171
Extensive	.35	4.45	.01	.08	.938
Middle	.69	1.27	.04	.55	.586
High	2.04	1.24	.12	1.65	.102

Note. Dependent variable: VTS_Scale

Summary

The purpose of data analysis was to understand the relationship between vicarious trauma and (a) the degree of exposure to trauma of clients; (b) the history of trauma in a counselor's personal life; (c) the ability to establish boundaries with others; (d) the level of school (elementary, middle, or high); and (e) the amount of education the counselor has received related to trauma or trauma counseling.

It was hypothesized these predictor variables individually or in combination with each other would predict scores on the VTS. Individually, the ability to establish boundaries with others (measured by the SODS) demonstrated evidence to reject the null hypotheses. This evidence was found to be statistically significant. The variable, differentiation of self, indicated very strong evidence of a relationship with vicarious trauma. The predictor variables; personal history of trauma in a counselor's personal life, level of school/work setting, and amount of education a counselor had received related to trauma offered little or no real evidence against the null hypotheses.

I will provide a more in depth interpretation of findings, study limitations, recommendations further research, and implications in Chapter 5. I will also address implications for potential social change and possible next steps.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

Early research studies in the field of trauma initially focused on the impact of traumatic events involving those who had first hand experiences. Since that time, studies have evolved and include those with secondary exposure as a result of working with those exposed to trauma. Most studies involving secondary or vicarious trauma however, focused primarily on counselors working in settings outside of the school environment. A variety of other professionals in high stress jobs such as first responders, trauma nurses, welfare professionals, social workers, and crisis support volunteers have been examined.

For the most part, researchers have overlooked the risk for vicarious trauma in school counselors despite overwhelming evidence many of the students they work with have experienced trauma, including neglect or physical, sexual, or psychological abuse (U. S. Department of Health and Human Services (DHHS), 2013). Many helping professionals who counsel victims of trauma do not experience symptoms indicative of vicarious trauma, but may even find some positive experiences, which may indicate there are risk and protective factors involved.

Interest in this research study was not only to identify potential risk factors for vicarious trauma that may exist for school counselors but also to bring attention to the importance of building a culture of wellness and self-care for school counselors. Pryce, Shackleford, and Pryce (2007) referred to vicarious trauma as an occupational hazard that can lead to distorted thinking patterns regarding self and others. Distorted thoughts can

impact how school counselors interact and relate to the students with whom they work (McCann & Pearlman, 1990).

The focus for this study was to identify the relationships between vicarious trauma and the degree of exposure to trauma of student clients, the history of trauma in counselors' personal lives, ability to establish boundaries with others, level of school (elementary, middle, or secondary), and amount of education the school counselor has received related to trauma or trauma counseling. I employed a quantitative cross-sectional research design that used an electronic questionnaire. I hoped to identify predictor variables that might account for variance in the response variable.

The alternative hypothesis (H_a) in this study was supported and the null hypothesis (H_0) rejected. The hypothesis was that the following variables, individually or in combination with each, would provide a statistically significant relationship with vicarious trauma scores on the VTS of school counselors: (a) the score on the degree of exposure to trauma of student clients (demographic survey in Appendix B); (b) level of school (elementary, middle, or secondary) where the participant is employed (demographic survey in Appendix B); (c) amount of education counselor has received related to trauma or trauma counseling (demographic survey in Appendix B); (d) the score on an ability to establish boundaries with others instrument (SODS in Appendix C); and (d) the score on a history of trauma in counselor's personal life instrument (Traumatic Life Events Questionnaire in Appendix D).

I was able to identify, using multiple regression, a significant negative relationship between scores on the SODS and scores on the VTS indicating that the lower

differentiation of self from others, the more likely the counselor was to have higher levels of vicarious trauma. The remaining variables showed little or no evidence in support of the alternative hypotheses that no significant differences existed.

Interpretation of Findings

In this study, I found that a school counselor's personal history of trauma, level of education specifically related to trauma, and level of school placement were not significantly related to the development of vicarious trauma in school counselors. In addition, the level of exposure to student clients who experienced trauma did not significantly impact a school counselor's risk of vicarious trauma. I found self-other differentiation, however, to be associated with an increased risk of vicarious trauma in my sample. School counselors who had higher self-other differentiation and were able to refrain from excessive identification with a student experienced significantly less vicarious trauma. School counselors who indicated low self-other differentiation experienced greater levels of vicarious trauma. I did not find the level of school a counselor worked in to be related to vicarious trauma. I was unable to locate studies where this had been previously explored, so I could not compare these results with any existing studies.

Vicarious Trauma and Personal History of Trauma

McCann and Pearlman (1990) and Pearlman and MacIan (1995) indicated those with a personal history of trauma were more likely than those without a history of trauma to show negative effects from the work. McCann and Pearlman (1990) found that listening to the traumatic experiences of clients could cause counselors to personalize

those feelings and trigger their own history of trauma. According to Branson et al. (2014), imagery associated with traumatic events, including shared details such as smells and sounds, could cause negative emotions to resurface.

Schauben and Frazier (1995) and Dunkley and Whelan (2006) found no relationship between a history of trauma and the development of vicarious trauma in counselors. Additionally, researchers have suggested there may be a disproportionate number of individuals who enter the helping professions as compared to other professions with unresolved trauma histories (Cieslak et al., 2011). The participants in this study did not provide responses in support of that finding. The average score for the 217 participants who completed the ACE Inventory was 1.8 out of a possible 10, indicating a low exposure to traumatic events in childhood. In comparison to the Adverse Childhood Experiences (ACE) study, Felitti et al, (1998), more than half (52%) of all respondents reported at least one or more adverse childhood experiences and one-fourth reported two, which would put the respondents in my study within an average but not elevated range.

Vicarious Trauma and Level of School

Previous researchers studying vicarious trauma have focused primarily on specific professions, work settings (such as counseling agencies, social service agencies, and those typical of health-care workers and first responders), client caseloads, and levels of exposure to traumatic material. Individuals in those settings often work with a wide variety of ages as opposed to school counselors who, by virtue of their work placement, spend a majority of their time with specific age groups, typically elementary (ages 5-11), middle (ages 11-14), and high school (ages 15-18). No data were available comparing

levels of vicarious trauma when working with specific age groups; however, Van Der Kolk (2014) suggested there may be a higher risk when working with a younger, more vulnerable population of children.

The ASCA (2016a) recommended school counselors spend a majority of their time in direct service to students and recognized the need for education about the impact of trauma and the potential effects of working with students who have trauma histories. In my study, I examined the relationship between vicarious trauma and the various levels (elementary, middle, and high school) in which school counselors worked. There was little or no evidence to suggest that the specific level (elementary, middle, or high school) where school counselors worked had a significant impact on their development of vicarious trauma. The recent addition of school-based depression awareness and suicide prevention programs designed specifically for middle and high school students could potentially result in a greater number of students in crisis being referred to school counselors. High school counselors may eventually spend a majority of their time outside of working just with the most at-risk students. This might warrant further investigation regarding whether high school students reveal more specific details of their trauma experiences and, therefore, increase the trauma exposure to school counselors.

Vicarious Trauma and Counselor Education in Trauma

Newell and MacNeil (2010) suggested the best defense against the development of vicarious trauma was education. Ethical standards of the American Counseling Association (2014) as well as the Council for the Accreditation of Counseling and Related Educational Programs (2009) identified the importance of counselor awareness

of personal and professional limitations as an ethical responsibility. Previous researchers have also supported the dangers of counselor impairment due to the development of vicarious trauma (Branson et al., 2014; Devilly et al., 2009; Figley, 1995; Harrison & Westwood, 2009; McCann & Pearlman, 1990; Pearlman & Saakvitne, 1995a; Sexton, 1999). No researchers have looked specifically at the education of school counselors specifically related to trauma and its potential relationship with vicarious trauma.

In this study, I examined the relationship among levels of education specifically related to trauma and vicarious trauma. Trippany et al. (2004) suggested that continuing education could limit the risk of vicarious trauma. The results of this study did not support previous research or the hypothesis as I found no significant relationship between levels of education (categorized as none, limited, moderate, or extensive) and vicarious trauma experienced by the school counselor participants. One possible explanation and suggestion for further research was the fact that a great majority of respondents (167 of 217) indicated they had received a moderate level of education specifically related to trauma. This result was consistent with the pilot study results where all of the 10 respondents indicated a moderate level of trauma education. It may be important to investigate differences in the types of trauma education more specifically related to personal and professional wellness of the counselor.

Vicarious Trauma and Exposure to Student Trauma

Pearlman and Saakvitne (1995a) identified empathic engagement as one of the most important components of the therapeutic relationship but also the element that could leave counselors most at risk for vicarious trauma. Research regarding one's ability to

adapt to experiences of trauma or secondary exposure to those experiences is often dependent upon psychological needs for safety, trust, esteem, intimacy, and control (McCann & Pearlman, 1990). Counselors who are exposed to trauma shared by students could begin to experience feelings of vulnerability, helplessness, and self-doubt, potentially putting them at greater risk for vicarious trauma (Trippany et al., 2004). According to Pearlman and Saakvitne (1995a), imagery can impact an individual's perception, suggesting that the more detailed experiences shared by clients, the greater the disruptions for their counselors which can include intrusive thoughts, fatigue, and difficulty concentrating.

Tyler (2012) found that working in organizations where there are insufficient supports and high caseloads could increase the risk of vicarious trauma. Williams et al. (2012), as well as Ivicic and Motta (2016), suggested working with a high percentage of traumatized clients was a predictor of higher levels of vicarious trauma. School counselors are often responsible for high caseloads of students with little or no opportunities to collaborate or seek support (Holcomb-McCoy et al., 2009). Lonn and Haiyasoso (2016) identified supervision as a significant support for counselors to recognize and explore feelings and thoughts that can arise from trauma work and to assist with protective strategies.

In this study, I investigated the relationship between the degree of exposure to student trauma and vicarious trauma in school counselors. Respondents were distributed across the spectrum reporting exposure to student trauma: 10% or less = 58, 10%-25% = 71, 25%-50% = 55, and 65% or greater = 33. My study did not provide support that

higher levels of vicarious trauma were associated with greater exposure to student trauma. More specifically, there was no significant evidence of a relationship between counselors who reported working with higher percentages of students who shared experiences of trauma and higher levels of vicarious trauma. Counselors who saw lower percentages of students with trauma histories did not show significantly lower scores on the VTS. The number of counselors who indicated they had worked with higher percentages (65+) of students was considerably smaller which may have explained the lack of statistical significance in this variable making it worthy of further examination.

Vicarious Trauma and Self-Other Differentiation

According to the American Counseling Association (2014), it is a counselor's ethical obligation to maintain appropriate therapeutic boundaries. Campesino (2007) and Mailloux (2014) suggested professional boundaries can often be more difficult to preserve when working with those who have experienced trauma, particularly children. Trippany et al. (2004) found regular supervision could help mitigate or potentially prevent the development of vicarious trauma by helping the counselor to manage feelings and examine perspectives related to boundaries. Given the fact that school counselors do not have access to regular supervision, they may be more vulnerable to cognitive shifts in beliefs and thinking that may lead to poor differentiation of self and lack of independent judgment.

My study investigated the relationship between vicarious trauma and self-other differentiation. Study participants completed the SODS as well as the VTS (Olver et al., 1989; Vrklevski & Franklin, 2008). The data indicated there was very strong evidence of

a negative relationship between differentiation of self and vicarious trauma. More specifically, when scores on the SODS decreased, scores on the VTS increased indicating counselors with lower differentiation of self- reported higher levels of vicarious trauma. Low self-other differentiation was found to be a significant predictor of vicarious trauma in school counselors.

The significant connection between self-other differentiation and vicarious trauma was consistent with much of the research in this area. According to McCann and Pearlman (1990), counselors who are unable to maintain a consistent sense of self are more likely to develop vicarious trauma. The constructivist self-development theory supports the idea that an individual's belief system related to self and others, particularly the ability to set limits, maintain a sense of identity, and manage strong feelings, can lead to an increased susceptibility for the development vicarious trauma (Cohen & Collens, 2013; McCann & Pearlman, 1990; Williams et al., 2012). Researchers of trauma have found that an individual's frame of reference and independence impacts the ability to adapt and manage strong feelings, allowing the counselor to disengage from identification with a client's trauma without disengaging from empathy (Harrison & Westwood, 2009).

Saakvitne and Pearlman (1996) suggested evidence of vicarious trauma would be reflected in areas of the self: frame of reference, self-capacities, ego resources, psychological needs, and cognitive schemas. An individual's frame of reference may appear in the counselor as avoidance or over-identification (Sexton, 1999). Securely attached relationships develop early in life and result in positive self-capacities and an

ability to regulate emotions, another important indicator of self-other differentiation (Olver et al., 1989; Trippany et al., 2004). Ego resources, another component of the constructivist self-development theory, allow individuals to meet their needs as well as others while maintaining an ability to set appropriate boundaries (Pearlman & Saakvitne, 1995a). Psychological needs for safety and control as well as cognitive schemas can also be compromised when a counselor has difficulty with self-other differentiation, resulting in challenges to identity and world view resulting in avoidance and difficulty working with clients (Stamm, 1999; Williams et al., 2012).

Limitations of the Study

One limitation of this study was the use of a convenience sampling strategy. I applied for approval to conduct my research in six large school districts in Virginia close in proximity to me originally with the intention that I might have the opportunity to follow up the study by providing informational workshops on vicarious trauma. I was able to gain approval and conducted my study in four of the six school districts. Consequently, the results of this study cannot be generalized to the larger population due to the lack of representation of school counselors in other regions of the state or in the nation. I have not had the opportunity to schedule or conduct workshops to date but continue to remain in contact with each district's school counseling supervisors and hope to explore future opportunities. In the workshops, I will be able to share the results from this study.

Another potential limitation was the fact that I was employed by one of the school districts that participated in the study. This could have resulted in the potential for bias as

some of the school counselors knew me although none worked directly with me. Participants may have decided to participate or not participate in the study because of their relationship with me. For this reason, I was careful to communicate to potential participants that the survey was anonymous and confidential. No personal or identifying information was collected in the study and all communication with potential participants went through the counseling supervisors as I did not have access to any individual counselor e-mail addresses.

The timing of the survey may also have been a limitation as it was distributed at the beginning of the school year when many counselors were busy setting up their schedules, attending meetings, and getting back into their routines. Procedural bias may have played a factor as some counselors who were new might have chosen not to participate due to feeling overwhelmed with the pressures of a new role or placement. I made the decision to significantly limit the data collection period initially to 2 weeks and 1 additional week after reminders were sent. After discussions with the school counseling supervisors, the consensus was that most school counselors would likely become even busier and would be less likely to complete the surveys after that initial period.

The survey was a self-report measure which may have been another limitation to the study. Issues with recall and response bias could have influenced the validity of the results. Participants might have under or over-reported information resulting in less accurate outcomes. Some participants who found the content distressing may have

discontinued the study, and therefore counselors more significantly impacted by vicarious trauma might not have been represented.

Lastly, the pilot study indicated a potential limitation with the question regarding the type of education a counselor had received specifically related to trauma. All 10 respondents in the pilot study chose the same moderate level response. This may have identified a problem with the wording or category of examples given. I decided, along with my committee, to keep the question and its original wording in the survey since the pilot study was small. A significant majority of participants in the larger study (167 of 217) also chose the moderate response, making the measure of that particular variable questionable.

Implications

Positive Social Change

Based on the data in this research study, I conclude there is a significant relationship between vicarious trauma and self-other differentiation suggesting opportunities for counselors to learn more effective ways to maintain a consistent sense of self while also processing and managing strong feelings. A number of researchers have documented the importance of maintaining clear boundaries with regard to counseling relationships and suggest counselors develop the ability to balance empathy and partial identification with relative disengagement from the client (Harrison & Westwood, 2009; Saakvitne & Pearlman, 1996; Williams et al., 2012). Although I did not find an increased risk of vicarious trauma among my sample when counselors indicated a higher level of exposure to students with trauma experiences, a counselor's

ability to maintain healthy boundaries with student clients may certainly be impacted by higher caseloads of students with trauma histories. This may be an area worthy of further examination. Based on the evidence from this sample data, I suggest that changes may be needed both at the individual and organizational levels to support school counselors to develop greater self-insight and maintain clear boundaries with students.

The implications for positive social change on an individual level may include education for counselors on the importance of coping with stress, differentiating thoughts from feelings, and being guided by intellect as opposed to emotions in order to maintain a degree of autonomy within their relationships (Skowron & Friedlanger, 1988). Educational opportunities may include recognition of the signs and symptoms of concern such as viewing clients or students as victims, rescuing behaviors, altered behaviors or responses to students, and disruptions to their lives. Individuals could also benefit from opportunities to reflect, find meaning in experiences, and evaluate their own motivations for doing this work (Lonn & Haiyasoso, 2016). Protective strategies could include strategies to reduce stress and increase self-care. According to Saakvitne and Pearlman (1996b), the ABC's of addressing vicarious trauma include awareness, balance, and connection.

Opportunities for positive social change on an organizational level should consider the need for school counselors to be able to access supervision or peer consultation in an effort to increase self-awareness and provide opportunities to reflect upon and process traumatic material they may be exposed to by students. Supervision has been recommended as a significant protective factor for counselors to help avoid or

reduce vicarious trauma (Harrison & Westwood, 2009). Organizations can also promote a culture of wellness, monitor caseloads, advocate for and provide regular opportunities for professional development. Self-care could also become part of a school's culture by encouraging movement, healthy eating, alternate work spaces, flex time, increased choices in professional growth, and a focus on work-life balance. Workplace cultures that promote health and wellness could in turn strengthen relationships, reduce absenteeism, and create a more positive outlook for staff. It is important to address the risks of working with students who have experienced trauma. Counselors should understand the impact of trauma exposure not only for their own wellness but to ensure effective service delivery to students.

Considerations for Future Research

In light of the current study, more studies are needed to help counselor educators understand how supervision and peer supports might be introduced into the school setting in order to help school counselors process strong emotions and identify early warning signs of vicarious trauma. Existing literature on supervision of practicing school counselors reveals a significant lack of supports as compared to counselors who work in other settings (Samody, Henderson, Cook, & Zambrano, 2008). In addition, most mental health counselors work in settings where they are a part of a team of counselors as opposed to many elementary and some middle school settings where often counselors work in isolation (Crutchfield et al., 1997). School counselors are exposed now more than ever to the increasingly diverse needs of students including experiences of trauma, school violence, natural disasters, and bullying to name a few that have a significant

impact on a students' psychological well-being (Keller-Dupree, 2013; Van Der Kolk, 2014). According to Wilson and Remley (1987), supervision of school counselors has been defined as administrative oversight by school principals who are often uneducated about the role and needs of counselors. A more structured, clinical supervision can provide opportunities for skill enhancement, professional identity development, case conceptualization, and increased self-awareness of issues such as dual relationships, professional boundaries, and the development of vicarious trauma (Samody et al., 2008).

One of the limitations of the current study was the question on the survey that addressed the type of education school counselors had received specifically related to trauma. I found that in both the pilot study and the full study that a great majority of school counselors (167 of 217) had indicated a moderate level of education. I recommend more study to specifically identify what types of education counselors receive in order to be able to further define this variable. A qualitative study may help to resolve this limitation. Time and resource constraints limited the study as the surveys were distributed just prior to counselors returning to work for a new school year. Most counselors were returning from time off through the summer where they had additional opportunities for self-care and reflection as opposed to the end of a school year when they may be more impacted at the time by their work with students. Surveying school counselors at the end of the year may produce similar challenges in completion and return rates as this is a very busy time of year for most school counselors given standardized testing and graduation responsibilities.

Currently, many school districts are beginning to implement curriculums addressing signs of depression and suicide at the middle and high school levels. Student referrals to counselors could most likely increase in the coming years as students are given a platform for speaking out about these feelings and in turn place additional pressures on school counselors. Future studies may be needed to explore the existence of such curriculums and their potential impact on the school counselor. In addition, counselors who have experienced extremely traumatic incidents such as a student suicide, death of a colleague, community or school violence, for example, may indicate higher levels of vicarious trauma and would be an area worthy of future research.

Overall, the current study highlights the fact that school counselors are vulnerable to the effects of vicarious trauma. The connection between school counselor self-other differentiation and vicarious trauma indicates a significant need for support in the way of supervision as opposed to administrative oversight. Given the fact the effects of vicarious trauma can be long lasting and impair work performance, it might be helpful for school systems to begin to enact some form of clinical support, particularly for counselors who indicate they have been impacted by the traumatic experiences of their students. In addition, school counselors could benefit from instruction and support in identifying potential risk factors for vicarious trauma as well as self-care strategies that could serve as protective factors. As stated by Shepard (2013, p. 10), "It is important to be an ally to oppressed people without trying to take on their oppression." One could also argue the importance of supporting those helping professionals who are the allies to our students who have experienced trauma.

Conclusion

School counselors work with a large number of students who have been exposed to trauma. The impact of this work has been recognized in a number of other groups of helping professionals and the time has come to validate the risk of vicarious trauma in school counselors. The consequences can affect both the personal and professional lives of counselors which can in turn impact students who are already vulnerable and at an increased risk for physical, social, emotional, and academic deficits. It is an ethical imperative to care for our adults in these helping professions in order to have effective interventions for students.

I conducted this study to understand the relationship between vicarious trauma and potential risk factors in school counselors. I found that self-other differentiation was a significant risk factor for vicarious trauma and therefore could contribute to a discussion of potential supports for both individuals and organizations to address areas of need in order to reduce this risk. Self-care practices that promote wellness and a work-life balance can be important protective factors and should be recognized as an integral part of any school culture.

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Appendix A: Consent Form

You are invited to take part in a research study about the impact of working with students with a history of trauma on school counselors. The researcher is inviting all professional school counselors who work at the elementary, middle, and high school levels to participate in the study. I obtained your contact information via your school counseling supervisor and with the permission of your school district's research department.

This study is being conducted by Connie Honsinger, who is a doctoral student at Walden University. You may already know the researcher as a school counselor in Chesterfield but this study is separate from that role.

The purpose of this study is two-fold:
1) To identify variables that may contribute to the development of vicarious trauma in school counselors

2) To explore potential differences between school counselors who work at the elementary, middle, and high school levels.

Variables examined will include a counselor's personal history of trauma, degree of exposure to trauma of student clients, ability to establish boundaries with others, level of school (elementary, middle, and high), and amount of education a counselor has received related to trauma or trauma counseling.

If you agree to be in this study, you will be asked to:
Complete an electronic survey accessed by selecting a link that will be sent in an email. The link will include a consent form similar to this one, three short questionnaires or scales, and a demographic survey.

Here are some sample questions:
"I feel very vulnerable to the criticism of others" True or False

"Have you ever experienced a natural disaster (flood, hurricane, earthquake, et..)?" Yes or No

"My job involves exposure to traumatized or distressed students" respond on a scale of 1(strongly disagree) to 7 (strongly agree).

Voluntary Nature of the Study:
This study is voluntary. Everyone will respect your decision of whether or not you choose to be in the study. No one at Walden University, Chesterfield County Public Schools, Henrico Public Schools, or your individual school sites will treat you differently if you decide not to participate in the study. If you decide to participate in the study now, you can still change your mind later. You may stop at any time.

Risks and Benefits of Being in the Study:
Participation in this type of study involves some risk of the minor discomforts that can be encountered in daily life, such as fatigue, stress, or becoming upset. Participation in this study would not pose risk to your safety or well-being.

The study's potential benefits may include increasing school counselor awareness of the impact of working with students who have experienced trauma as well as risk and protective factors associated with the development of vicarious trauma. In addition, participants could benefit from an understanding of how personal history may impact current health as well as work performance. Information gathered from this study may also contribute to improved work environments, counselor supports, and professional development for school counselors.

Payment:
There will be no payment for your participation however you will be offered an opportunity to attend an upcoming free professional development workshop on counselor wellness and self-care.

Privacy:
Any information you provide will be kept anonymous. The researcher will not ask for or use your personal information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in the study reports. Data will be kept secure by password protection and use of codes in place of any identifying information. Data will be kept for a period of at least 5 years, as required by the university.

Contacts and Questions:
You may ask any questions you have by contacting the researcher, Connie Honsinger, via email: connie.honsinger@waldenu.edu or (804)513-8982. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 612-312-1210. Walden University's approval number for this study is (06-07-17-0305549) and it expires on (6-6-18).

Pleases print or save this consent form for your records.
Obtaining Your Consent

If you feel you understand the study well enough to make a decision about it, please indicate your consent by clicking the link below.

https://www.surveymonkey.com/r/DCL98L9

Appendix B: Demographic Questionnaire

1. Level of School you currently work in
   a. Elementary
   b. Middle
   c. High School

2. What type of education have you had *specifically related to trauma*? Choose the one that best describes your experience.
   a. None (no training specifically related to trauma)
   b. Limited (read article(s) or book(s) about working with individuals with a trauma history)
   c. Moderate (attended workplace training, professional development, online training or continuing education focused on working with individuals who have experienced trauma)
   d. Extensive (academic coursework, advanced degree program specializing in trauma, supervised internship in an agency or setting primarily serving individuals with a trauma history)

3. Estimate the % of students you have worked with in your current workplace who had a trauma history and shared those experiences with you? *(Situations that can be traumatic: • Physical or sexual abuse • Abandonment • Neglect • The death or loss of a loved one • Life-threatening illness in a caregiver • Witnessing domestic violence • Automobile accidents or other serious accidents • Bullying • Life-threatening health situations and/or painful medical procedures • Witnessing or experiencing community violence (e.g., shootings, stabbings, robbery, or fighting at home, in the neighborhood, or at school) • Witnessing police activity or having a close relative incarcerated • Life-threatening natural disasters • Acts or threats of terrorism (viewed in person or on television) • Living in chronically chaotic environments in which housing and financial resources are not consistently available)*
   a. 10%
   b. 25%
   c. 50%
   d. 65%

Appendix C: Self-Other Differentiation Scale

1. If someone close to me finds fault with what I do, I find my self-evaluation lowered.
2. I find myself becoming depressed or anxious if a close friend is feeling that way.
3. I find it hard to decide how I feel about something until I've discussed it with those close to me.
4. I tend to be uncertain how good my ideas are until someone else approves of them.
5. I find it difficult to feel good about myself when I don't get affirmation from other people.
6. A chance criticism from a friend will deeply upset me.
7. When my mother criticizes my decisions, I become uncertain of them.
8. I find it hard to make a separate judgment in the face of a strong opinion expressed by a friend.
9. I feel very vulnerable to the criticism of others.
10. I feel uncomfortable if my best friend disagrees with an action I take.
11. If my parents don't approve of a decision I've made, I question my competence in making the decision.

True responses are scored as 0; false responses are scored as a 1.

Source: Olver, R. R., Aries, E., & Batgos, J. (1989). Self-other differentiation and the mother-child relationship: The effects of sex and birth order. *Journal of Genetic Psychology: Research and Theory on Hyman Development, 150*(3), 311-322.

Appendix D: Adverse Childhood Experiences Inventory–Revised

The purpose of this questionnaire is to assess exposure to 14 categories of potentially traumatic events which are coded "0" or "1" (indicating the absence or presence of the experience)

Items

(All items preceded by "prior to your 18th birthday…)

1. Did a parent or other adult in the household **often or very often** …
   Swear at you, insult you, put you down, or humiliate you?
   Or
   Act in a way that made you afraid that you might be physically hurt?

   Yes No If yes enter 1 _____

2. Did a parent or other adult in the household **often or very often …**
   Push, grab, slap, or throw something at you?
   Or
   Ever hit you so hard that you had marks or were injured?

   Yes No If yes enter 1 _____

3. Did an adult or person at least 5 years older than you **ever**…
   Touch or fondle you or have you touch their body in a sexual way?
   Or
   Attempt or actually have oral, anal, or vaginal intercourse with you?

   Yes No If yes enter 1 _____

4. Did you **often or very often** feel that …
   No one in your family loved you or thought you were important or special?
   Or
   Your family didn't look out for each other, feel close to each other, or support each other?

   Yes No If yes enter 1 _____

5. Did you **often or very often** feel that …
   You didn't have enough to eat, had to wear dirty clothes, and had no one to protect you?
   Or
   Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?

   Yes No If yes enter 1 _____

Adverse Childhood Experiences Inventory—Revised

Items

6. Was a biological parent ever lost to you through divorce, abandonment, or other reason?
Yes No If yes enter 1 _____

7. Was your mother or stepmother:
Often or very often pushed, grabbed, slapped, or had something thrown at her?
Or
Sometimes, often, or very often kicked, bitten, hit with a fist, or hit with something hard?
Or
Ever repeatedly hit over at least a few minutes or threatened with a gun or knife?

Yes No If yes enter 1 _____

8. Did you live with anyone who was a problem drinker or alcoholic, or who used street drugs?

Yes No If yes enter 1 _____

9. Was a household member depressed or mentally ill, or did a household member attempt suicide?

Yes No If yes enter 1 _____

10. Did a household member go to prison?
Yes No If yes enter 1 _____

11. Did other kids, including brothers or sisters, often or very often hit you, threaten you, pick on you or insult you?

Yes No If yes enter 1 _____

12. Did you often or very often feel lonely, rejected or that nobody liked you?

Yes No If yes enter 1 _____

13. Did you live for 2 or more years in a neighborhood that was dangerous, or where you saw people being assaulted?

Yes No If yes enter 1 _____

14. Was there a period of 2 or more years when your family was very poor or on public assistance?

Yes No If yes enter 1_____

Source: Finkelhor, D., Shattuck, A., Turner, H., & Hamby, S. (2015). A revised inventory of adverse childhood experiences. *Child Abuse and Neglect, 48*, 13-21.

Appendix E: Vicarious Trauma Scale

Please read the following statements and indicate on a scale of 1 (*strongly disagree*) to 7 (*strongly agree*) how much you agree with them.

1. Strongly disagree
2. Disagree
3. Slightly disagree
4. Neither agree nor disagree
5. Slightly agree
6. Agree
7. Strongly agree

1. My job involves exposure to distressing material and experiences.
2. My job involves exposure to traumatized or distressed clients.
3. I find myself distressed by listening to my clients' stories and situations.
4. I find it difficult to deal with the content of my work.
5. I find myself thinking about distressing material at home.
6. Sometimes I feel helpless to assist my clients in the way I would like.
7. Sometimes I feel overwhelmed by the workload involved in my job.
8. It is hard to stay positive and optimistic given some of the things I encounter in my work.

Source: Vrklevski, L. P., & Franklin, J. (2008). Vicarious trauma: The impact of solicitors of exposure to traumatic material. *Traumatology, 14*(1), 106-118.