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An Exploration of the Relationship between Work Climate, the Utilization of Support Resources, and Compassion Fatigue Level in Child Protective Investigators

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AN EXPLORATION OF THE RELATIONSHIP BETWEEN WORK CLIMATE, THE UTILIZATION OF SUPPORT RESOURCES, AND COMPASSION FATIGUE LEVEL IN CHILD PROTECTIVE INVESTIGATORS

by

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ABSTRACT

The impact of child maltreatment is far reaching, affecting the abused child, the family system, and the professionals tasked with providing support during the moments of crisis. As child protective investigators (CPIs) provide care and support to others, they are at high risk of experiencing secondary traumatic stress and/or burnout, both aspects of compassion fatigue. Researchers suggest that work climate, utilization of resources, and worker characteristics can impact CPI compassion-fatigue level. Drawing on extant literature, this study examined three research questions and seven hypotheses aiming to explore the relationship between work climate, resource utilization, CPI characteristics, and CPI compassion-fatigue level. This dissertation research used a cross-sectional study design that included collecting data from 165 CPIs using three instruments: (a) CPI demographic form, (b) Professional Quality of Life-5, and (c) Safety Attitudes Questionnaire. Descriptive, nonparametric, and regression analyses were conducted on the returned surveys of 165 Florida-based CPIs. Results of data analyses indicated that statistically significant inverse relationships exist between the independent variable, compassion fatigue, and the dependent variables of teamwork climate, CPI supervision utilization, CPI age, and CPI trauma history (verbal abuse). The study presents implications for addressing compassion fatigue in CPIs from a public-affairs, a practice, and a research perspective.

Keywords: child abuse, child welfare, child protective investigator, compassion fatigue, secondary traumatic stress, vicarious trauma

In loving memory of my dad

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LIST OF ABBREVIATIONS

ACEs	Adverse Childhood Experiences Study
APA	American Psychological Association
CAPTA	Child Abuse Prevention and Treatment Act
CPI	child protective investigator
CSDT	constructivist self-development theory
CWP	child-welfare professional
DCF	Department of Children and Families
HHS	U.S. Department of Health and Human Services
IRB	Institutional Review Board
MSW	Master of Social Work
NCTSN	National Child Traumatic Stress Network
ProQOL	Professional Quality of Life
PTSD	Post-traumatic Stress Disorder
SAQ	Safety Attitudes Questionnaire
STS	secondary traumatic stress
STSS	Secondary Traumatic Stress Scale
TABS	Trauma Attachment Belief Scale
VRS	Vicarious Resilience Scale
VT	vicarious traumatization

CHAPTER 1: INTRODUCTION: PROBLEM AND SCOPE

A 9% increase in child-welfare service delivery occurred in response to child maltreatment between 2011 and 2015 (U.S. Department of Health and Human Services [HHS], 2015). The increase in the number of child-abuse victims also increased from 658,000 in 2011 to 683,000 in 2015 (HHS, 2015). The field of child welfare comprises a variety of workers tasked with protecting children against abuse, neglect, and other forms of maltreatment. Child protective investigators (CPIs) serve on the front lines of investigating child abuse/maltreatment allegations and are routinely exposed to trauma as a result of their work (HHS, 2015; Sprang, Craig, & Clark, 2011). The overarching goals of a CPI are to investigate child risk or maltreatment concerns and to intervene to ensure safety (HHS, 2015). This type of work-related trauma exposure can ignite adverse emotional and behavioral responses in CPIs that can interfere with personal and professional functioning (Bride, Jones, & Macmaster, 2007).

The research on how work-related trauma affects helping professionals has increased significantly in the past 20 years (Cohen & Collens, 2013). Some researchers suggested negative effects experienced by workers are an "occupational hazard" from caring for traumatized individuals (Brady, 2017, p. 305). Definitions of trauma include the primary or secondary exposure to circumstances that result in or threaten harm or death (American Psychological Association [APA], 2013; see Appendix A). The implications for work-related trauma exposure are far-reaching, affecting helping professionals and their agencies (Cohen & Collens, 2013; Dane, 2002; Horwitz, 2006; Knight, 2010; Osofsky, 2009; Tyler, 2012).

Background

Figley (1995, 2002a, 2002b) described compassion fatigue as the negative consequences that can occur from being a professional responsible for the safety, care, or welfare of others.

Figley (2002a) asserted that "the very act of being compassionate and empathic extracts a cost under most circumstances" (p. 1434). He formally defined compassion fatigue as "a state of exhaustion and dysfunction biologically, psychologically, and socially as a result of prolonged exposure to compassion stress and all it invokes" (Figley, 1995, p. 253). More broadly, compassion fatigue is the "emotions, behaviors, and physical conditions associated with ongoing exposure to work stressors" (Matey, 2016, p. 20)

The presence of compassion fatigue in a professional can lead to negative work behaviors including tardiness, work avoidance, failure to honor work commitments, and an overall loss of productivity (Boyle, 2015; Figley, 2002b). A professional may exhibit emotional detachment from work, job-related apathy, or a reduction in empathy, leading to poor judgment (Boyle, 2015; Figley, 2002b). Unaddressed compassion fatigue among professionals in one agency might result in changes in attitudes, poor employee retention, and high attrition (Jankoski, 2010; McFadden, Campbell, & Taylor, 2015). *The Diagnostic and Statistical Manual of Mental Disorders*, 5th edition (DSM-5) included secondary trauma exposure among professionals as one of the criteria that can be used in formulating a posttraumatic stress disorder (PTSD) diagnosis (American Psychological Association, 2013). One of the most significant concerns associated with symptoms of compassion fatigue is risk of PTSD diagnoses, especially if symptoms go untreated. Therefore, more research is needed in factors associated with reducing compassion-fatigue symptoms in helping professionals.

Helping professionals in healthcare and mental health fields commonly experience symptoms of compassion fatigue (Boyle, 2015; Figley, 2002b; Jankoski, 2010, McFadden et al., 2015), but prevalence in CPIs is an area in need of research. A study exploring the effects of trauma on social workers (including those in child welfare) found that 55% of the 275 study

participants experienced at least one symptom of PTSD from work-related trauma exposure (Bride, 2007). Additionally, about 15% of study participants met the full criteria for a PTSD diagnosis (Bride, 2007). In another study focusing on the relationship between job-related trauma exposure, personal trauma histories, and length of time on the job as a child welfare professional (CWP), about 40% of participants experienced emotional distress from job-related stressors (Cornille & Meyers, 1999). The results of the aforementioned study highlighted that CWPs frequently experience PTSD symptoms due to work-related trauma exposure (Bride, 2007; Cornille & Meyers, 1999)

Statement of the Problem

Professionals affected by compassion fatigue can experience anger, anxiety, exhaustion, decreased capacity for empathic or sympathetic response, and depression. In addition, irritability, loss of self-esteem, diminished enjoyment of once-enjoyable activities, and substance misuse are factors of compassion fatigue (Cocker & Joss, 2016; Figley, 2002b). Compassion fatigue can lead to physical illness or place the professional at risk for PTSD when the precipitating causes are not adequately addressed (Figley, 2002b).

Some researchers broadly studying professionals in the field of child welfare suggested that effective assessment of child safety and overall job performance may be negatively affected by unaddressed compassion fatigue (Jankoski, 2010; McFadden et al., 2015). Cornille and Meyers (1999) argued that CPIs are at equal risk of experiencing the negative effects of work-related trauma exposure as other helping professionals. However, limited research describes how the presence of compassion fatigue affects the professional and personal functioning of CPIs. Because CPIs are responsible for determining if a child has been abused and implementing

services to keep that child safe (National Child Traumatic Stress Network [NCTSN], n.d.), more research is needed on factors associated with compassion fatigue in CPIs.

Job-related stressors are a strong predictor of compassion fatigue among professionals addressing trauma (Badger, Royse, & Craig, 2008; Cohen & Collens, 2013). A professional's work environment may affect job commitment, level of burnout, and job performance (Sexton et al., 2006). Two of the organizational factors affecting work climate are (a) attitudes about colleagues and (b) attitudes about management (Jankoski, 2010; McFadden et al., 2015; Sexton et al., 2006). Attitudes about colleagues are the first component of a work climate that has implications for CPIs. The McFadden et al. (2015) literature review indicated that when professionals working in the field of child welfare feel they are part of a team, they are less likely to experience burnout or a desire to resign. Studies highlighted the need for more research to be conducted on how work climate is associated with compassion fatigue, especially in the child-welfare field. The next category of work climate—attitudes about management—has implications for professionals in the field of child welfare because supportive managers help CWPs determine ways to reduce stress in their work environment (Jankoski, 2010). Child-welfare professionals who are exposed to trauma and feel unsupported by their managers may be at higher risk for PTSD (Jankoski, 2010).

The utilization of resources and how they are associated with CPI compassion fatigue is another area in need of further study. The extant literature on recommended strategies to mitigate the effects of compassion fatigue has primarily focused on helping professionals from the mental health and health care disciplines (Cornille & Meyers, 1999; Figley, 1995, 2002a, 2002b; Joinson, 1992). Although research on compassion-fatigue intervention focused on preventative and coping strategies (Bober & Regehr, 2005; Jankoski, 2010), no existing studies directly

identified ways to reduce symptoms in helping professionals. The utilization of supervisory support is a recommended strategy that can reduce compassion fatigue in helping professionals (Jankoski, 2010; Knight, 2010; Lowe, 2016; Pelon, 2017). Jankoski (2010) explained that all child-welfare organizations must prioritize ways to retain staff by creating a work environment that supports the discussion of professional stressors. The first step to accomplishing this is to require agency supervisors to undergo training that helps them understand the effects of trauma experienced by employees (Jankoski, 2010). Some researchers suggested that professionals in helping disciplines can also benefit from in-service trainings that provide education and support related to self-care and stress prevention (Jankoski, 2010; Nelson-Gardell & Harris, 2003).

To better understand the implications of compassion fatigue in helping professionals, it is also necessary to explore factors that may protect workers from experiencing these symptoms. Researchers often introduced the concept of compassion satisfaction in studies of compassion fatigue because it addresses the positive feelings and outcomes associated with providing care to traumatized individuals (Sacco & Copel, 2018; Stamm, 2010). Compassion satisfaction is the positive feelings professionals experience about their work helping others (Sacco & Copel, 2018; Stamm, 2010). Compassion satisfaction has been connected with lower levels of against burnout and Secondary Traumatic Stress (STS), possibly mitigating the effects of compassion fatigue on helping professionals (Audin, Burke, & Ivtzan, 2018; Hinderer et al., 2014; Stamm, 2010; Van Hook & Rothenberg, 2009). The literature review section of this dissertation further describes compassion satisfaction and how it relates to compassion fatigue.

Purpose of the Study

This research study used a sample of CPIs to better understand the relationship between (a) work climate and compassion-fatigue level, (b) the utilization of recommended support

resources and compassion-fatigue level, and (c) CPI characteristics and compassion-fatigue level. Management and teamwork climates were examined by asking CPIs to rate their attitudes about team and management environments using the Safety Attitudes Questionnaire (SAQ; Sexton et al., 2006; see Appendix B). This study also explored the relationship between CPIs' compassion-fatigue levels and their support strategies, utilization of supervision, and utilization of trainings. The use of supervision and trainings were explored using a researcher-developed demographic form (see Appendix C). This dissertation explored the relationship between CPI age, CPI time spent in the field, CPI trauma history, and compassion-fatigue levels using the aforementioned researcher-created CPI demographic form. Personal trauma history was explored with a question on the demographic form that asked respondents to indicate the number of childhood traumatic events they had experienced. The dependent variable, compassion-fatigue level, was measured with the Professional Quality of Life 5 (ProQoL-5; Stamm, 2010; see Appendix D). Chapter 3 includes discussion on these instruments in the instrumentation section.

Research Questions and Hypotheses

The following research questions and associated hypotheses guided this research study.

Research Question 1. Does a relationship exist between work climate and compassion fatigue in CPIs?

H_a1. There is a statistically significant relationship between attitudes about colleagues (teamwork climate) and the level of compassion fatigue in CPIs.

H_a2. There is a statistically significant relationship between attitudes about supervisors (management climate) and the level of compassion fatigue in CPIs.

Research Question 2. Does a relationship exist between a CPI's utilization of support and their level of compassion fatigue?

H_a3. There is a statistically significant relationship between utilizing supervision and the level of compassion fatigue in CPIs.

H_a4. There is a statistically significant relationship between the attendance of trainings by CPIs and the level of compassion fatigue.

Research Question 3. Is there a relationship between CPI characteristics and the level of compassion fatigue?

H_a5. There is a statistically significant relationship between the age of a CPI and the level of compassion fatigue.

H_a6. There is a statistically significant relationship between time spent in the field as a CPI and the level of compassion fatigue.

H_a7. There is a statistically significant relationship between the personal trauma history of a CPI and the level of compassion fatigue.

Organization of the Remainder of the Study

Chapter 1 provided the introduction, background, and purpose of this research study. Chapter 2 presents a review of the literature on compassion fatigue. Additionally, Chapter 2 discusses Lazarus and Folkman's (1984) stress and coping theory as the explanatory and predictive framework that guided this study. Chapter 3 discusses the methodology including data collection, recruitment, sample, procedure, instrumentation, and operationalization of variables used to complete this research study. Next, Chapter 4 presents the results from the data analysis of the seven hypotheses explored in this study. Finally, Chapter 5 concludes with a discussion on the findings, limitations, and implications for policy, practice, and research.

CHAPTER 2: LITERATURE REVIEW AND THEORETICAL PERSPECTIVE

Chapter 2 provides a literature review and the theoretical perspective used to guide this research study. Chapter 2 begins with an introduction to concepts important in understanding the effects of compassion fatigue across disciplines. The chapter also discusses resources utilized , work climate, and worker characteristic variables in relation to compassion fatigue. Chapter 2 presents previous studies in which researchers examined how compassion-fatigue symptoms were associated with and impact professionals in helping disciplines including healthcare, mental health, and child welfare.

Concepts Relevant to Understanding Compassion Fatigue

Empathy

When a helping professional's capacity for empathy is strong, their heightened stress response can increase the risk of experiencing compassion fatigue (Figley, 1995). Figley (1995) explained that compassion fatigue is a natural "cost of caring," as helping professionals feel "fear, pain, and suffering," alongside their clients (p. 1). The helping professional can develop symptoms of compassion fatigue when the empathic support provided to clients exceeds a professional's ability to cope (Joinson, 1992). Sexton (1999) explained, "increasingly, therapists are being called on to assist survivors of violent crimes, natural disasters, childhood abuse, torture, and acts of genocide, as well as refugees and war trauma victims" (p. 393). Researchers use the term *empathy* to describe a series of behaviors and emotional responses that attempt to provide understanding and support of another's needs (Sulzer, Feinstein, & Wendland, 2016). Empathy involves the "sharing of experiencing" with a client (Clark, 2010, p. 97). When a client has been traumatized, the helping professional displays a heightened sense of empathy, which can help build rapport (Harr & Moore, 2011; Hernandez-Wolfe, Killian, Engstrom, & Gangsei,

2015). Consequently, compassion fatigue can occur as a natural consequence of providing empathic support (Figley, 2002a, 2002b; Joinson, 1992).

The provision of empathic support begins at the initiation of services, which is the rapport-building stage in establishing a professional relationship with the client (Ahern, Sadler, Lamb, & Gariglietti, 2017). Empathy is a crucial characteristic for providing a supportive presence to clients/patients. As a result of the required increased need to provide empathic support, helping professionals risk developing compassion fatigue during the rapport-building stage of working with clients (Ahern et al., 2017). The prevention of compassion fatigue in helping professionals who provide empathic support to traumatized individuals, such as child-abuse victims, is an area in need of further study (Sexton, 1999; Way, Van Deusen, & Cottrell, 2007).

Trauma

The concept of trauma originates from the Greek word for "wound" (Jones & Cureton, 2014, p. 257). Work-related secondary trauma exposure may create emotional and behavioral difficulties for the helping professional, resulting in compassion fatigue (Figley, 1995, 2002a, 2002b). The psychological implications of trauma became more formally recognized in the late 1800s by psychoanalytical practitioners, primarily Sigmund Freud (Jones & Cureton, 2014). Trauma exposure occurs from a variety of circumstances commonly associated with an individual's direct or indirect exposure to death, injury, or sexual assault (APA, 2013). While conducting studies on trauma, Figley (1995) found that mental health practitioners can display symptoms of or meet the criteria for a PTSD diagnosis when discussing or witnessing the traumatic experiences of their clients. The DSM-5(2013) accounts for the helping professional's manifestation of these secondary trauma symptoms as a part of the diagnostic criteria for PTSD

(APA, 2013). The American Psychological Association (2018) explained that trauma could create

> an emotional response to a terrible event like an accident, rape or natural disaster. Immediately after the event, shock and denial are typical. Longer term reactions include unpredictable emotions, flashbacks, strained relationships and even physical symptoms like headaches or nausea. (para. 1)

An individual who is exposed to trauma may exhibit maladaptive behaviors that require intervention (Levenson, 2017). Trauma experiences and exposure can impact the victim's functioning (Levenson, 2017) or the functioning of the professionals who help provide support (Figley, 1995). Child-abuse victims who witness or directly experience neglect or physical, sexual, or emotional harm are especially at risk of developing maladaptive symptoms (Centers for Disease Control and Prevention, 2018). The trauma response in a young child is often complex because the event disrupts the child's ability to experience feelings of safety from adult caregivers (Wright, 2014). CPIs with a high level of compassion fatigue may have an impaired ability to respond properly to the needs of and provide protection for the abused child (Cornille & Meyers, 1999).

The negative ways primary and secondary trauma can affect individuals is well-documented (APA, 2018; Cornille & Meyers, 2003; Felitti et al., 1998; Figley, 1995; Levenson, 2017; Turgoose & Maddox, 2017; Way et al., 2007). Research related to how professionals are affected by trauma has indicated that trauma has implications for a professional's personal history (Cornille & Meyers, 1999; Knight, 2010; Nelson-Gardell & Harris, 2003; Turgoose & Maddox, 2017) and exposure to work-related trauma (Figley, 1995; Figley, 2002a; Figley, 2002b; McCann & Pearlman, 1990). Although the relationship between how a child-welfare

professional's personal trauma history is associated with their psychosocial functioning is an area in need of further research; the association between an individual personal trauma history and negative psychological and physical health outcomes has been established (Felitti et al., 1998). The Adverse Childhood Experiences (ACE) study was one of the first studies to make contributions to scientific research by establishing that a relationship does exist between "adverse childhood events" (child abuse and negative psychosocial circumstances during childhood) and long-term negative health outcomes (Felitti et al., 1998, p. 246). The ACEs illustrated that there are associations between the number of childhood trauma exposures and increased negative physical and emotional health consequences in adulthood (Felitti et al., 1998). These findings highlight the importance of continued research on how childhood trauma exposure is associated with long-term emotional health outcomes.

Evolution of Compassion Fatigue

Compassion fatigue and STS hold similar meanings, as both concern the behavioral and psychological risks associated with providing work-related care to traumatized individuals (Figley, 1995). Researchers commonly use the terms compassion fatigue and STS interchangeably (Figley, 1995, 2002a, 2002b; hereafter referenced as *compassion fatigue)*. However, a historical overview of the evolution of compassion fatigue and other similar terminology is helpful to provide understanding. The concept of compassion fatigue has evolved as a result of more than 2 decades of research that examined how helping professionals appraise and respond to client trauma (Figley, 2002b). This evolution resulted in a deeper understanding of how compassion fatigue differs from what was originally believed to be a special type of burnout (Figley, 2002b).

The continual provision of empathic response and ongoing trauma exposure can contribute to the development of compassion fatigue in professionals across disciplines (APA, 2013; Figley, 2002a, 2002b; Joinson, 1992; Sexton, 1999). Figley (2002a) asserted that compassion fatigue "is a function of bearing witness to the suffering of others" (p. 1435). Prior to a focus on child-welfare, researchers believed these professionals were immune to the effects of job-related trauma exposure because trainings adequately prepared them for their work with maltreated children (Cornille & Meyers, 1999). It was also believed that helping professionals could ignore their personal feelings about a client's trauma and provide dispassionate support (Figley, 2002a, 2002b). Figley (1995, 2002a, 2002b) rejected this notion and developed an interest in the emotional responses and behaviors that surfaced through the course of the professional's work with traumatized clients.

Initially, Figley (1995) believed that a professional's trauma-exposure response manifested in ways similar to burnout. However, Figley later realized that a professional's response to trauma exposure differed from those behaviors associated with burnout from workplace stressors. Figley (1995, 2002a, 2002b) recognized that too many concepts are used to explain the negative effects of work-related trauma exposure among professionals, resulting in a need for concept clarification. Thus, Figley (1995) identified maladaptive behaviors relating to job-related trauma exposure as a specialized type of burnout. Figley realized that the term compassion fatigue could be used to define a unique set of psychological and behavioral responses exhibited by professionals who were repeatedly exposed to work-related trauma. The concept of compassion fatigue captures the STS- and PTSD-like symptoms exhibited by helping professionals (Figley, 1995, 2002a, 2002b).

Compassion fatigue is a commonly used concept to describe the effects of providing compassionate care to traumatized individuals across disciplines. Figley (1995) explained that compassion fatigue is a more recognizable term used to describe STS. STS disorder was originally considered the PTSD that occurred as a result of helping others. Figley (1995, 2002a, 2002b) warned that the PTSD symptoms found in helping professionals with unaddressed compassion fatigue can include (a) an intrusion of or recurrent images associated with the client's trauma, (b) feelings of distress, and (c) attempts to avoid working with the client that triggered the distressing feelings. The symptoms of compassion fatigue can manifest in an individual's cognitive processes, emotional responses, daily behaviors, spirituality, personal relationships, physical health, and performance at work (Figley, 1995; Harr & Moore, 2011; Joinson, 1992).

Compassion Fatigue in Helping Disciplines

Understanding the implications of compassion fatigue across helping disciplines is important in assisting helping professionals meet their daily job duties. In addition, a better understanding of these implications can assist professionals in providing more effective support to the client (Matey, 2016). Historically, researchers primarily focused on how compassion fatigue affects helping professionals in health care settings (Hodge & Lockwood, 2013; Joinson, 1992; LaFauci Schutt & Marotta, 2011; Sorenson, Bolick, Wright, & Hamilton, 2015) and mental health disciplines (Figley, 1995, 2002a, 2002b; Joinson, 1992). However, compassion fatigue is also pervasive in professionals working in the field of child welfare (Cornille & Meyers, 1999; Harr & Moore, 2011; Jankoski, 2010).

Compassion Fatigue in Health Care Settings

The concept of compassion fatigue is prevalent in the health care and nursing literature (Joinson, 1992; Kelly & Lefton, 2017; Schmidt & Haglund, 2017). Joinson (1992) highlighted the challenges for nurses associated with providing ongoing empathic care and support, and called for health care organizations to review ways to reduce such challenges. The provision of compassionate care is a necessary part of health care but compassion fatigue among nurses can negatively affect how nurses treat their patients (Emergency Nurses Association [ENA], 2014; Hodge & Lockwood, 2013; Sorenson, Bolick, Wright, & Hamilton, 2017).

The health care literature identifies compassion fatigue as problematic because it can affect a nurse's overall feelings of well-being (Joinson, 1992). Matey (2016) found that the compassion-fatigue level in nurses was associated with their perceptions of support by colleagues and supervisors, workload demands, and appraisal of their work environment. Suggestions to reduce the risk of compassion fatigue in nursing care include decreasing work demands (less overtime), improving colleague support (such as mentoring), and offering opportunities for nurses to decompress and share feelings (break rooms and conferences; Matey, 2016). The consequences of unaddressed compassion fatigue in nursing professionals can result in poor employee attendance, a decrease in employees' abilities to share in joyful experiences with others, a decreased capacity for empathy, lowered productivity, high attrition, and avoidance of care provision to certain patient populations (ENA, 2014; Hodge & Lockwood, 2013; Matey, 2016). Consequently, the pervasive presence of compassion fatigue in nurses can appear as low morale and affect the entire health care system (Hodge & Lockwood, 2013).

Factors Associated With Compassion Fatigue and Health Care Settings

Many researchers working to understand compassion fatigue in health care professions explored associated factors (Hodge & Lockwood, 2013; Joinson, 1992; LaFauci Schutt & Marotta, 2011; Sorenson et al., 2015). Health care professionals who work as first responders frequently display symptoms of compassion fatigue (LaFauci Schutt & Marotta, 2011; Schmidt & Haglund, 2017). This relationship suggests that repeated front-line exposure to traumatic events may place professionals at an increased risk of developing compassion fatigue. LaFauci Schutt and Marotta (2011) also found that compassion fatigue was present in first responders when their personality traits, the frequency of patient-trauma exposure, and responses to their work environment were considered together. The researchers found that trauma symptoms were higher in first responders with a history of childhood trauma. However, when the characteristics mentioned above were considered individually, they were not found to influence compassion fatigue (LaFauci Schutt & Marotta, 2011). The empathic responses provided by nurses to their traumatized patients automatically placed the nurses at higher risk for compassion fatigue (Figley, 1995, 2002a, 2002b; Joinson, 1992; Sorenson et al., 2017). Research on compassion fatigue in health care practitioners must emphasize finding ways to help reduce stressors related to meeting the strenuous demands of patient care (Hodge & Lockwood, 2013).

Compassion Fatigue in Mental Health Fields

Figley (1995) initially became interested in the effects of trauma in mental health professionals when working with combat veterans in the 1970s. Practitioners in the Figley (1995) study experienced PTSD-like symptoms. Compassion fatigue can occur from listening to the distressing stories of patients or clients (Cuartero & Campos-Vidal, 2018). Figley (2002a, 2002b) explained that mental health practitioners might develop PTSD symptoms because they provide

empathy while simultaneously being exposed to a client's trauma history. Similar to professionals in the health care field, high-acuity cases were strongly associated with the presence of compassion fatigue in mental health practitioners (LaFauci Schutt & Marotta 2011; Pelon, 2017). Mental health practitioners also risk experiencing compassion fatigue as a direct result of services provided to clients (Kapoulitsas & Corcoran, 2015). Services include witnessing client violence, processing abuse, and diagnosing clients with mental health conditions (Kapoulitsas & Corcoran, 2015).

Decreasing Risk of Compassion Fatigue

In a small qualitative interview-based study, researchers examined how to reduce compassion fatigue in social workers (Kapoulitsas & Corcoran, 2015). The primary purpose of the interviews was to gain insight into how social workers responded to serving distressed clients, building resilience, and decreasing the risk of compassion fatigue. The researchers defined compassion fatigue as the negative feelings and behaviors exhibited by a helping professional resulting from an empathic response to client-related stressors. The researchers interviewed six female social workers, aged 23–32, employed at a community agency, using a social constructivist perspective. The agency social workers addressed a range of client psychosocial concerns including stress, anxiety, depression, and involvement in the child-welfare system. Study participants described that they felt anxiety and distress as a result of working with clients experiencing traumatic circumstances. One participant recalled that her safety was threatened by a parent involved with child protective services. Most participants shared feelings of emotional distress encountered by providing ongoing emotional support to clients. Kapoulitsas and Corcoran (2015) concluded that a supportive work environment and cohesion between employees could build resilience in professionals experiencing compassion fatigue. The study

encouraged more research on building resilience as a way to help individuals positively appraise work-related stressors and thereby mitigate the effects of compassion fatigue (Kapoulitsas & Corcoran, 2015). These findings seem to suggest that compassion-fatigue risk may decrease when social workers hold positive attitudes about their colleagues, feel they are part of a supportive work environment, and display resilience.

Compassion Fatigue in Child Welfare

Similar to the field of mental health, child-welfare professionals are at risk of developing compassion fatigue (Cohen & Collens, 2013; Dane, 2002; Horwitz, 2006; Knight, 2010; Osofsky, 2009; Tyler, 2012). In a study exploring compassion fatigue and associated variables and child-welfare professionals, Van Hook and Rothenberg (2009) found their sample experienced burnout and compassion fatigue at similar rates to those in other helping professions. CWPs can be victims of primary trauma, such as being assaulted while on the job, or secondary trauma, such as witnessing or hearing about the traumatic experiences of a child victim (Brady, 2017; Geoffrion, Morselli, & Guay, 2016). Feeling high levels of stress is considered a job-related challenge for professionals working in the field of child welfare (Nelson-Gardell & Harris, 2003). One reason for high stress is that CPIs must balance the safety needs of the abused child and the child victim's family (Nelson-Gardell & Harris, 2003). Since only some CWPs experience high levels of compassion fatigue (Baugerud, Vangbæk, & Melinder, 2018), more research is needed on risk and protective factors associated with compassion fatigue in CWPs (Baugerud et al., 2018; Geoffrion et al., 2016).

Work Environment

Jankoski (2010) conducted a qualitative study consisting of interviews of CPIs to understand the personal and professional consequences of job-related trauma exposure. The

study incorporated vicarious trauma (VT) rather than compassion fatigue as the variable. Jankoski described VT as the maladaptive emotions and behaviors affecting CWPs. Although the author used the concept of VT, the definition is similar to compassion fatigue. Jankoski's study was grounded in McCann and Pearlman's (1990) constructivist self-development theory (CSDT) to explore how exposure to clients' trauma impacts helping professionals' cognitive schemas. Jankoski's study was unique in its application of a framework originally designed to explore trauma effects on clinicians working in the field of child welfare. The study concerned the use of CSDT as an explanatory framework to better conceptualize how CWPs appraise trauma exposure following on the job.

After developing a focus group of CWPs, Jankoski (2010) examined how VT affected the group of participants. Jankoski held 24 focus groups consisting of caseworkers, administrators, or supervisors working in rural and urban areas. The sample size totaled 305 participants across 16 counties. Some participants took part in individual interviews in addition to a focus group. Data analysis was an ongoing process consisting of retrospective reflection by the researcher using transcripts, tapings, and field notes. Pervasive themes shared by participants were feelings of (a) burnout, (b) countertransference, and (c) VT. Drawing from constructivist self-developmental constructs, Jankoski coded interview data, selecting interviews exhibiting high levels of verbal sharing and interaction to draw credible conclusions. All interviews yielded similar thematic responses, but the researchers used only information from meetings with the most verbal engagement between participants (Jankoski, 2010). Participants believed supervision needed to improve, wanted training to strengthen their understanding of the effects and prevention of VT, and sought ways to reduce job stress to mitigate the potential impacts of VT (Jankoski, 2010).

Factors Associated With Compassion Fatigue in Child Welfare

It is also helpful to understand how compassion fatigue affects CWPs because of low employee retention rates in the child-welfare field (Van Hook & Rothenberg, 2009). Van Hook and Rothenberg (2009) employed a quantitative study design to examine the presence of compassion fatigue, compassion satisfaction, and burnout in professionals working in central Florida child-welfare agencies. The authors defined the child welfare system:

> A network of public and private agencies with services that include identifying and responding to children who are being abused and neglected, working with families to prevent out-of-home placement, placing children out of their homes, monitoring out-of-home placements (including services to children and families), and arranging for the adoption of children. (p. 37).

Van Hook and Rothenberg's (2009) study introduced implications for faith-based organizations in the child-welfare system. Their study began with an overview of retention challenges in child welfare and explained the transition to the privatization of child welfare in the central Florida area. The authors primarily aimed to identify the levels of compassion fatigue, burnout, and compassion satisfaction in a sample of CWPs in the state of Florida. The authors also explored how child-welfare workers coped with stress, and which worker characteristics (gender, age, education, time spent in field, and job responsibilities) aligned with compassion-fatigue symptoms. Additionally, the authors offered recommendations for organizations to reduce stressors for this population of workers. The researchers distributed surveys to three community-based agencies and asked respondents to return them, keeping the results anonymous. Van Hook and Rothenberg used the ProQOL (Stamm, 2005) to assess the level of

compassion fatigue. Of the 182 surveys distributed, the researchers used 175 in the study. The others were not used because of missing data (Van Hook & Rothenberg, 2009).

The age distribution among participants was 40% for those aged 18–29, 32% for ages 30–39, 17.8% for ages 40–49, and about 10% of participants were older than 50 (Van Hook & Rothenberg, 2009). Almost half of participants held a bachelor's degree: 17.5% held a Bachelor of Social Work, 14% a Master of Social Work (MSW), and the remainder a master's degree or higher in mental health or related fields. The authors also identified the leading professional roles as follows: 46 participants were targeted case managers, 55 were dependency case managers, 22 were supervisors, and six participants were adoption specialists. Study results substantiated that CWPs experienced higher levels of compassion fatigue than professionals in other helping disciplines. Their study also found that women, professionals in younger age ranges, and professionals in supervisory or dependency case-management positions were also at higher risk of experiencing compassion fatigue. The researchers concluded that manageable caseloads and access to more administrative support mitigated the negative effects of compassion fatigue. When CWPs engaged in self-care activities, such as exercising, spending time with their families, balancing breaks at work, and reducing time spent on necessary tasks, symptoms of compassion fatigue also diminished. The limitations to this study, according to the authors, were that data accrued using self-report measures (Van Hook & Rothenberg, 2009). The authors also emphasized the importance of understanding the implications of organizational (work) climate variables on compassion fatigue.

Van Hook and Rothenberg's (2009) study suggested that younger professionals are at risk of compassion fatigue. Harr and Moore (2011) noted similar findings in their study on MSW students in field placements. Harr and Moore found that although students appeared motivated in

their jobs and committed to the field, they were at risk for burnout and compassion fatigue. The extant literature substantiates the risk of compassion fatigue, suggesting that the longer a professional spends in the field, the higher the likelihood the professional will experience compassion fatigue (Harr, Brice, Riley, & Moore, 2014; Kinman & Grant, 2016). These findings suggested that for younger CWPs, it is necessary to identify what factors influence burnout and compassion fatigue (Harr et al., 2014; Kinman & Grant, 2016; Van Hook & Rothenberg, 2009). Thus, a need persists to introduce prevention strategies to mitigate compassion fatigue when professionals are new to the field and motivated, before compassion-fatigue symptoms can occur (Harr & Moore, 2011).

Other Work-Related Trauma Exposure Concepts

Burnout

Researchers often use burnout in partnership with compassion fatigue, as it describes the behaviors associated with workplace stress (Figley, 2002a). The concept of burnout can be explained as "the experience of physical, emotional and mental exhaustion that can arise from long-term involvement in occupational situations that are emotionally demanding" (McFadden et al., 2015, p. 1547). To gather a more comprehensive understanding of the implications of burnout among child-welfare social workers, McFadden et al. (2015) conducted a systematic review of peer-reviewed databases. Their inclusion criteria consisted of searching for "social workers," "child welfare," and "child protection" (p. 1549). The 65 studies included in the final review contained the terms STS, compassion fatigue, personal trauma histories, and VT. These emerged as pervasive concepts, associated with but not defined as burnout. Although these terms aligned with burnout, they are all conceptually distinct. In child welfare, burnout and resilience linked to social workers' concerns and workplace climates (McFadden et al., 2015). Child-

welfare social workers were at increased risk for burnout as a result of the strenuous demands placed on them by their work (Travis, Lizano, & Mor Barak, 2016). The other consequence of burnout identified in the literature was disengagement, indicating that employees were not readily participating in their job duties (Travis et al., 2016).

Compassion Satisfaction

Compassion satisfaction aligns with positive thoughts and feelings that arise from helping others (Hansen et al., 2018). Stamm (2010) explained that compassion satisfaction is "the pleasure you derive from being able to do your work well. You may feel positive about your colleagues or your ability to contribute to the work setting or even the greater good of society" (p. 12). The ability to experience compassion satisfaction rests on the positive meaning a professional finds from providing care to traumatized individuals (Kelly & Lefton, 2017; Klein, Riggenbach-Hays, Sollenberger, Harney, & McGarvey, 2018, as cited in Stamm, 2010). Sacco, Ciurzynski, Harvey, and Ingersoll (2015) explained, "compassion satisfaction is the sum of all positive feelings derived from helping others" (p. 33).

Researchers established a relationship between compassion satisfaction and compassion fatigue (Stamm, 2010). Although the relationship is not fully understood (Stamm, 2010), compassion satisfaction "buffers" the symptoms of compassion fatigue in helping professionals (Audin et al., 2018, p. 5; Stamm, 2010). Some researchers suggested that higher levels of compassion satisfaction aligned with lower levels of STS and burnout (components of compassion fatigue; Audin et al., 2018; Harr et al., 2014; Hinderer et al., 2014; Van Hook & Rothenberg, 2009; Stamm, 2010). Supervisors can help promote compassion satisfaction by helping their employees recognize their positive contributions to the clients they served (Van Hook & Rothenberg, 2009). Other scholars made similar observations regarding the compassion

fatigue experienced by nurses. Nurses can experience less compassion fatigue when provided ways to recognize symptoms and realistically appraise how work-related stressors affect their daily lives (Joinson, 1992).

Many factors can affect compassion-satisfaction levels in helping professionals. In a study of mental health professionals in Italy, clinicians' perceptions of needed trainings, quality meetings, and future risks influenced their level of compassion satisfaction (Centrano et al., 2017). Findings suggested that organizations can use trainings and meetings to improve the level of compassion satisfaction among staff (Centrano et al., 2017). In a study on compassion fatigue, compassion satisfaction, and STS, a sample of trauma nurses' higher levels of compassion satisfaction associated positively with having a strong support network, usage of relaxation or extracurricular activities, and positive relationships with coworkers (Hinderer et al., 2014).

Sacco and Copel (2018) analyzed the concept of compassion satisfaction to help establish better meaning in the nursing profession. Sacco and Copel explained that the effects of compassion fatigue in the nursing profession presented a concern shortly after the concept was introduced in the mental health/social work literature. Not long afterward, the term *compassion satisfaction* was introduced. The authors proposed six assumptions based on their review of themes found in the literature as the foundation for their concept analysis on compassion satisfaction (Sacco & Copel, 2018): (a) A nurse works with a patient and family to establish a caring relationship, (b) The nurse experiences positive feelings as a result of caring for the patient, (c) The nurse is exposed to repeated traumatic events in the environment where they provide nursing care, (d) The nurse's establishment of a meaningful connection with their patient results in compassion and empathy, (e) The nurse can be negatively affected by having to

witness trauma while providing empathic support simultaneously, and (f) The nurse is not able to easily identify the positive aspects of the caregiving relationship.

Sacco and Copel (2018) proposed a conceptual model to understand compassion satisfaction. The researchers explained that nurses experiencing compassion satisfaction might exhibit certain qualities including viewing their career as a calling, having a capacity for empathy, establishing relationships with patients, experiencing support in stressful and traumatic work environments, having strong coping skills and resilience, and having a good work–life balance. In this context, nurses appraised providing compassionate support as a positive experience including feeling inspired, invigorated, and accomplished. The positive feelings derived from the feelings of caring for others translated to compassion satisfaction. Consequently, nurses experiencing compassion satisfaction were more engaged in their jobs, provided effective patient care, maintained cohesion among the healthcare team, and protected against compassion fatigue (Sacco & Copel, 2018). Although the research conducted by Sacco and Copel was initially developed for nurses, their conceptual model can also be applied to other helping professions.

In the field of child welfare, workers are at high risk of experiencing compassion fatigue (Baugerud et al., 2018). However, similar to other helping professions, compassion satisfaction may be associated with reduction of symptoms of compassion fatigue (Baugerud et al., 2018; Kinman & Grant, 2016). It is important to understand better ways to improve compassion satisfaction in the field of child welfare because worker disengagement can be detrimental to the worker, the agency, and the families served (Salloum, Kondrat, Johnco, & Olson, 2015). In a study measuring levels of compassion fatigue and compassion satisfaction experienced by Norwegian child protective workers, Salloum et al. (2015) found that only a small percentage of

workers experienced either high (14.4 %) or low levels (.9 %) of compassion satisfaction. Among the 467 participants in the study, the majority of child protective workers experienced moderate levels of compassion satisfaction (Baugerud et al., 2018). A moderate level of compassion satisfaction meant that participants experienced "limited pleasure" in their roles as child protective workers (Baugerud et al., 2018, p. 229). The authors highlighted the importance of findings on compassion satisfaction in child protective workers because few studies analyzed the concept of compassion satisfaction in relation to burnout and STS (Baugerud et al., 2018).

Countertransference

Freud (1917) used the term *countertransference* to describe how clinician's feelings and perceptions transferred from client to clinician in the clinical relationship (as cited by Lowe, 2016). In clinical practice, it has widely been taught as a negative, albeit common, reaction that should be promptly addressed in clinicians. Professionals may unintentionally blur boundaries with clients when they interject their emotions into the relationship (Lowe, 2016). In trauma work, countertransference means the feelings of pain and devastation experienced by the professional, mitigating their ability to work effectively with clients (McCann & Pearlman, 1990). Although often a naturally occurring part of the therapeutic process, countertransference can have negative implications because the clinician providing trauma support can experience the client's negative emotional responses (McCann & Pearlman, 1990). However, Lowe (2016) asserted countertransference, especially when working with abused children, may have some positive outcomes as well. Lowe explained that in trauma work with maltreated children, countertransference could be "inappropriately positive," especially when it came to supporting the abused child's needs (2016, p. 61). The author further explained,

> Counter-transference does not always have negative outcomes either. If a therapist has a greater awareness of the potential counter-transference occurring, they can use supervision and reflective practice to maintain ethical and professional boundaries and harness the therapist's humanity into a positive therapeutic process (Lowe, 2016, p. 61).

Although countertransference is addressed mostly in clinical settings, it is important for CPIs to recognize and understand the implications of how it may occur in their work. This concept contributes to understanding the implications of secondary trauma exposure; however, it was not used as a variable in the current research study.

Vicarious Trauma (VT)

VT is similar to compassion fatigue in that it is used to define the ways that helping professionals, primarily clinicians, experience disruptions in psychological well-being from secondary trauma exposure (McCann & Pearlman, 1990). Research in both compassion fatigue and VT recognized that burnout presented with unique characteristics in helping professionals exposed to the trauma of others (Figley, 1995; McCann & Pearlman 1990). McCann and Pearlman (1990) coined the term VT, to describe the potential long term "psychological effects, effects that can be disruptive and painful for the helper" (p. 133). They recognized through their research that there were no specific terms that accurately defined the ways in which helping professionals were affected by secondary trauma. Drawing from the CSDT framework, McCann and Pearlman focused on how a clinician responds to a particular trauma and the meaning that emerged as a result. They explained, "cognitive manifestations of needs are schemas," and trauma experiences can disrupt create psychological disruptions in areas of "safety, dependency/trust, power, esteem, intimacy, independence, and frame of reference" (McCann & Pearlman, 1990, p. 137). The next section describes the aforementioned schemas identified by

McCann and Pearlman. Although these concepts were unique to VT, they explained secondary traumatic stress exposure can disrupt the thoughts and beliefs of helping professionals (McCann & Pearlman, 1990).

Dependency/Trust

McCann and Pearlman (1990) introduced "dependency/trust" to describe disruptions to a therapist's "schema about trust" (p. 138). They highlighted that perceptual changes in this area might occur frequently in clinicians working with victims who were abused as children. The repetition of bearing witness to stories of deceit can result in a clinician's own belief that the majority of people are deceitful (McCann & Pearlman, 1990). CPIs who regularly work with young children abused by primary caregivers may experience similar changes in perceptions due to witnessing adults violate the trust of child victims. As a result, CPIs might find themselves feeling cynical or distrustful towards parents or primary caregivers.

Safety

The next schema introduced by McCann and Pearlman (1990) involves, "threats or harm" or "loss of safety" (p. 137). Some helping professionals may require greater need for reinforcement of safety and security (McCann & Pearlman, 1990). A helping professional may experience diminished perceptions of personal safety from listening to or witnessing their client's trauma. McCann and Pearlman asserted clinicians who work with victims of violent crimes were likely to take significant safety precautions to protect themselves against such crimes.

Power

"Power or efficacy" can be lost when clinicians witness the recall of client memories with themes of victimization (McCann & Pearlman, 1990, p. 139). A helping professional who feels powerless in their professional role may attempt to overcompensate to gain power in other areas. Consequently, they may encourage a client to take actions beyond the client's capabilities rather than support them through their experience (McCann & Pearlman, 1990). Changes of perceptions of power in clinicians can result in extreme consequences including overcompensation and trying to hold too much power or feeling hopeless about life circumstances.

Independence

A clinician with a high "need for independence" can experience traumatization from witnessing client victims lose their own sense of autonomy (McCann & Pearlman, 1990, p. 140). Changes to independence may likely occur in women victims of sexual assault (McCann & Pearlman, 1990). McCann and Pearlman explained that different clinicians made different meaning from helping clients who experienced changes to their independence resulting from victimization. One clinician concerned herself with how limited she would feel if she had to change her level of personal freedoms whereas another clinician focused on "personal vulnerability" (McCann & Pearlman, 1990, p. 140).

Esteem

McCann and Pearlman (1990) explained, "We use esteem to refer to the need to perceive others as benevolent and worthy of respect" (p. 140). They were not referring to a client's self-esteem, but instead to the way the client regarded others following victimization. It is in this

context that a violent attack or crime against individuals can harm their relationships with others. The perceptions of negativity towards others may transfer from the client to their clinician, resulting in changes to the ways the clinician perceives others as well. McCann and Pearlman described clinicians as possibly feeling more "cynical and pessimistic" about human nature because they often heard continuous accounts of client victimization (p. 140).

Intimacy

Perhaps one of the most devastating consequences of trauma is the impact on "intimacy" (McCann & Pearlman, 1990, p. 141). McCann and Pearlman (1990) explained that a loss of intimacy can result in feelings of isolation of disconnection from others. Intimacy is an important aspect of effective support services delivery because it is required for exploring the needs of a client, can affect relationships among colleagues, and play a role in collaboration with other professionals (McCann & Pearlman, 1990). If a CPI feels this sense of disconnect or isolation from their colleagues, it can affect their overall work performance. These feelings can also crossover into the compassion-fatigue subscale of burnout, which described the loss of effectiveness a professional might experience in their ability to do their job effectively (Stamm, 2010).

Frame of Reference

It is natural to draw from areas of familiarity to make meaning out of personal experiences. Clinicians may rely on "frame of reference" to better understand "causality, or individual's attributions about why events occur" (McCann & Pearlman, 1990, p. 141). CPIs are particularly vulnerable to trauma work with clients in this area because of the uncertainty felt by victims. The professional may ask unnecessary questions about the attack or incident (in the

form of "victim blaming"), which can lead to the changes in perceptions of their own views of the world (McCann & Pearlman, 1990, p. 141).

McCann and Pearlman (1990) provided insight into the needs of professionals as a result of their repeated exposure to client traumatization. They argued it is imperative for professionals working with traumatized victims to understand how their perceptions affect their relationship with clients and impacts job performance. McCann and Pearlman (1990) asserted, "just as PTSD is viewed as a normal reaction to an abnormal event, we view vicarious traumatization as a normal reaction to the stressful and sometimes traumatizing work with victims" (McCann & Pearlman, 1990, p. 145). VT is one of the more long-term effects of ongoing and pervasive trauma exposure, changing an individual's perceptions over time (McCann & Pearlman, 1990).

Secondary Traumatic Stress

As previously discussed, STS and compassion fatigue are terms that can be used interchangeably (Figley, 1995). STS was the term initially applied to conceptualize the stress response of helping professionals working with traumatized clients (Figley, 1995, 2002a, 2002b). STS is "the natural consequent behaviors and emotions resulting in knowing about a traumatizing event experienced by significant other-the stress resulting from helping or wanting to help a traumatized or suffering person" (Figley, 1993, as cited in Figley, 2002, p. 1435).

STS disorder, though not considered a formalized diagnosis, has (Figley, 1993, as cited in Figley, 2002a). Figley (2002a) asserted, "the very act of being compassionate extracts a cost under most circumstances. In our world to view the world from a suffering perspective, we suffer" (p. 1434). STS can lead to a long-term display of complex symptoms by professionals helping with a client's primary trauma exposure (Figley, 2002a). When clinicians experience

STS, they may present a heightened sense of anxiety and display disruptions in their personal or work engagement (Caringi et al., 2017).

Vicarious Resilience

Researchers who focused on the underresearched positive effects of working with clients with trauma adopted a shift away from VT and the adoption of associated concepts. Similar to compassion satisfaction, *vicarious resilience* is an emerging term. The term vicarious resilience attempts to recognize the positive interactional exchange between a client and a professional, providing helping professionals with the opportunity to positively appraise their work-related trauma exposure (Killian, Hernandez-Wolfe, Engstrom, & Gangsei, 2017). Existing qualitative research suggested that some clinicians can use the traumatic experience to make their life perspectives more positive (Edelkott, Engstrom, Hernandez-Wolfe, & Gangsei, 2016). Vicarious resilience "refers to the transformations in the therapist's inner experience resulting from empathetic engagement with the client's trauma material" (Hernández, Gangsei, & Engstrom, 2007, p. 237). This concept emerged after researchers analyzed a series of interviews with therapists working with trauma survivors.

Key Distinctions Between Burnout, Compassion Fatigue, and Countertransference VT and STS

Burnout is a concept linked to a professional work environment and encompasses the strains of carrying out the daily job functions of helping professions, resulting in decreasing productivity (McFadden et al., 2015). In the realm of helping professions, burnout is also considered one contributor to compassion fatigue (Stamm, 2010). In this context, burnout is the part of compassion fatigue that explains how professionals experience and respond to their daily chronic stressors (Stamm, 2010).

STS is synonymous with compassion fatigue but primarily concerns the immediate emotional and behavioral responses related to direct or indirect job-related trauma exposure (Figley, 1995; Stamm, 2010). STS represents the first stages of maladjustment that occur from exposure to and caring for those who are traumatized (Figley, 1995; Stamm, 2010). The concept of VT underscores the importance of recognizing the cognitive changes a professional may experience as a consequence of exposure to ongoing and chronic trauma without intervention (McCann & Pearlman, 1990).

Although it is beyond the scope of this research to further discuss VT outside of its use in the literature, it is an important concept that cannot be overlooked when understanding the impact of work-related trauma exposure. Less frequently discussed in the extant literature, but still significant, is countertransference: the feelings and behaviors that occur primarily in therapists during their work with clients (Lowe, 2016). When a professional projects emotions onto the client and the client's trauma, it can increase the professional's risk of developing compassion fatigue. The research suggests that when compassion fatigue is not effectively addressed, the worker can develop longer term consequences, such as posttraumatic stress disorder (Figley, 1995, 2002a, 2002b, NCTSN, n.d.).

Key Studies on Compassion Fatigue

In their meta-synthesis, Cohen and Collens (2013) highlighted four major themes about professionals who experienced compassion fatigue. First, listening to clients' traumatic stories produced psychological and physiological responses in the worker (Cohen & Collens, 2013; Tyler, 2012). Second, professionals varied on whether they responded to job-related trauma in a healthy or unhealthy manner (Cohen & Collens, 2013). Third, exposure to trauma from providing support to clients changed a helping professional's support process. Finally, secondary

trauma exposure, when appraised positively, could initiate growth in some professionals (Cohen & Collens, 2013). Thus, not all aspects of professional exposure to client trauma are negative. If appropriate intervention is provided, the professional can respond positively to the growth and change faced as a result of compassion fatigue.

Cohen and Collens (2013) explained that positive growth could occur only if professionals have positive coping skills and receive strong support from their agency. Furthermore, when agencies provide support to their employees, they can reduce the effects of work-related trauma exposure (Cohen & Collens, 2013). Although the authors provided operational procedures as examples of effective intervention, no clear protocol emerged on the most effective interagency interventions (Cohen & Collens, 2013).

Job-Related Stressors

Job-related stressors are strongly associated with compassion fatigue among professionals addressing trauma (Badger et al., 2008; Cohen & Collens, 2013). Secondary trauma can exist regardless of years of experience, types of coping mechanisms, or types of support provided to social workers (Badger et al., 2008). Adverse reactions from employees are much more likely to occur in environments where the job is perceived as stressful, trauma exposure is pervasive, and the professional feels unsupported (Badger et al., 2008). Badger et al. (2008) aimed to explore how variables of time spent in the field, types of support, and attitudes toward work environment were shown to have a relationship with compassion-fatigue level. In their study aimed at identifying factors predictive of trauma symptoms in hospital social workers, Badger et al. (2008) found a strong relationship between compassion fatigue and job-related stress. The study methodology was strong, using data collected completely anonymously and

voluntarily. By doing so, hospital social workers may have felt less inhibited about sharing their perceptions of STS experiences (Badger et al., 2008; Horwitz, 2006).

Trauma Types

Cunningham (2003) explored whether differences exist between how social workers with an MSW managed interactions with clients who experienced illness or were victims of abuse. The study aimed to determine if a relationship existed between trauma types and levels of STS. Using a nationally representative directory of MSWs, the author randomly selected 304 potential candidates to recruit. The response rate was close to 60% (N = 182). Cunningham asked participants to complete and return a standardized, self-report questionnaire that measured beliefs about traumatic stress. The strength of Cunningham's study was its high generalizability because of the nationally representative group of participants. Despite participant clinicians' significant experiences, results showed that clinicians working with abused clients experienced more STS symptoms than those working with cancer patients. Cunningham suggested that interventions with this population should be preventative, with close attention to trauma types.

Intervention Effectiveness

Cuartero and Campos-Vidal (2018) asserted it is not possible to prevent compassion fatigue, but it is necessary to engage in interventions aimed at reducing adverse effects. Bober and Regehr (2005) conducted one of the only studies that discussed the effectiveness of secondary trauma exposure interventions among practitioners. At the time of their study, the authors indicated they found no other studies examining traumatic-stress intervention effectiveness. The authors investigated whether commonly recommended interventions were helpful to practitioners. The researchers identified programs in a large city that specialized in trauma-related care. Cuartero and Campos-Vidal gathered data from a variety of disciplines in a

health care system. Social workers represented almost half of the 259 participants. The authors used a coping inventory to identify the coping strategies participants used. The authors categorized interventions for STS as follows: (a) engaging in extracurricular activities, (b) learning coping mechanisms that help with self-care, (c) receiving supervision, and (d) participating in educational or research opportunities. Although participants identified activities they perceived as helpful in coping with work-related trauma, they tended not to set aside time to engage in those activities.

Findings from Bober and Regehr's (2005) study indicated that the use of coping strategies by participants did not protect them from "acute stress" (p. 7). The findings are unclear about the efficacy of any intervention as a long-term protective factor against work-related trauma exposure. The authors concluded that results should be interpreted with caution because improper work–life balance, failure to make time for interventions, and poor use of interventions by participants might skew the results. The primary strength of the Bober and Regehr study is the insight it provided in an area that has received very little attention: the effectiveness of intervention. The study's methodology appeared strong as it aimed to survey members of several disciplines performing trauma work, used instruments with strong psychometric properties to gather data, and recruited a large sample.

Key Findings Related to Study Variables

Work Climate

A major influence on the trauma response of helping professionals is how they perceived their work environment (Horwitz, 2006). Horwitz (2006) found that workplace safety, feelings of being supported in the work environment, and the impact of the work environment on performance played a significant role in decreasing CWPs' perceptions of trauma on the job.

Miller, Buckholdt, and Shaw (2008) explained, "Researchers who treat stress as a consequence of stressors operating in work environments call attention to the ways in which work can be an unhealthy and alienating experience" (p. 5). The positive impact of a healthy work environment contributed to employees' feelings of support in health care environments. Results indicated that perceptions of a healthy work environment reduced feelings of burnout in nursing populations (Kelly & Todd, 2017). Although Kelly and Todd (2017) addressed the relationship between the work environment and burnout among helping professionals, the impact of the work environment on compassion fatigue in helping professionals had not received sufficient attention in the literature and is an area recommended for further study (Henson, 2017).

Ghesquiere, Plitchta, McAfee, and Rogers (2018) conducted one study related to adult protective workers, examining the job-related stressors that could contribute to compassion fatigue and burnout. The researchers created a cross-sectional survey examining occupational stressors and responses, including compassion fatigue, burnout, and STS. The authors sent two surveys to participants: (a) a researcher-created job-satisfaction scale, and (b) the ProQOL scale (Stamm, 2010). Study results indicated that 90% of participants experienced job-related hazards during home visits including working in unsanitary homes and hostile clients. These conditions occurred more than once throughout the respondent's career, with occupational-hazard exposure averaging three times per month.

Ghesquiere et al. (2018) defined work climate as employees' perceptions about how well their skills were being used, sense of relationship to the job, sense of being valued in the position, level of comfort in sharing concerns about the job, self-perception about their ability to manage work demands, and sense of safety in the job. The Ghesquiere et al. study is one of the few quantitative studies exploring how human service professionals (outside of health care

settings) perceived work climate and were affected by compassion fatigue. The researchers highlighted the importance of understanding the implications of work stressors on professionals and the clients whom they serve. For professionals working in the field of child welfare, compassion fatigue has the potential to negatively impact the ability to provide interventions (Cornille & Meyers, 1999). Another factor that can contribute to child welfare professionals' ineffectiveness of on-the-job service delivery is the experience of a traumatic event in the course of their workday.

Brady (2017) examined how the work environment affected compassion fatigue in investigators of child-exploitation crimes. Brady's findings suggested that reducing the adverse effects of compassion fatigue is the responsibility of the organization and the employee. Although employees might feel a high level of overall satisfaction regarding their job-related responsibilities; they may not do well managing their trauma-related stress (Brady, 2017). The work environment can improve coping strategies in employees through trainings aiming to improve socialization among employees and extend educational opportunities to members of the investigators' families (Brady, 2017). Supervisors can reduce job-related compassion fatigue by frequently checking in with their employees (Brady, 2017). Because work climate can play a role in an employee's poor management of compassion-fatigue symptoms, organizations must evaluate methods to decrease turnover rates and retain employees by reducing compassion fatigue (Brady, 2017).

Utilization of Support Strategies

A primary goal of understanding relationships between certain variables and compassion fatigue is to identify the strategies that can be implemented to prevent symptoms or prevent their escalation (Joinson, 1992). Schmidt and Haglund (2017) used a case example to illustrate how

compassion fatigue was presented and addressed in one nurse. The nurse in the study reported experiencing the following symptoms: (a) psychological symptoms of anger, anxiety, cynicism, a lost sense of purpose, and a dislike toward the work; (b) physical symptoms of stomach upset, weight fluctuations, sleep disturbances, constant fatigue; and (c) behavioral symptoms of self-medication with alcohol, disordered eating, frequent irritability, isolation, personal-relationship strains, increase in absenteeism, and complaining more frequently. The case example illustrated how the nurse's professional and personal life was affected by symptoms of compassion fatigue. The study indicated that debriefings could serve as a supportive intervention for nurses experiencing compassion fatigue.

It is essential to target compassion fatigue not only for individuals but also in the organization (Tyler, 2012). Tyler (2012) introduced the *freeze dynamic* to describe a group of colleagues' collective failures to take action when one or more members of the team were traumatized. Therefore, when a traumatic or stressful work-related circumstance occurred, failure to address it at the individual could result in a breakdown of the organization's effective functioning.

Support aimed at helping professionals positively appraise the negative circumstances experienced on the job—compassion satisfaction—decreases the associated symptoms (Harr et al., 2014). Researchers asserted that clients and families, agencies, and helping professionals are all negatively affected when a helping professional's work-related trauma symptoms remain unaddressed (Jankoski, 2010; Tyler, 2012). Tyler (2012) stated that "vicarious trauma, compassion fatigue, and burnout are all terms used to describe how staff becomes 'infected' by the trauma of their clients" (p. 126). Further, this infection negatively impacted the worker's ability to effectively carry out job duties.

Tyler's (2012) research focused on VT, another negative effect of unaddressed work-related trauma exposure. Study findings pointed to implications for interventions and prevention of compassion fatigue. Tyler reported that when addressing trauma in professionals, the results from existing literature (a) offered insight on the emotional and physical effects of secondary trauma exposure, (b) explained that secondary trauma exposure affected the professional and the agency, and (c) offered suggestions to address secondary trauma in professional settings. Tyler asserted that, similar to compassion fatigue, VT has physical and psychological implications because it produces fundamental changes in the individual. Tyler's discussion focused on the importance and types of interventions to prevent VT because failure impacted work productivity and caused problems for the agency, the professional, and the client. Each of these areas warrants further research (Tyler, 2012). STS exposure could change the behaviors and perceptions of the professional, which can impact the way the professional responds to the client. For example, if a professional is angry and blames the client, that blame can create conflict in the worker–client relationship. Tyler asserted that a professional's experience of symptoms of VT could produce a fight-or-flight response. The example of conflict resulting from workers blaming the client is illustrative of the fight response. Active avoidance and fear affecting the worker are examples of a flight response, which prevents a professional from helping the client progress. Both responses are danger zones, as they limit productivity and indicate change in the professional's capacity to provide effective support. Researchers suggested that VT can occur at any time, even if a professional is already experiencing compassion fatigue (NCTSN, n.d.), as these concepts overlap.

How a professional may respond to compassion fatigue rests on how the worker responds to the identified trauma (O'Mahony et al., 2018). In environments known to cause high stress,

reducing compassion fatigue focuses on lowering work-load responsibilities and support from employee-assistance programs, colleagues, or supervisors (Matey, 2016). Therefore, debriefing techniques, in which helping professionals have the opportunity to reflect on the distressing situation, are a recommended intervention (Harr et al., 2014; Schmidt & Haglund, 2017). One recommendation to mitigate the adverse effects of compassion fatigue is self-care: maintaining one's physical health, working out, identifying activities that are good for emotional and spiritual well-being, and maintaining a predictable routine (Boyle, 2015). Another study (Harr et al., 2014) recommended self-care as an intervention for preventing compassion fatigue. Boyle's (2015) study is one of the few that discussed specific strategies.

Recommended Interventions

Hodge and Lockwood asserted that some strategies to combat compassion fatigue, include debriefing, teaching self-care strategies, identifying organizational stressors, and increasing awareness of symptoms to prevent compassion fatigue. Despite the number of identified interventions, their effectiveness had not been adequately studied because of discrepancies in concepts used to define work-related trauma exposure (Sorenson et al., 2015). The interventions recommended in health care settings provided some insight into how those in other helping fields could effectively mitigate or prevent compassion fatigue.

The symptoms of compassion fatigue are felt and observed even before the consequences become detrimental (Schmidt & Haglund, 2017). One preventative strategy is to monitor professionals for changes in behaviors (Nelson-Gardell & Harris, 2003). Agency supervisors can monitor employee performance and watch for signs of job-related stress. Such preventative approaches could assist in reducing the likelihood of professionals' experiences of compassion fatigue. Professionals could be further supported by providing in-service trainings on job-related

trauma, helping professionals maintain self-awareness, and rotating difficult client cases. These tactics are especially important in the field of child welfare (Nelson-Gardell & Harris, 2003).

Supervision

Face-to-face supervision provided to social workers is more effective than e-mail or telephone support (Pelon, 2017). Some studies indicated that compassion-fatigue education could start early by integrating training into the core curriculum of student education (Knight, 2010). Providing supervision, sharing in groups, and processing feelings with peers are important ways to decrease stress from job-related trauma (Knight, 2010). In a study evaluating the effectiveness of recommended preventative trainings, Kinman and Grant (2016) incorporated workshops on self-care (meditation), cognitive-behavioral strategies, supportive supervision practices, peer support, and self-growth to determine if such interventions mitigated compassion fatigue. The workshops had a positive effect on new social workers, but a thorough evaluation of effectiveness was limited due to time constraints placed on participants.

The provision of direct supervision is essential for supporting professionals affected by job-related trauma exposure (Tyler, 2012). Professionals have the opportunity to process their thoughts and feelings surrounding work with a traumatized client or client system. Addressing trauma at the individual level helps eliminate the stressors from being carried over into the professional's work environment. As previously discussed, some VT symptoms overlap with symptoms of compassion fatigue, which can also impair sound decision-making and lead to problems for professionals, especially those working in child welfare. Because symptoms of VT can also result in some of the same emotional and behavioral consequences as other forms of secondary trauma exposure, similar interventions can be used to also mitigate the effects of compassion fatigue. When supervisors implement individual supervision, the professional

addresses feelings and thoughts surrounding the trauma in an environment with a trained professional. As a result, negative behaviors, attitudes, and discussions stemming from VT diminish in the work environment. Therefore, professionals can focus on making decisions that are in the best interest of the client (Tyler, 2012). Although Tyler (2012) highlighted important considerations relevant to appropriate interventions for VT in social work practice, the article failed to measure participants' perceptions of this intervention's level of helpfulness.

Some extant literature appeared to agree that supervision is vital to help child-welfare workers address STS, compassion fatigue, or VT (Jankoski, 2010; Knight, 2010; Tyler, 2012). However, little research described the degree to which supervision helps address compassion fatigue among these professionals. Osofsky (2009) highlighted the importance of individual supervision among new and experienced social workers who provide services to young children. The author also provided a detailed account of the importance of a specific type of supervision to address professionals' feelings of stress and trauma but did not evaluate its effectiveness.

Trainings

Some researchers suggested that attendance at trainings and workshops may be beneficial in reducing feelings of stress and trauma among helping professionals (Horwitz, 2006; Jankoski, 2010; Kinman & Grant, 2016, Nelson-Gardell & Harris, 2003; Wright, Powell, & Ridge, 2006). Kinman and Grant (2016) recommended that a variety of workshops on self-care, supportive supervision practices, cognitive-behavioral strategies, and other issues faced by helping professionals could mitigate compassion fatigue. According to Horwitz (2006), researchers disagree about whether mandatory trainings mitigate effects of STS. In a mandatory training on understanding workplace trauma and building resiliency, Horwitz queried 272 participants about the effectiveness of required training. The efficacy of trainings continues to be an area requiring

more research, as researchers provided no uniformity in topics covered or how frequently trainings are used (Wright et al., 2006).

Horwitz (2006) provided one of the few studies that offered insight into interventions to address STS resulting from social workers' work with abused children. Data from the study accrued between 1994 and 1996 and included child-welfare workers who attended either mandatory or voluntary trainings on client and workplace trauma and resiliency theories. A total of 272 participants from the sample completed the survey. Threats to internal validity appeared high, due to selection bias, as some participants were required to attend the trainings and may have felt obligated to complete the administered surveys. Horwitz cautioned that the results might not be generalizable, as no randomization existed in the sample of convenience. The survey consisted of 54 items, rated on a Likert-type scale, that identified exposure to negative events in the work environment, worker experiences as a result of those events, and the degree of associated exposure and worker reaction (Horwitz, 2006). The survey examined areas that can be considered STS, such as feelings related to hearing distressing stories from clients. However, some questions were directed at the individual's exposure to an incident of direct trauma (e.g., property damage or physical assault).

Horwitz (2006) measured the effects of the trauma using social worker reports of thoughts and behaviors resulting from trauma. Perhaps most importantly, the study identified the interventions perceived as most helpful. Perceptions of support from family, friends, the public, supervisors, administrators, and clients were all included in the survey. A strong relationship emerged between perceptions of workplace safety and workplace support. Results indicated that no matter how long a social worker had been in the position, if the individual felt safe and supported, the workers was less like to have negative workplace perceptions. STS appeared to

diminish when the work environment was a supportive atmosphere that valued safety. Accordingly, interventions to combat work-related trauma should emphasize establishing a work environment perceived as safe and supportive by professionals.

Child-Protective-Investigator Characteristics

Personal Trauma History

Trauma history during childhood has been associated with negative psychological and physical health outcomes throughout an individual's lifespan (Felitti et al., 1998). Nelson-Gardell and Harris (2003) explored professionals' personal trauma history in relation to compassion fatigue in child-welfare professionals (Nelson-Gardell & Harris, 2003). The researchers recruited 166 professionals working in child welfare in the southeastern United States who attended a training on VT. The researchers examined the relationship between the trauma histories of child-welfare professionals and STS. The two groups of participants recruited were the entire staff of one large child-welfare agency and those attending the training as part of a professional-development conference. The study had a time-series pretest–posttest design. The pretest gathered demographic information and asked participants to complete a standardized test on compassion fatigue. After completing the measure, participants attended a training with psychoeducational and self-awareness sessions. Two weeks following the training, the authors administered "a knowledge survey, a satisfaction rating, and analog application of STS knowledge" (Nelson-Gardell & Harris, 2003, p. 14), followed by a questionnaire on childhood trauma.

Nelson-Gardell and Harris (2003) concluded that (a) STS (compassion fatigue) was prevalent among child-welfare workers. (b) younger professionals were more likely to be negatively impacted by STS than older ones, (c) administrators should focus on developing

interventions that focus on prevention of STS in CPIs, and (d) STS was more prevalent among professionals who had experienced personal trauma, especially abuse. The researchers suggested evaluating how to use job-related trainings to prevent STS, creating peer support groups for professionals to process stressors, and rotating significantly traumatic cases among professionals. Nelson-Gardell and Harris concluded it is necessary for professionals working in child welfare to exercise self-awareness and learn how exposure to client trauma could affect their personal and professional lives.

In order to further examine how personal trauma history is associated with compassion fatigue in CPIs, the Adverse Childhood Experiences study (ACEs; Felitti et al., 1998) can provide a foundation for exploring this relationship. ACEs explored how negative childhood trauma impacted adult psychosocial and physical health outcomes. Felitti et al. (1998) surveyed participants on whether they were exposed to events related to psychological abuse, physical abuse, sexual abuse, substance misuse, parental mental health, domestic violence, and criminal activity before they were 18 years of age. The results of ACEs indicated a relationship exists between childhood-trauma exposure and negative adult emotional health (such as, depression) and/or physical health outcomes (such as heart or lung disease, which are leading causes of death). One goal of the study was to examine whether childhood trauma exposure was a precipitating factor for adult risk-taking behaviors that led to negative health outcomes. A main finding was that higher numbers of adverse event exposures during childhood resulted in poorer health outcomes in adulthood. Felitti et al. (1998) highlighted the need for more research on how adverse experiences during childhood are associated with an individual's social-emotional or physical health throughout their lifespan. The original ACEs traumas were adapted for use in this

current research study and will be discussed in the methodology section of this paper. Currently, no studies were found to exist that use ACEs in relation to CPI compassion-fatigue level.

Turgoose and Maddox (2017) asserted that professionals with past trauma histories are more likely to experience compassion fatigue than those without a past trauma history. One relationship suggested was the presence of a professional's personal trauma history with compassion-fatigue level (Cornille & Meyers, 1999; Knight, 2010). Therefore, it is crucial that helping professionals understand their personal psychosocial history and the implications for their professional career (Knight, 2010). However, studies on the association between a professional's trauma history and compassion fatigue have yielded varying results, depending on the variables studied (Cornille & Meyers, 1999; Knight, 2010).

Way et al. (2007) further verified that providing trauma therapy to clients can result in long-term negative consequences for clinicians. The researchers used McCann and Pearlman's (1990) theoretical perspective to describe the cognitive schema changes experienced by clinicians, especially by those providing trauma therapy. They explained that VT is likely an accumulation of exposure to client trauma using McCann and Pearlman's theorization, changing clinicians' self-perspectives. Way et al. (2007) explained, "disrupted cognitions about self refers to the negative beliefs that clinicians have about themselves" (p. 82). Consistent with McCann and Pearlman's theory of cognitive schemas, Way et al. found that ongoing secondary trauma exposure affects the clinician's ability to believe in perceptions, disrupts feelings of safety when alone, and lowers confidence. The authors reviewed existing literature to determine associations between different variables and VT in clinicians. They asserted that previous studies demonstrated a relationship between the length of time a clinician worked with trauma-exposed victims and VT. They explored whether clinicians with a personal maltreatment history were at

higher risk of VT and found that outcomes differed depending on the other variables used in the studies. They also explored if a relationship exists between clinician gender and VT effects.

Way et al. (2007) used three different self-report measures: The Childhood Trauma Questionnaire (Bernstein & Fink, 1998, as cited in Way et al., 2007) to gather data on past maltreatment history (Way et al., 2007), the Traumatic Stress Institute Belief Scale (Pearlman, 2003), and the Trauma Attachment Belief Scale (TABS; Pearlman, 2003) to assess cognition. The two different surveys accounted for differences in the subscale questions. The researchers converted the Traumatic Stress Institute Belief Scale responses to the subscales of the TABS. Results indicated that 76% of clinicians in the study had experienced some form of abuse as a child. The trauma reported by female participants was lower than that reported by men as well as by other studies. Male clinicians were more likely than female participants to be affected by disruptions in self-esteem and self-intimacy cognitions (Way et al., 2007). Way et al. also found that clinicians who experienced emotional neglect as children were also at higher risk for disruptions in social cognition. The study provided important implications for understanding the role of clinician gender, social cognition, and past abuse.

Demographics

In a study on social work students' understandings of STS in field placements, the age range of students was 21–56 years (Harr & Moore, 2011). Results from this study indicated that risks of STS are associated with time spent in the field. In another study, the age range of social work participants was more limited, as data accrued from participants between 23 and 32 years of age (Kapoulitsas & Corcoran, 2015). In Van Hook and Rothenberg's (2009) study, results indicated that younger female CWPs are considered to be at higher risk of burnout. In the majority of previous studies, participants were mostly women (Way et al., 2007). The handful of

studies that used gender as a comparison variable indicated that women were more likely to experience VT (Way et al., 2007).

Way et al. (2007) studied the variables of clinician gender, age, and maltreatment history to determine if they were predictors of changes in self-esteem and self-intimacy cognitions among clinician participants. Way et al. focused their study on professionals who provided therapy to survivors or perpetrators of sexual maltreatment. Their study defined VT as distortions in self-cognitions and used a mailed survey to prospective participants. The researchers' survey included demographic questions related to age, gender, and type and duration of work provision. Way et al. sent the anonymous survey to 1,754 members of child-abuse-treatment professional organizations. The researchers analyzed data from 409 surveys, of which 383 were usable (23% response rate). Disproportionate differences arose in gender among the responses: 150 men and 233 women. Of participants, 113 clinicians provided support to sexual-abuse survivors and 270 worked with offenders or survivors. Just over half of the sample had a mean age of 45 with 10 years of providing clinical support. Almost 95% of participants were European American, 67% had a master's or specialists' degree, and 27% held a doctorate.

Credentials and Experience

Bride's (2007) study on prevalence represented a group of professionals holding degrees in mental health, health care, child welfare, and social work. Harr and Moore's (2011) study was specific to social work students and their field placements, whereas Kapoulitsas and Corcoran (2015) focused on a small group of professional social workers. Among studies specifically examining the field of child welfare, Cornille and Meyers (1999) found that CWPs held bachelor's degrees in criminal justice, psychology, social work, and sociology. One participant held a master's degree in counseling. Three participants did not have any formalized degree.

Extant literature varies on relationships between compassion-fatigue or compassion-satisfaction levels and the time spent working in the helping field (Salloum et al., 2015). Salloum et al. (2015) explored whether relationships existed between compassion satisfaction, compassion fatigue (burnout and STS), and the use of trauma-informed self-care by child-welfare professionals. The researchers defined trauma-informed self-care as a worker's ability to practice self-awareness in their responses when working with traumatized clients. Coping strategies for trauma-informed self-care included attending supervision, trauma-focused trainings, and practicing appropriate work–life-balance strategies (Salloum et al., 2015).

When the researchers explored the extent to which trauma-informed self-care explained compassion satisfaction, the amount of variance between the variables was not significant (Salloum et al., 2015). However, gender and amount of time spent in the field were both predictors of compassion satisfaction. Child-welfare workers with a year or more of experience had higher levels of compassion satisfaction than those with a year or less (Salloum et al., 2015). Harr et al. (2014) found lower levels of reported compassion satisfaction in social workers who were students or beginning their careers. In contrast to the Salloum et al. study, Van Hook and Rothenberg (2009) found no statistically significant relationship between compassion-satisfaction level and time spent in the field among their sample of child-welfare professionals in central Florida. Baldschun, Hämäläinen, Töttö, Rantonen, & Salo (2019) found that increasing age and experience related to lower levels of job satisfaction.

The reasons are not fully understood for the variances in the relationship between compassion-satisfaction level and the length of time a child welfare professional spent in the field. Harr et al. (2014) asserted that age, overall experience, and ability to work in their field of interest might contribute to the level of compassion satisfaction and compassion fatigue

experienced by helping professionals. Boyas, Wind, and Ruiz (2013) conducted a study to explore how organizational and personal characteristics influenced job stress and intent to resign in two groups of child-welfare workers. The researchers divided groups of employees based on tenure. One group consisted of employees who were employed for 3 years or more, and the other group had been employed for less than 3 years. Boyas et al. asserted that experience in the first 2 years of employment in the child-welfare field determined employee longevity. Using a theoretical model on employment-based social capital, the researchers found that their model was not influential in both groups (Boyas et al., 2013). Employees working in their positions for less than three years experienced less anxiety when they felt more supported by their supervisors. This employee group also expressed an increased intent to leave when they suffered exhaustion. Among employees who worked at the organization for more than three years, poor coping-skills development, such as depersonalization, and were associated with an expressed intent to leave (Boyas et al., 2013). The researchers concluded that newer employees have different needs than more experienced employees and organizations had to meet the individualized needs of their employees (Boyas et al., 2013). These findings seemed to suggest that compassion satisfaction can be achieved early in a CWP's career by actively addressing risk factors for burnout and STS. Exploring relationships between compassion satisfaction and employee tenure appears to be an area in need of further study.

Gender

Another variable that yielded different results in its relationship with compassion fatigue was gender. This result may partly stem from the domination of female helping professionals in the studies (Cornille & Meyers, 1999; Harr & Moore, 2011; Kapoulitsas & Corcoran, 2015). In one of the few studies specifically addressing STS in CWPs, Cornille and Meyers' (1999) study

sample was dominated by women; of the 21 participants, 20 were women. All six participants were women in Kapoulitsas and Corcoran's (2015) qualitative study investigating the experiences of compassion fatigue and resilience in a group of social workers. Harr and Moore's (2011) study explored variables related to STS in a group of social work students, of which 89% were women.

Instruments Used in Previous Research

Researchers used several instruments to explore the presence of secondary-trauma exposure among professionals. This section discusses the instruments used in previous studies to measure compassion fatigue and associated concepts. Chapter 3's instrumentation section discusses the data-collection instruments used in the present study.

Vicarious Resilience Scale (VRS)

New research has suggested shifting to gauging resilience in trauma work. The VRS (Killian et al., 2017) emerged partially as a result of a need to find a more positive way to appraise VT (Molnar et al., 2017). The purpose of this measure was to determine how helping professionals could formulate definite meaning through the resilience of their clients (Killian et al., 2017; Molnar et al., 2017). VRS is a 27-item scale that addressed concepts of VT, burnout, and other areas associated with responses to secondary trauma. It also identified ways clinicians make positive meaning from experiences. The overall reliability of VRS was .92. The scale has the following subcategories: increased resourcefulness, changes in life goals and perspectives, increased self-awareness and self-care, client-inspired hope, spirituality, the consciousness of social location, and power to remain present during trauma narratives (Killian et al., 2017, p. 27). Clinicians can use the VRS as a self-awareness tool. The researchers suggested its importance in gathering greater insight into a professional's personal VT story.

Vicarious resilience is directly associated with posttraumatic growth, another emerging concept aimed at depathologizing normal reactions to traumatic stressors (Killian et al., 2017). Researchers can use the VRS to measure a clinician's response to client trauma as a way to prevent VT or STS (Killian et al., 2017). VRS is still in its earliest stages of implementation, but is one of the first to gauge how a clinician may positively respond to their work with clients (Killian et al., 2017). McCann and Pearlman (1990) identified cognitive schemas that indicated the influence of VT on a clinician's personal and professional well-being. VRS evaluated how a clinician's spiritual and emotional appraisals of exposure to client circumstances affected the clinician's well-being (Killian et al., 2017).

Secondary Traumatic Stress Scale (STSS)

Researchers created the STSS (Bride, Robinson, Yegidis, & Figley, 2004) to quantify VT experiences in human-service professionals, specifically social workers. The developers created three domains modeled after the diagnostic criteria for PTSD in the *Diagnostic and Statistical Manual of Mental Disorders* (APA, 1994). The three domains—intrusion, avoidance, and arousal—are all subdomains of PTSD symptomology. STSS uses a 17-question instrument with Likert-type scale responses, gauging human-service professionals' symptoms experienced in the previous 7 days. Psychometric properties for this instrument suggested good internal reliability and consistency, .93–.95 overall when used in samples of mental health professional populations (Bride et al., 2004; Kintzle, Yarvis, & Bride, 2013; Ting, Jacobson, Sanders, Bride, & Harrington, 2005).

Trauma and Attachment Beliefs Scale (TABS)

Grounded in the CSDT theoretical framework, Pearlman (2003) modified the TABS from the Traumatic Stress Institute Beliefs Scale (Pearlman, 2003). The scale has a strengths-based

focus designed to help determine the effects of trauma on cognitive schemas (Pearlman, 2003). It was initially created so clinicians could assess how trauma affected their clients, but has also been used to gauge VT in clinical populations (Molnar et al., 2017). TABS contains 84 self-rated items that can be completed by individuals who can read at a third-grade level and are aged 9 years or older (Pearlman, 2003). TABS was normed using a heterogeneous, nonclinical group of individuals (N = 1,743). Reliability and consistency were considered in the acceptable range with overall scores of .96 and .75 respectively. The five cognitive schemas measured by the scale were safety, trust, esteem, intimacy, and control (Pearlman, 2003).

Theoretical Perspective

Historically, stress and coping models have explained the transactional relationship between how an individual appraises a situation and responds based on the resources available (Lazarus & Folkman, 1984). Compassion fatigue is considered to be an outcome of an individual's psychological distress after experiencing the trauma of others either as a visual witness or hearing a victim recall the events (Figley, 1995, 2002a, 2002b). Thus, models of stress and coping can be used to explain and predict how the CPI responds to trauma exposure, depending on stress appraisal and resources available and utilized.

Lazarus and Folkman's (1984) transactional model of stress and coping asserts that an individual's response to a presented stressor rests on how the individual appraises that event. The interactional factors that affect how an individual appraises an event include (a) the individual stressor, (b) personal characteristics such as personality type, (c) resource accessibility, (d) co-occurring stressors, and (e) the individual's coping responses (Pottie & Ingram, 2008). A series of systematic primary and secondary appraisals shape how an individual interprets a stressor (Lazarus & Folkman, 1984). During the primary-appraisal process, an individual

determines the extent to which the presented stressor will affect the individual's current circumstances. During the secondary appraisal, the individual decides how much control was possible over the given situation. Once the impact of the stressor was assessed, the individual could then use available resources to cope effectively with the event. Lazarus and Folkman (1984) defined the ability to cope as an individual's behavioral and cognitive appraisal of circumstances, used to negotiate any demands exceeding what the individual has determined as the extent of available resources.

Lazarus and Folkman's (1984) framework is essential for understanding how compassion fatigue can affect the CPI. During investigations, the CPI's exposure to the trauma can lead to symptoms of compassion fatigue, especially when the CPI is required to conduct continuing investigations, without processing the trauma. Negative reactions by the CPI might suggest that the professional appraised the stress circumstances as too taxing and will have difficulty coping (Lazarus & Folkman, 1984).

The objective severity of a threat is not as important as an individual's perception of the threat (Laubmeier, Zakowski, & Bair, 2004; Shaw, 1999). Shaw (1999) evaluated the influence of stress and coping on individuals with chronic health conditions and confirmed that an individual's perception of a stressor related to chronic illness holds implications for understanding how that individual will cope. Further, maladaptive responses could occur in individuals who negatively appraise their circumstances and have limited access to supportive resources. Inadequate coping responses can include active avoidance of the situation, chronic and heightened stress, and emotional distress (Shaw, 1999). Conversely, a positive appraisal strongly associates with effective coping (Quine & Pahl, 1991; Shaw, 1999). If CPIs can positively appraise their exposure to trauma, they can cope more effectively.

Conclusion

The literature review in Chapter 2 explored the evolution of the term compassion fatigue and other terms used to understand this concept. It explored how researchers studied the term across disciplines including healthcare, mental health, and child welfare. The chapter began with a discussion on how compassion fatigue has been studied in health care, mental health, and child-welfare fields and explored how other concepts related to compassion fatigue in the literature. Chapter 2 also presented the variables identified in the extant literature that warranted further investigation on how they relate to compassion fatigue. The instruments used to operationalize compassion fatigue in the existing literature were also discussed. A theoretical framework was identified to help explain the research and predict outcomes. Chapter 3 will reintroduce the research questions and discuss this study's methodology. Furthermore, the research design will be explained, along with the survey, data-collection procedures, and data-analysis process. Chapter 3 will conclude with a summary of this research study's methodology section.

CHAPTER 3: METHODOLOGY

This research study used a cross-sectional design to explore the relationship between work climate, resource utilization, CPI characteristics, and CPI compassion fatigue. Specifically, the study addressed the following three research questions and seven associated hypotheses.

Research Question 1. Does a relationship exist between work climate and compassion fatigue in CPIs?

H_a1. There is a statistically significant relationship between attitudes about colleagues (teamwork climate) and the level of compassion fatigue in CPIs.

H_a2. There is a statistically significant relationship between attitudes about supervisors (management climate) and the level of compassion fatigue in CPIs.

Research Question 2. Does a relationship exist between a CPI's utilization of support and their level of compassion fatigue?

H_a3. There is a statistically significant relationship between utilizing supervision and the level of compassion fatigue in CPIs.

Ha4. There is a statistically significant relationship between the attendance of trainings by CPIs and the level of compassion fatigue.

Research Question 3. Is there a relationship between CPI characteristics and the level of compassion fatigue?

H_a5. There is a statistically significant relationship between the age of a CPI and the level of compassion fatigue.

H_a6. There is a statistically significant relationship between time spent in the field as a CPI and the level of compassion fatigue.

H_a7. There is a statistically significant relationship between the personal trauma history of a CPI and the level of compassion fatigue.

Design

This research study used a cross-sectional design to explore the relationship between CPI work-climate variables, CPI utilization of support resources, CPI characteristics, and CPI compassion-fatigue level (measured using STS and burnout subscales) in a purposive sample of CPIs (N = 165). Consistent with a cross-sectional study design, a survey was administered to participants to collect data during limited period of time. Several of the existing studies exploring compassion fatigue among helping professionals, including those in the field of child welfare, primarily used qualitative designs (Edelkott et al., 2016; Jankoski, 2010; Kapoulitsas & Corcoran, 2015; Nelson-Gardell & Harris, 2003). The aforementioned studies provided insight into variables requiring further research. Thus, a quantitative research design was employed to gain a broader understanding of the way identified variables affect a larger sample.

Sample

This study utilized the combined results of two data-collection sites that comprised a total sample of 165 CPIs. A primary and secondary data-collection site were recruited to address concerns of low-response rates. There were 495 CPIs recruited from the primary data-collection site and 276 from the secondary site. The total population of recruited CPIs for this purposive sample was 771. Although 213 surveys were returned, a total of 48 surveys contained unusable data sets. The response rate was 26.62%, slightly higher than the 20% rate identified as typical when conducting online survey research (Shih & Fan, 2009).

The estimated number of CPIs that was initially identified for recruitment from the primary data collection site for this study was 400. A power analysis was conducted to determine

the number of completed responses needed for statistically significant results. The margin of error was .05, the confidence level was .95, the response distribution was .50, and $\alpha = .50$. Calculations indicated that with a sample size of 400, 197 responses, or a 47.5% return rate would be needed. Some risk aligned with the expectation of such a large return rate because online e-mail surveys tend to have a return rate of about 20% (Shih & Fan, 2009). Accordingly, the minimum number of responses were met to achieve statistically significant results.

Recruitment Procedures

Initial recruitment for this research study began by contacting the regional manager from the primary data-collection site. Once contact was established, permission was requested to send an invitational e-mail to invite CPIs in the region to complete a one-time survey. A letter of support was provided for this researcher to conduct research and recruit participants from the primary data-collection site (see Appendix E), pending appropriate Institutional Review Board (IRB) approvals.

Recruitment efforts were coordinated with key staff in the primary data-collection site through e-mail, telephone conferences, and a face-to-face meeting. During this process, this researcher coordinated identification and obtained a second data-collection site with assistance from key staff from the primary site. The same recruitment procedures occurred at the secondary data-collection site as for the primary site. This researcher maintained communication with points-of-contact for both data-collection sites until research approval was granted and data-collection began.

Inclusion Criteria

Participants recruited for this study included all CPIs in the primary and secondary data-collection sites.

Exclusion Criteria

Professionals working for the Department of Children and Families (DCF) who were not CPIs, such as dependency case managers or support staff were not recruited or included in this study.

Institutional Review Board

University and agency IRBs granted permission prior to recruiting participants. This study was categorized as exempt research by the university IRB as participants had no to minimal risks related to participation (see Appendix F).

Data-Collection Process

An introductory face-to-face meeting occurred with key administrative staff at the primary data-collection site. Both regions provided points-of-contact to help obtain CPI e-mail addresses and receive any necessary technical assistance for procedural concerns. Administrative personnel from each region sent an e-mail to their staff introducing this researcher and the study. However, this researcher coordinated all recruitment efforts to prevent risk of coercion. Data-collection procedures occurred the same way in both regions.

The invitational e-mail sent to CPIs included an overview of informed-consent language (see Appendix G). This researcher sent an invitational e-mail to each CPI from a master list obtained from the point-of-contact for each region. The invitational e-mail provided a link to the survey, hosted by Qualtrics.com. A total of three reminder e-mails were sent over a six -week period of time. Once the CPI entered the survey, housed on the Qualtrics.com website, they were brought to the informed-consent screen. The informed consent provided an overview of the study, but because it was considered exempt research, the participant did not have to provide a signature (see Appendix H). The administration of an anonymous survey and concerns of

discomfort were major considerations. Therefore, Qualtrics.com was enabled to anonymize surveys upon return by deleting CPI IP addresses. To account for discomfort, options for the CPI to opt-out of the survey at any time, skip questions, or seek counseling support were provided. Specific options for opting out included exiting the survey, selecting "no" when prompted to proceed to the survey from the informed consent page, or skipping any questions that caused discomfort. Furthermore, participants were required to select "yes" to advance to the survey. Participants viewed directions at the beginning of the demographic form, ProQOL-5 and SAQ. The participant did not receive feedback on their scores for the ProQOL-5 or the SAQ. All three of the instruments were incorporated into one survey. Participants could have exited the survey and returned to it at a later time. Upon completion of the survey, responses were submitted with nothing additional requested of the participant. All data were analyzed and reported in aggregate form only.

Data collection began in mid-October 2018 and was closed in late December 2018. After 4 weeks of data collection at the primary data-collection site, the secondary data site was recruited to ensure enough responses to generate statistically significant results. Time constraint was a major consideration for this population, and all efforts were made to shorten the length of time required to complete the survey in 15–20 minutes. Initially, data collection was expected to begin earlier and close in late October 2018. However, due to implementation challenges, data collection began later, resulting in closure being extended until late December 2019.

Operationalization of Variables and Instrumentation

A total of seven independent variables were analyzed in relation to the dependent variable, compassion fatigue. The independent variables included teamwork climate, management climate, utilization of supervision, utilization of job-related trainings, CPI age, CPI

time spent in the field, and CPI personal-trauma history. The dependent variables included the two separate components of compassion fatigue (measured by STS and burnout subscales). Three instruments were used in this research study: (a) a researcher-created CPI demographic form, (b) the SAQ (Sexton et al., 2006), and (c) the ProQOL-5 (Stamm, 2010). The three instruments were combined into a web-based questionnaire with a targeted completion time of no more than 20 minutes. Permission to use and modify the ProQOL-5 (Stamm, 2010) and the SAQ (Sexton et al., 2006) from the respective points-of-contact were obtained before the implementation of data collection (see Appendix I).

ProQOL-5

The ProQOL-5 (Stamm, 2010) was the instrument selected to measure the dependent variable, compassion fatigue. Compassion fatigue is "a state of exhaustion and dysfunction biologically, psychologically, and socially as a result of prolonged exposure to compassion stress and all it invokes" (Figley, 1995, p. 253). The instrument was a 30-item, Likert-type response scale that asked participants to self-report feelings related to providing care and support to clients over the past 30 days (Stamm, 2010). The ProQOL-5 used Likert-type scale responses ranging from never to very often, reported by the professional completing the instrument. The measure has three subscales used to capture the burnout, compassion satisfaction, and STS levels experienced by the participant. The burnout and STS subscales were used to quantify the presence of compassion fatigue, as the ProQOL-5 identified these subscales as two distinct and separate components of the concept (Stamm, 2010). All three subscales are similarly scored, as they each comprised 10 self-report items. Each subscale was scored independently and used no overall score (Stamm, 2010). The ProQOL-5 (or earlier versions) has been used in about 50 percent of the approximately one hundred published articles on compassion fatigue, STS, and

burnout (Stamm, 2010). Although the ProQOL measures the STS, burnout, and compassion satisfaction constructs separately, STS and burnout both relate to negative and distressful experiences. There is a 34% (r = .58;; co-σ = 34%; 14 n = 1187) shared variance between the burnout and STS subscales, likely reflective of the distress present in both constructs (Stamm, 2010, p. 13). According to Stamm (2010), the instrument has "good construct validity with over 200 published papers" (p. 13). The reliability was good for measurement of each of the three constructs: Cronbach's alphas were $\alpha = .89$, $\alpha = .71$, and $\alpha = .80$, respectively, for compassion satisfaction, burnout, and compassion fatigue/STS (Stamm, 2005). Compassion fatigue was considered an ordinal variable, with the level of compassion fatigue recorded as quantified based on each participant's raw score. Only the STS and burnout subscales were used in this study because they measured compassion fatigue. The third subscale in the ProQOL-5 was compassion satisfaction. The items for the compassion-satisfaction subscale were kept in the instrument but responses were not used in this study. The ProQOL-5 does not have an overall score used to measure compassion fatigue; therefore, the STS and burnout subscales were interpreted separately (Stamm, 2010).

The ProQOL-5 (Stamm, 2010) was used because it was identified as the latest version of this assessment. It was initially created by Figley (1995) and was named the Compassion Fatigue Self-Test. Researchers use various versions of the ProQOL frequently to measure the presence of compassion fatigue and compassion satisfaction using the subscales of burnout, compassion satisfaction, and STS (Finzi-Dottan & Kormosh, 2016; Harr et al., 2014 Kinman & Grant, 2016; Thomas, 2013; Van Hook & Rothenberg, 2009). The ProQOL-5 comprises 30-items and asks respondents to rate how frequently they experienced each statement in the past 30 days (Stamm, 2010). Items include "I feel happy," "I feel trapped at my job," and "I feel depressed because of

the traumatic experiences of the people I help" (Stamm, 2010). The Likert-type scale ratings ranged from 1 (never) to 5 (very often). Scoring consisted of summing all 10 items corresponding to specific items on each subscale. Higher scores on subscales—compassion satisfaction, burnout, and STS—were associated with higher risks of experiencing effects related to the subscale, scoring all three subscales the same way. Scoring for each subscale included summing all responses to obtain a raw score. For the burnout scale, some items were reverse scored. Although converting scores to low, moderate, and high risk was not necessary for this study, individuals completing the measure had this option.

Burnout and STS scores were both important in gauging compassion fatigue as both subscales contribute to symptoms (Stamm, 2010). Burnout was described as the symptoms of compassion fatigue that more closely aligned with gradual onset (Stamm, 2010). An individual feeling burnout may perceive work to hold no authentic meaning, perhaps attributed to an unsupportive work environment. The authors of the ProQOL considered STS to be the "second component of compassion fatigue" (Stamm, 2010, p. 3). This instrument indicates that the presence of STS aligns with reaction from on-the-job trauma exposure, also regarded as VT in some literature (McCann & Pearlman, 1990). Symptoms of compassion fatigue relate to immediate behaviors and responses that occur as a result of on-the-job trauma exposure.

SAQ

Question 1 of this study included the first two independent variables used to measure work climate. The definitions of work climate comprised teamwork climate and management climate. Teamwork climate means how professionals appraise the quality of interactions between others in their work environment (Sexton et al., 2006). The second, work-climate variable,

managerial climate, is the feelings the professional holds regarding the actions of supervisors (Sexton et al., 2006).

Teamwork and managerial climate were measured using the SAQ (Sexton et al., 2006). The SAQ asked participants to report their level of agreement with statements using a 5-point Likert-type scale. The SAQ employs two sets of questions to address subscales of teamwork and managerial climates. Historically, researchers used the SAQ to assess health care workers' attitudes about different aspects of the work climate in their workplaces in several domains. Sexton et al. (2006) explored the attitudes about colleagues and management, the conditions of the work environment, perceptions of job safety, and stress recognition. Psychometric properties for this instrument were obtained through validation studies using a large sample of healthcare professionals (n = 10,843) from a variety of health care settings to better understand work climate by asking participants about their attitudes on various aspects of their work environment. The SAQ demonstrated strong composite scale reliability through Raykov's p coefficient, at .90 (Sexton et al., 2006). Because of its acceptable reliability, researchers have used the instrument widely in various health care settings, including to compare work climates across health care agencies. Although research is limited, Sexton et al. (2006) also suggested researchers could use the SAQ to gauge the work climate in other settings.

The SAQ short form comprised 36 items with a 5-point self-reported Likert-type scale response. The levels of agreement ranged from 1 (Disagree Strongly) to 5 (Strongly Agree). Participants could have selected two other options: neutral and not applicable. Two sets of questions from the instrument were used. The first six questions on the SAQ measured teamwork climate. These included questions such as "I have the support that I need to care for my patients" and "It is easy for personnel to ask questions here that they don't understand." The permission

letter provided for use of the SAQ for this research study indicated that the scale's authors were unable to provide modifiable versions but that the scale could be modified to meet specific research goals. Therefore, to reduce significant modifications to the instrument for this research study, only terms related to health care, patients, or other medical wording were changed to *clients*, *team*, or *agency*.

The second set of questions related to managerial climate. The four questions used to gauge attitudes surrounding management support (Questions 24–28) included "Management supports my daily efforts" and "Management doesn't knowingly compromise patient (client) safety." Participants answered these questions using the same agreeability scale. Researchers have used the SAQ in more than 50 health-care-related studies (Center for Healthcare and Quality Safety, 2018). The purpose of using the SAQ was to gain insight into whether or not relationships existed between teamwork and managerial climate and compassion-fatigue level in CPIs. No other studies found indicated using the SAQ to gauge the work climate of CPIs.

The SAQ is scored using a 100-point scale. Responses were scored for the managerial and teamwork climates only. Only one question (Research Question 2) was reverse scored. The total score (1–100) for each category (managerial climate and teamwork climate) was calculated by taking each of their mean scores, subtracting 1, and multiplying it by 25. An individual score of 75 or higher indicated agreeability (75 = agree slightly). Higher scores corresponded with higher levels of agreeability for the teamwork and management climate subscales.

Child-Protective-Investigator Demographic Form (Researcher-Created)

This researcher-created demographic form comprised 11 questions. This demographic form was pretested by administering it to six licensed clinicians. The clinicians were asked to complete the form and provide feedback. The reason this population was selected for pretesting

was because of the importance of identifying items that may cause distress in prospective participants. This population was selected as CPIs separate from the recruited sample and were not accessible for pretesting. Feedback on the length of time it took to complete items, item clarity, and whether any of the questions resulted in feelings of distress were specifically requested. Pretest participants initially identified some redundancy in items, resulting in shortening the demographic form. The clinicians reported ease in completing the form and did not indicate it was time consuming. The item that asked clinicians to identify traumatic experiences was the only item of possible concern. However, none of the clinicians indicated high levels of distress by being asked the question. Furthermore, concerns of distress that participants could have been experienced were mitigated by providing an option for the participant to choose not to respond. The researcher-developed Child Protective Investigator Demographic form does not include any psychometric properties, as the form was developed specifically to collect demographic information from study participants.

The first survey item asked participants about the length of time they were employed in their current position, in months. This first item on the demographic form corresponded with Research Question 3, exploring the relationship between time spent as a CPI and the level of experienced compassion fatigue. The second item on the demographic form inquired about the participant's educational background and this question was reported only as a descriptive statistic. Items 3, 4, and 5 requested information on the participant's numbers of position at DCF, gender, and ethnicity/race. The sixth item, which also corresponded with Research Question 3, asked the participant to indicate types of trauma to which they were exposed as a child. Data from the participant trauma history were used to determine if a relationship existed between personal trauma history and compassion-fatigue level in CPIs.

The demographic form had items related to CPI resource use. These items corresponded to Hypotheses 3 and 4. Demographic form items asked CPIs about types of supervision they attended (i.e., group or individual), the frequency with which they attended supervision and job-related trainings, and types of trainings attended. Choices for training topics were provided to participants, as well as the option to specify others not included on the list. The data on types of trainings were not reported in this research study. Item 13 asked participants about their age. The age of the participant corresponded with Research Question 3, exploring the relationship between age and the presence of compassion fatigue (one of the identified provider characteristics).

The final questions asked the participants about their plans to remain in their positions at DCF. If the participant indicated they planned to leave their current position as a CPI, they were asked to identify the reasons behind their decision. Frequencies on whether the CPI planned to stay in their respective positions were reported in the descriptive section of Chapter 4.

ACEs Adapted for CPI Demographic Form Use

As discussed above, this researcher created a CPI Demographic Form to query respondents about specific items corresponding with the hypotheses identified in this research study. Hypothesis 7 stated that a statistically significant relationship existed between compassion fatigue and CPI trauma history. The ACEs study examined seven categories of negative childhood trauma using two waves of data from over 17,000 people (Center for Disease Control and Prevention, 2013; Felitti et al., 1998). A major purpose of the ACEs study was to examine how these negative events in childhood were associated with negative psychological and physical health outcomes in adulthood. Items on the ACEs were adapted from other surveys or questionnaires specific to the related adverse-event category (Felitti et al. 1998). Recruitment

occurred by asking adults members of a large HMO to complete a standardized medical evaluation (Felitti et al., 1998). The seven categories identified on the evaluation included questions on abuse, household violence toward a maternal figure, exposure to adult household member substance misuse or mental illness, or whether a household member was incarcerated.

The total number of trauma categories were compared to a measure on risk-taking behaviors and current health and disease status (Felitti, et al., 1998). Results from logistic regression indicated that greater numbers of childhood trauma exposures were associated with more negative health outcomes. Those participants who experienced at least four adverse childhood experiences were between four and 12 times more at risk for alcohol/substance misuse, depression, and attempting suicide. More categories of trauma were also associated with high risks of smoking and participant self-report ratings of negative physical health concerns when compared to those who experienced none. Furthermore, about 50% of the sample experienced at least one category of negative childhood trauma (Felitti et al., 1998). Findings from this study hold important implications because, as the number of adverse childhood experiences increased, the risk of negative physical and emotional health outcomes also increased (Felitti et al., 1998).

This researcher adapted the questions from the ACEs (Felitti et al., 1998) to the current research study in an effort to gain more insight into the relationship between CPI personal trauma history and CPI compassion fatigue. The trauma history items on the researcher-Developed CPI Demographic Form, adapted from the ACEs study (Felitti et al. 1998), asked the CPI to identify whether or not they experienced a particular trauma type. The traumas specifically on the demographic form included nominal yes/no categories for verbal abuse, physical abuse, sexual abuse, feeling unloved, experiencing neglect, experiencing parental

divorce, whether or not they experienced abuse by a maternal figure, exposure to drug/alcohol misuse, whether or not a family member experienced significant mental illness including suicide, and whether or not a family member went to prison. CPI respondents were asked to indicate whether or not they had been exposed to the associated trauma, or they could choose not to disclose.

Because this research study was exploring whether or not relationships existed between each trauma type and compassion fatigue in CPIs, each trauma response was analyzed separately with compassion fatigue. The option to choose not to disclose was added to give CPIs the option to elect not to answer the question, rather than opt out of the entire survey. Table 1 identifies the variable and measurement type of each variable in this research study.

Table 1

Operationalization of Variables

Research question	Hypothesis	Operationalization of variable (measurement)	Variable type
Research Question 1: Does a relationship exist between work climate and compassion-fatigue level in CPIs?	H1	IV: Teamwork climate (SAQ)	Ordinal
		DV: Compassion-fatigue level (ProQOL)	Ordinal
	H2	IV: Management climate (SAQ)	Ordinal
		DV: Compassion-fatigue level (ProQOL)	Ordinal
Research Question 2: Does a relationship exist between the utilization of support and compassion-fatigue level in CPIs?	H3	IV: Utilization of supervision (Researcher-developed survey, yes/no)	Nominal
		DV: Compassion-fatigue level (ProQOL)	Ordinal
	H4	IV: Attendance of in-service trainings (Researcher-developed survey, yes/no)	Nominal
		DV: Compassion-fatigue level (ProQOL)	Ordinal
Research Question 3: Does a relationship exist between the CPI characteristics and CPI compassion-fatigue level?	H5	IV: CPI age (Researcher-developed survey)	Ordinal
		DV: Compassion-fatigue level (ProQOL)	Ordinal
	H6	IV: Provider time spent in the field (Researcher-developed survey)	Interval
		DV: Compassion-fatigue level (ProQOL)	Ordinal
	H7	IV: Provider trauma history (Researcher-developed survey)	Nominal
		DV: Compassion-fatigue level (ProQOL)	Ordinal

Statistical Analysis

Descriptive and inferential statistics were used to report results for this research study. Results from the data analysis were reported in aggregate form only. This section describes how frequencies, Spearman's rho, Mann–Whitney, and simple linear regression tests were used to analyze results for each of the hypotheses in this study. Chapter 4 will present the results of the data analysis.

Frequencies

Descriptive frequencies and percentages were analyzed on all demographic variables. The purpose of these statistical analyses was to provide a description of the sample. Reported frequencies related to CPI demographic information included age, gender, race/ethnicity, and degree/education type. The resource utilization variables included the report on frequencies including use of supervision and job-related trainings. The descriptive section of Chapter 4 also reported CPI responses on whether participants experienced use of particular type of supervision or training. Chapter 4 reported on frequencies of CPIs planning to stay or leave their current position.

Spearman's rho

Each of the two-tailed seven hypotheses explored whether relationships existed between the independent and dependent variables. Accordingly, Spearman's rho was selected as the statistical analysis used for hypotheses where both variables were measured at the ordinal or ratio level. The two main assumptions for Spearman's rho include variables must be in rank order and have monotonic relationships (both values increase or decrease simultaneously; the relationship can be either negative or positive). The Spearman's rho also does not require that a linear

relationship exists between the independent and dependent variables. SPSS 25 (IBM, 2017 was used to analyze relationships related to the corresponding hypotheses.

The Mann–Whitney U

The Mann–Whitney is considered the nonparametric version of a *t*-test. Accordingly, this statistical test was also conducted on hypotheses where data were not normally distributed. The Mann–Whitney *U* was used to compute hypotheses that had a nominal-level independent variable and continuous dependent variable. Four assumptions met were (a) the dependent variable is continuous in nature, (b) the categorical variable are two groups independent of one another, (c) observations between groups are independent of one another, and (d) variables are not normally distributed. The data-analysis software, SPSS 25 (IBM, 2015), was used to analyze these data.

Regression

Simple linear regression were proposed as the data analyses performed on each of the seven hypotheses. However, due the nonnormally distributed variables and appropriateness, this test was only conducted when it met the criteria. Simple linear regression was conducted on hypotheses that displayed a statistically significant relationship and warranted further investigation. Each of the four simple linear regression assumptions were assessed. First, residuals must be normally distributed to meet the first assumption. Next, simple linear regression assumes multivariate normality. The third assumption in this type of regression was to ensure that no autocorrelation existed. The next assumption was not considered in this analysis because it had no relationship to ensuring no multicollinearity. Because the simple linear regressions used in this research study only addressed one independent and one dependent

variable simultaneously, multicollinearity was not a consideration. It was also important to check for the absence of homoscedasticity. The final assumption that was necessary to consider was that the variables have a linear relationship. Data were coded and added to a codebook (see Appendix J) to be analyzed through SPSS 25 (IBM, 2017) to compute this data analysis. Findings from regression equations were reported.

Data-Management Strategies

The Qualtrics, Inc. website provided confirmation that their host site meets necessary security-storage requirements (Qualtrics.com, 2018). Qualtrics returned responses in an anonymous format with no access to participants' identifying responses. The Qualtrics website was reviewed, and it was determined that responses would be collected anonymously. The website provided instructions on how the user was to use the "anonymize responses" in the survey options (Qualtrics.com, 2018, para. 3) to prevent the collection of participants' IP addresses.

Validity

The main validity threat in this study related to sample selection. This study did not incorporate an experimental design, and it was cross-sectional. Thus, the purposive sample with this research design created selection bias.

Conclusion

Chapter 3 provided a discussion on the methodology used to complete this research study. It included recruitment, sampling, data collection and storage, IRB protocol, operationalization of variables and instrumentation, data analysis, and considerations for study validity. The data analysis used to interpret study results is discussed in Chapter 4.

CHAPTER 4: RESULTS

This chapter provides the results of data analysis used to explore relationships between independent variables and compassion fatigue in a purposive sample of Florida-based CPIs. Data from 165 of the 213 returned surveys were analyzed to report results from this study that employed a cross-sectional design. The data from the remaining surveys were not included due to unusable or incomplete data sets. Descriptive and inferential statistics associated with the seven hypotheses are described in this chapter.

Descriptive Statistics

The descriptive statistics for this section relate to CPI demographic information. CPI participants in the combined central and northeast regions of Florida returned a total of 213 surveys. Of those surveys, 48 were unusable due to incomplete data sets. Therefore, the total sample size included valid surveys from 165 participants (see Table 2).

Data Analysis

Age, Gender, Race/Ethnicity

The gender of CPIs completing the survey was as follows, the majority were women of (83.7%, *n* = 123), 24 CPIs were men (16.3%), and the remaining CPIs did not report their gender (10.9%, *n* = 18). The reported ages of CPIs (*n* = 165) ranged from 18-26 years to over 62 years. The highest frequently reported ages were between 27 and 35 years (*n* = 46, 27.9%). The second most frequently reported age group was 18–26 years (*n* = 39, 23.6%). The mean age range was between 33 and 35 years. In regard to race/ethnicity, 54.5% of CPIs identified as Caucasian/White (*n* = 90), 26.1% as Black/African American (*n* = 43;), 12.7% Hispanic/Latino (*n* = 21), 3% identifying as multiracial (*n* = 5), and 3% as biracial or other (*n* = 5; see Table 2).

Table 2

Child-Protective-Investigator Descriptive Information

	N	%
Age (in years)	165	100
18–26	39	23.6
27–35	46	27.9
36–44	33	20.0
45–53	30	18.2
54–62	12	7.3
Over 62	4	2.4
No response	1	0.6
Race/Ethnicity	165	100
Black/African-American	43	26.1
White/Caucasian	90	54.5
Hispanic/Latino	21	12.7
Asian	1	0.6
Biracial	3	1.8
Multiracial	5	3.0
Other race	2	1.2
Gender	165	100
Male	24	16.3
Female	123	83.7
No response	18	10.9
Education	165	100
Bachelor's (helping)	107	64.8
Bachelor's (nonhelping)	11	6.7
Master's (helping field)	25	15.5
Master's (nonhelping field)	10	6.1
Other Degree Type	11	6.6
No response	1	0.6
Time spent in position (in months)	165	100
12 or less	37	22.3
13–24	49	29.4
25–36	18	10.8
37–48	11	6.0
49–60	3	1.8
More than 60	18	9.6
Supervision and training	165	100
Yes	109	66.1
No	55	33.3
No response	1	0.6
Training attendance (n = 165)	165	100
Yes	160	96.9
No	3	1.8
No response	2	1.2

Education and Time Spent in the Field

The researcher-developed CPI demographic survey asked CPIs to identify their highest degree level and type. CPIs with a bachelor's degree in a helping professional comprised the majority of responses (64.8%, *n* = 107). Bachelor's and master's degrees identified in helping professions included social work, mental health, and psychology. CPIs with degrees in healthcare professions included nursing, occupational therapy, education, and early childhood, also classified as helping professionals. Degrees comprising nonhelping professions included physics, accounting, or other science-related degrees. A total of 15.5% of CPIs (*n* = 25) held a master's degree in a helping profession.

The remaining participant education levels were as follows: one participant held an associate's degree (.6%), 24 CPIs held a bachelor's or master's degree in a nonhelping or health-related discipline (22.2%), and 10 CPIs held other degree types (such as a Ph.D.) of degrees (6.6%). A total of 132 CPIs responded to the question asking them how long they had been in their current position. The majority of CPIs reported being in their position between 13 and 24 months (*n* = 49, 29.4%). The second most frequently reported time in position was 12 months or less (*n* = 37, 22.3%). There were 18 CPIs (9.6%) who had been in their position for more than 5 years. CPIs were also asked how many different positions they had held at DCF. Of respondents, 72.2% indicated they held only their current CPI position. The remaining responses included 38 CPIs who indicated that they had held one other position. A total of three CPIs reported they held a total of three positions during their DCF careers.

Utilization of Supervision and Training

The demographic form of the survey asked respondents to provide information on supervision and training utilization. The question on supervision utilization asked participants to

select the types of supervision they attended (group or individual) or to select that they did not attend supervision. A total of 164 of the 165 participants responded to this question: 66.1% (*n* = 109) of participants attended supervision, 33.3% (*n* = 55) did not. A total of 160 of the 165 CPIs reported they attended job-related trainings. A total of 96.9% (*n* = 160) reported they attended job-related trainings, and 1.8% (*n* = 3) did not attend trainings. Table 3 provides the frequencies and percentages.

CPI Trauma History

A total of 164 of the 165 CPIs responded to the question asking them if they experienced specific trauma types. A total of five CPIs chose not to disclose any information as to whether or not they experienced a specific trauma under the age of 18. The highest frequently reported trauma experienced by CPIs before the age of 18 was parental separation/divorce (*n* = 60, 36.4%). The most frequently reported type of abuse experienced by CPIs was verbal abuse (*n* = 56, 33.9%), followed by sexual abuse (*n* = 51, 30.9%), and physical abuse (*n* = 40, 24.2%). The reported trauma types did not indicate which CPIs experienced more than one trauma type (see Table 3).

Remaining at DCF

A total of 164 CPIs responded to the question of whether they were going to stay in their position for the next year. A total of 93 (55.4%) CPIs reported they would remain in their current position for the next year, whereas 23 (13.9%) reported they would not. Of the 164 respondents, 48 (29.1%) were undecided about whether to remain in their current positions.

Inferential Statistics

This section provides a discussion on the results of the hypotheses identified in this research study. Spearman's rho was used to analyze Hypotheses 1, 2, 5, and 6. Because

Hypotheses 1 and 3 displayed statistically significant relationships between two ordinal variables, simple linear regressions were also conducted to further illustrate this relationship. Hypotheses 3, 4, and 7 were analyzed using Mann–Whitney tests. Each of the hypotheses used compassion fatigue as the dependent variable. The ProQOL-5 (Stamm, 2010) classified burnout and STS as two distinct subscales of compassion fatigue. Therefore, all seven hypotheses required independent variables to be analyzed with the compassion-fatigue subscales burnout and STS, run separately.

Table 3

Frequencies of CPI Reported Trauma Histories

Trauma type	*n*	%	Trauma type	*n*	%
Verbal abuse	165	100	Parental divorce	165	100
Yes	56	33.9	Yes	60	36.4
No	103	62.4	No	99	60.0
Not disclosed	5	3.0	Not disclosed	5	3.0
No response	1	0.6	No response	1	0.6
Physical Abuse	165	100	Abused by mother/stepmother	165	100
Yes	40	24.2	Yes	15	9.1
No	119	72.1	No	144	87.3
Not disclosed	5	3.0	Not disclosed	5	3.0
No response	1	0.6	No response	1	0.6
Sexual Abuse	165	100	Exposed to substance abuse	165	100
Yes	51	30.9	Yes	38	23.0
No	108	65.5	No	121	73.3
Not disclosed	5	3.0	Not disclosed	5	3.0
No response	1	0.6	No response	1	0.6
Felt unloved	165	100	Parental mental health or suicide	165	100
Yes	27	16.4	Yes	28	17.0
No	132	80.0	No	131	79.4
Not disclosed	5	3.0	Not disclosed	5	3.0
No response	1	0.6	No response	1	0.6
Neglect	165	100	Parent went to prison	165	100
Yes	26	15.8	Yes	15	9.1
No	133	80.6	No	144	87.3
Not disclosed	5	3.0	Not disclosed	5	3.0
No response	1	0.6	No response	1	0.6

Hypothesis 1: Relationship Between Teamwork Climate and Compassion Fatigue

Hypothesis 1 asserted that a statistically significant relationship would exist between teamwork climate and compassion fatigue. Spearman's rho was performed to explore the relationship between CPI attitude about colleagues (teamwork climate) and compassion-fatigue levels. Compassion-fatigue subscales, burnout, and STS, were tested separately with attitudes about colleagues (teamwork climate). Burnout and STS are considered subscales of compassion fatigue, measured by the ProQOL-5 (Stamm, 2010). The scatterplot was used to assess the assumption of linearity for teamwork climate, management climate, and compassion fatigue prior to calculating the correlation coefficient. Because all four variables were not normally distributed, as indicated by the Shapiro–Wilk nonparametric correlation values were computed. Results indicated that an inverse statistically significant relationship existed between STS and teamwork climate with a Spearman correlation of -.258 (p = .001). Table 4 illustrates the relationship between teamwork climate and compassion fatigue (measured by STS and burnout). The negative relationship indicates that higher STS scores are associated with lower teamwork-climate scores. A Spearman correlation value of -.093 (p = .238) demonstrated no statistically significant relationship between teamwork climate and burnout. There was no statistically significant relationship between teamwork climate and burnout, as measured by a Spearman correlation value of -.093 (p = .238).

Table 4

Spearman's Rho Results for Hypothesis 1: Relationship Between Teamwork Climate and Compassion Fatigue

	Correlation coefficient	Significance (2-tailed)
Compassion-fatigue burnout	-.093	.238
Secondary traumatic stress	-.258**	.001

Note. **Significant at the .01 level (2-tailed), (N = 164).

To further explain the inverse relationship found between teamwork climate and STS, simple linear regression was conducted for further illustration. Prior to conducting a linear regression, it was necessary to ensure that the necessary assumptions for this type of regression were met. The first assumption entailed a visual examination of a scatterplot test that ensured residuals were normally distributed. The second assumption, multivariate normality, was checked using a histogram. A Durbin Watson indicated correlations existed between residuals to meet the fourth assumption, assessing for autocorrelation. Finally, a visual examination of the residuals on the scatterplot indicated the absence of homoscedasticity. The R^2 value of .073 was a small effect size, based on Cohen's classification categories, suggesting that team climate accounted for only 7.3% of the variation in STS.

The simple linear regression model used to predict STS using teamwork climate was statistically significant ($F = 12.813$, $p < .001$). The formula used to illustrate the relationship was $y = 28.224 - .078x$. Accordingly, for every 40-point change in the independent variable, teamwork, a 3-point inverse change occurred in the STS score (see Figure 1).

Hypothesis 2: Relationship Between Management Climate and Compassion Fatigue

Hypothesis 2 stated that a statistically significant relationship would exist between management climate and compassion fatigue. Spearman's rho was performed to explore whether a relationship exists between attitudes about management and compassion fatigue. The dependent variable, compassion fatigue, was measured using two subscales (burnout and STS), with each subscale run separately. A statistically significant relationship did not exist between management climate and STS, measured by Spearman's rho (.072, $p = .079$). Additionally, a statistically significant relationship did not exist between management climate and compassion

fatigue on the subscale burnout. Table 5 illustrates the relationship between variables for Hypothesis 2.

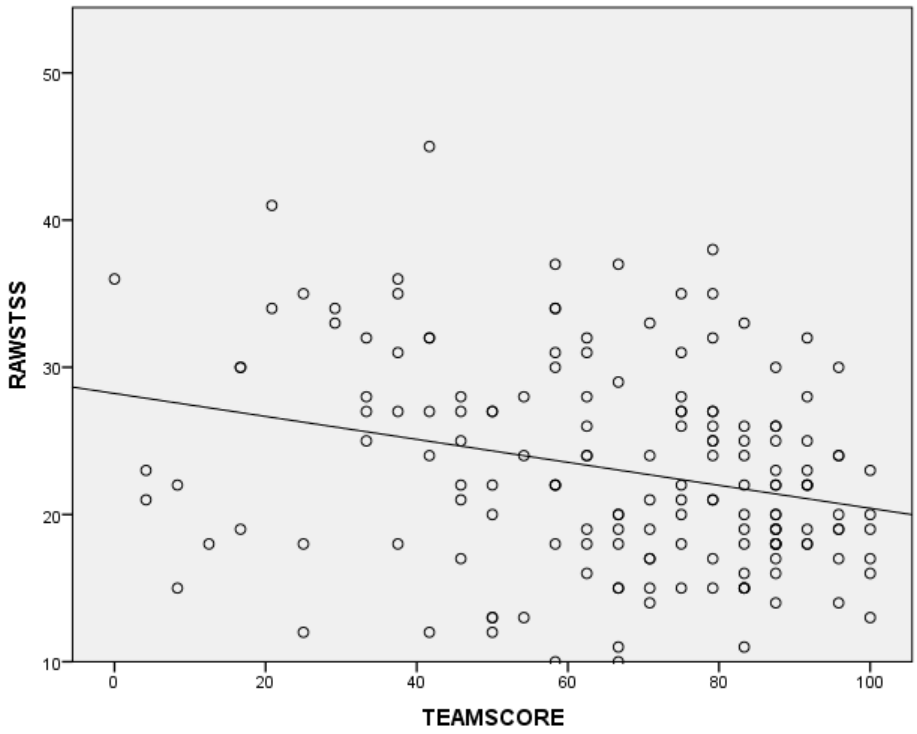

Figure 1. Simple linear regression model illustrating the relationship between teamwork climate and secondary traumatic stress.

Table 5

Spearman's Rho Results for Hypothesis 2: Relationship Between Management Climate and Compassion Fatigue

	Correlation coefficient	Significance (2-tailed)
Compassion-fatigue burnout	-.072	.357
Secondary traumatic stress	-.137	.079

Note. **Significant at the .01 level (2-tailed), (N = 164).

Hypothesis 3: Relationship Between Utilization of Supervision and Compassion Fatigue

Hypothesis 3 stated that a statistically significant relationship would exist between CPI use of supervision and compassion fatigue. The independent variable, utilization of supervision,

was coded as a nominal, binary response of yes/no. The dependent variable, compassion fatigue with subscales (burnout, and STS), was measured separately as ordinal variables. The Mann–Whitney test was used to analyze Hypothesis 3. In concert with the assumptions for the Mann–Whitney test, the independent variable (supervision attendance) was nominal and the dependent variable (compassion fatigue, as measured by the subscales burnout and STS) was ordinal. Results for Hypothesis 3 demonstrated that a statistically significant negative relationship existed between utilization of supervision and STS (t = -2.041, p = .041).

The results of the analysis using Mann–Whitney tests suggested that CPIs that used supervision had lower STS scores than those who did not use supervision. The Mann–Whitney test was also conducted to determine whether or not a relationship existed between the independent variable, utilization of supervision, and the dependent variable, burnout. No statistically significant relationship existed between CPI utilization of supervision and CPI burnout (t = 1.504, p-value = .132). Table 6 illustrates the hypothesis test results for supervision use and compassion fatigue.

Table 6

Mann–Whitney Results For Hypothesis 3; Relationship Between Supervision Utilization and Compassion Fatigue

Hypothesis	Sig (2-tailed)
Relationship exists between supervision utilization and secondary traumatic stress level.	**.041
Relationship exists between supervision utilization and burnout.	.132

*Note.***.05 significance level, (N = 164)

Hypothesis 4: Relationship Between Trainings and Compassion Fatigue

Hypothesis 4 asserted that a statistically significant relationship exists between utilization of job-related trainings and CPI compassion-fatigue level. A Mann–Whitney test was used to analyze attendance of job-related trainings as a nominal variable (as indicated by a yes/no

categorization of responses). The dependent variable, compassion fatigue was an ordinal dependent variable with separate tests run for the burnout and STS subscales. In regard to Hypothesis 4, no statistically significant relationship existed between CPI training attendance and compassion fatigue (as measured by subscales, STS, or burnout; see Table 7).

Table 7

Mann–Whitney Results for Hypothesis 4: Relationship Between Trainings Utilization and Compassion Fatigue

Hypothesis	Sig (2-tailed)
Relationship exists between attendance of job-related trainings and secondary traumatic stress	.068
Relationship exists between job-related trainings and burnout	.115

Note. .05 significance level, (N = 164).

Hypothesis 5: Relationship Between Child-Protective-Investigator Age and Compassion Fatigue

Hypothesis 5 stated that a statistically significant relationship would exist between CPI age and compassion-fatigue level. A Spearman's rho test was used to analyze the relationship between the independent variable, CPI age, and the dependent variable, CPI compassion-fatigue level (measured through separate analyses of the burnout and STS subscales). When analyzing Hypothesis 5, a negative statistically significant relationship existed between CPI age and STS level (rho = -.224, p = .004). Results indicated that older CPIs displayed lower levels of compassion fatigue on the STS subscale. However, there was no statistically significant relationship between CPI age and CPI burnout (rho = -.103, p = .192) (see Table 8). Table 8 illustrates the relationship , measured by Spearman's rho.

Simple linear regression was used to predict CPI age on STS level. To ensure assumptions were met, appropriate tests were conducted. A scatterplot was run to examine residuals to ensure they were normally distributed. Second, a histogram was examined to ensure multivariate

normality. Assessment for autocorrelations was conducted using the Durbin Watson test that indicated correlations between residuals. A visual examination of the residuals on the scatterplot indicated the absence of homoscedasticity. The R^2 value of .044 was a small effect size, based on Cohen's classification categories. The model used to predict STS using age was statistically significant ($F = 12.813$, $p < .05$). The formula used to describe the relationship is $y = 25.79 - 0.38x$. Figure 2 illustrates the regression line demonstrating the relationship between CPI age and STS.

Table 8

Spearman's Rho Results For Hypothesis 5: Relationship Between CPI Age and Compassion Fatigue

Hypothesis	Correlation coefficient	Sig (2-tailed)
Compassion-fatigue burnout	-.103	.192
Secondary traumatic stress	0.224**	.004

Note. **Significant at the .01 level (2-tailed), (N = 164).

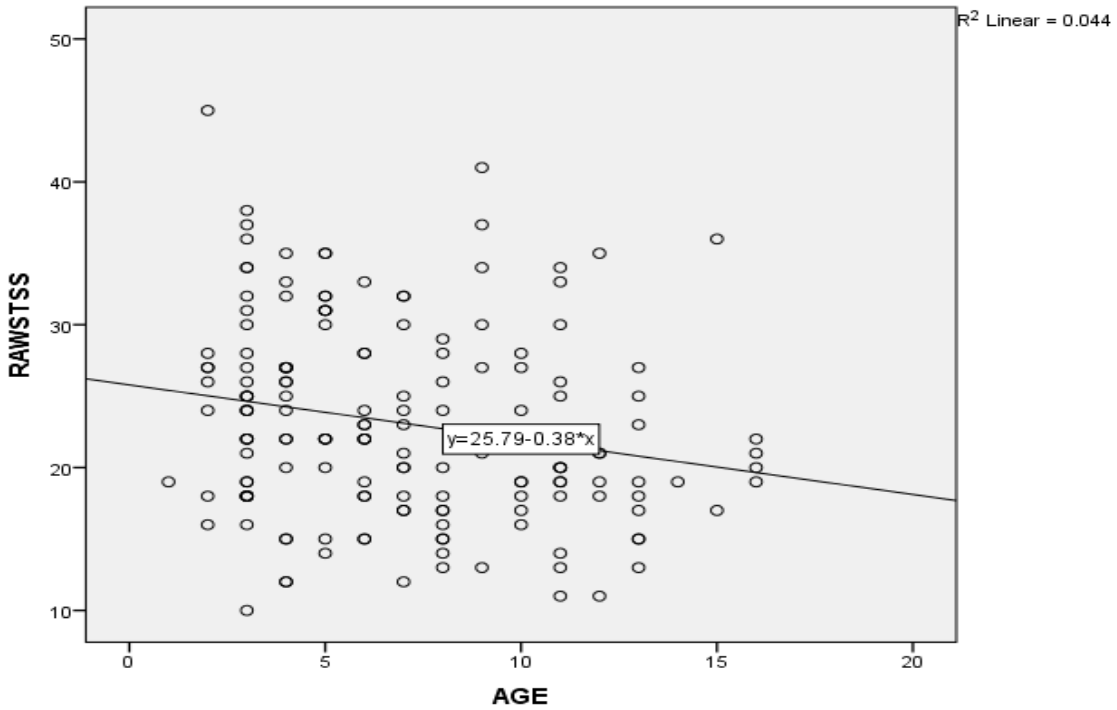

Figure 2. Simple linear regression model illustrating the relationship between CPI age and secondary traumatic stress.

Hypothesis 6: Relationship Between Time Spent in the Field and Compassion Fatigue

Hypothesis 6 stated that a statistically significant relationship would exist between CPI time spent in the field and compassion-fatigue level. Spearman's rho was used to analyze the relationship between the independent scale variable, CPI's time spent in the field, and compassion-fatigue level (measured separately using the burnout and STS subscales). No statistically significant relationships existed between CPI time spent in the field and burnout (rho = .130, p = .140). Similarly, no statistically significant relationship was shown to exist between CPI time spent in the field and STS (rho = .053, p = .545). Table 9 illustrates the results of Spearman's rho that demonstrated no relationship existed between CPI time spent in field and compassion fatigue.

Table 9

Spearman's Rho Results for Hypothesis 6: Relationship Between Time Spent in Field and Compassion Fatigue Spearman's rho

Hypothesis	Correlation coefficient	Sig (2-tailed)
Compassion-fatigue burnout	.130	.140
Secondary traumatic stress	.053	.545

Note. **Significant at the .01 level (2-tailed), (N = 164).

Hypothesis 7: Relationship Between Trauma History and Compassion Fatigue

Hypothesis 7 stated that a relationship would exist between CPI personal trauma history and compassion-fatigue level. The independent variables comprised various trauma types, categorized as nominal yes/no variables. The dependent variable, compassion fatigue, continued to be measured as an ordinal level variable. Mann–Whitney tests were used to analyze the relationship between each trauma type (categorized as yes/no) and compassion fatigue (burnout and STS). A negative statistically significant relationship existed between exposure to verbal

abuse and STS level in CPIs (t = -2.661, p = .008). There were no other statistically significant relationships between exposure to other trauma types and compassion-fatigue level (burnout and STS). Each trauma type was analyzed with the compassion-fatigue subscales, STS and burnout (run separately). Table 10 illustrates the values for each trauma-type variable.

Table 10

Mann–Whitney Tests Results for Hypothesis 7: Results for Relationship Between Trauma Types and Compassion Fatigue

Hypothesis A statistically significant relationship exists between	Burnout t =	Burnout Sig.	STS t =	STS Sig.
Verbal abuse and compassion fatigue	-1.115	0.265	-2.661**	.008
Physical abuse and compassion fatigue	-0.347	0.729	-1.678	.093
Sexual abuse and compassion fatigue	-0.612	0.541	-0.871	.384
Felt unloved and compassion fatigue	-0.655	0.512	0.798	.425
Neglect and compassion fatigue	-1.241	0.214	-1.651	.099
Parental divorce and compassion fatigue	-1.514	0.130	-1.241	.215
Maternal abuse and compassion fatigue	-0.892	0.372	-0.734	.463
Parental substance misuse and compassion fatigue	-0.053	0.958	-0.181	.856
Parental mental health issues and compassion fatigue	-0.089	0.929	-1.598	.110
Parent goes to prison and compassion fatigue	-0.137	0.891	-0.769	.442

Note. **The significance level is .05, (n = 164).

Conclusion

Chapter 4 presented the results from the data analysis for the seven hypotheses researched in this study. Data analysis using the Spearman's rho for Hypothesis 1 demonstrated that a negative statistically significant relationship existed between attitudes about colleagues (teamwork climate) and the compassion-fatigue subscale, STS, but not between teamwork climate and burnout. Hypothesis 2 demonstrated that a statistically significant relationship did not exist between attitudes about management and CPI compassion fatigue (subscales STS and burnout), when analyzed using Spearman's rho. The Mann–Whitney test used to address

Hypothesis 3 demonstrated that lower STS scores were lower in CPIs who utilized supervision than those who did not. The Mann–Whitney test used to analyze Hypothesis 4 demonstrated that a statistically significant relationship did not exist between CPI utilization of trainings and CPI compassion fatigue. For Hypothesis 5, regarding the relationship between CPI age and compassion fatigue, Spearman's rho findings demonstrated that an inverse relationship existed between the two variables. The younger the CPI, the higher the levels of compassion fatigue (measured on subscale STS). However, no statistically significant relationship existed between CPI age and compassion fatigue (measured by the subscale burnout). Results using a Mann–Whitney test for analysis of Hypothesis 6 demonstrated that no relationship existed between CPI time spent in the field and compassion fatigue. Mann–Whitney tests were also run for Hypothesis 7 to explore whether or not relationships existed between CPI trauma and compassion fatigue (measured by the STS and burnout subscales). Only verbal abuse demonstrated a relationship. Those CPIs reporting they experienced verbal abuse displayed higher STS than those who reported they did not. Researchers reported that compassion fatigue and STS definitions are so similar that they can be used interchangeably (Figley, 1995, 2002a, 2002b). Therefore, Hypotheses 1, 3, 5, and 7 (verbal abuse only) demonstrated a negative statistically significant relationship. The remaining Hypotheses 2, 4, 6, and the remaining trauma types for Hypothesis 7 did not display statistically significant relationships between independent variables and either compassion-fatigue subscale. Chapter 5 contains further conclusions that can be drawn from the results of this research study, guided by the existing literature. The final chapter also highlights key findings from each hypotheses and provide implications and limitations.

CHAPTER 5: FINDINGS AND DISCUSSION

The purpose of this study was to explore relationships between CPI compassion-fatigue levels and work climates, resources utilization, and professional and personal characteristics. The findings from the work-climate variables—attitudes toward colleagues and management—will be discussed in this chapter under Hypotheses 1 and 2. The findings from variables comprising CPI resources utilization , supervision, and job-related trainings, will be included in the discussion for Hypotheses 3 and 4. The findings for the final three hypotheses (5–7): CPI age, CPI time spent in the field, and CPI trauma history, will also be discussed. The dependent variable, compassion fatigue, was measured using the ProQOL-5 subscales, burnout and STS. This chapter also includes discussions related to the dependent variable in relation to each hypothesized independent variable.

In addition to the ProQOL-5 used to measure the dependent variable, the SAQ was used to measure the variables on work climate. The final instrument used for variable measurement in this study was a researcher-developed CPI demographic form. This form gathered data on resources use and CPI characteristic variables. This chapter presents the important findings relevant to descriptive variables. Upon completion of the discussion section of this chapter, limitations related to this research study and conclusions will include implications for policy, research, and practice.

Summary of Findings and Conclusions

Hypothesis 1: Teamwork Climate and Compassion Fatigue

Attitudes about colleagues are one of several areas that comprise work climate (Sexton et al., 2006). The reason this research study included teamwork climate was because Horwitz (2006) noted that this organizational factor was associated with compassion fatigue. Henson

(2017) asserted that more research is needed to better understand how work environment is associated with compassion fatigue among professionals. Few quantitative studies explored the relationship between compassion fatigue in work climate and compassion fatigue in human-services professionals (Ghesquiere et al., 2018). Among extant studies, researchers often include teamwork climate as a characteristic of the broader category, perceptions of the work environment (Brady, 2017; Ghesquiere et al., 2018; Henson, 2017; Horwitz, 2006). Therefore, the first hypothesis aimed to further understand how CPIs' attitudes about colleagues was associated with compassion fatigue.

The ways that compassion fatigue is researched vary in relation to work climate in the existing literature (Brady, 2017; Kelly & Todd, 2017; Ghesquiere et al., 2018). To consistently measure compassion fatigue, the ProQOL-5 (Stamm, 2010) was used to separate the two subscales, STS and burnout, in this research study. Consistent with the existing literature, the usage of STS to define compassion fatigue is considered acceptable, as the terms are often used interchangeably (Figley, 1995, 2002a, 2002b).

The first hypothesis of this research study found that a relationship existed between teamwork climate and compassion fatigue. Results from the Spearman's rho displayed an inverse relationship between CPI attitudes about colleagues and STS (rho = -.258, p = .001). However, no statistically significant relationship was found between CPI attitudes about colleagues and burnout.

In concert with the original proposal to use regression analysis for hypothesis testing, A simple linear regression was also conducted. The purpose of conducting a regression analysis was to attempt to further explain the linear relationship between teamwork climate and compassion fatigue. The results displayed a statistically significant linear relationship

($F = 12.813$, $p < .001$) between teamwork climate and STS. The regression equation was $y = 28.224 - .078x$.

The manner in which a CPI perceives their interactions and experiences with their coworkers can affect how they feel about their team (Sexton et al., 2006). A professional's feelings of safety, feelings of preparedness, level of experience, and how they feel in their roles, contribute to the presence of compassion fatigue (Horwitz, 2006; Jankoski, 2010; Knight, 2010; Nelson-Gardell & Harris, 2003; Tyler, 2012). Sexton et al. (2006) suggested that colleagues may partially influence the feelings and perceptions related to safety, job readiness, and roles. In fact, the SAQ conceptualizes employee perceptions of their own input, ability to be assertive, the manner in which disagreements are addressed, feelings of being supported, ease of asking for direction, and an ability to work together as a team as what comprises a teamwork climate (Sexton et al., 2006).

Child-abuse investigational work places CPIs at risk of feeling symptoms of STS at any time. These findings can be appraised positively in that CPIs with low STS scores hold more positive attitudes toward their colleagues. However, the findings also suggested that when STS scores are high, CPIs' positive attitudes about colleagues decreases. This assertion highlights a significant concern related to a CPI's ability to seek and receive support from colleagues. Because STS symptoms are typically present immediately following a trauma, this conclusion presents an area in which CPIs may benefit from immediate evaluation and intervention.

The findings from Hypothesis 1 seemed to suggest that CPI attitudes about colleagues predicts STS in CPIs. However, CPI burnout level does not statistically significantly relate to attitudes toward colleagues. The reasons a statistically significant relationship between teamwork climate and STS existed, but not between teamwork climate and burnout, is not entirely clear.

Stamm (2010) explained that a sudden-onset of symptoms related to direct trauma exposure characterized STS. Brady (2017) similarly concluded that even when workers feel satisfied in their respective positions, they often have difficulty managing on-the-job trauma exposure. These finding highlight the importance that attitudes about colleagues is a variable that needs to be studied independently from other work climate variables. The differences between the onset of symptoms in burnout and STS may be one factor that influences the results in this analysis.

Hypothesis 2: Management and Compassion Fatigue

Similar to teamwork climate, researchers often work to identify perceptions of management under the broader category, work climate (Brady, 2017; Ghesquiere et al., 2018; Henson, 2017; Horwitz, 2006). To first determine if strengthening CPI attitudes about management is an area in need of further study, it was first necessary to explore whether or not a relationship existed. For this research study, Spearman's rho was used to test whether CPI attitudes about management were associated with compassion-fatigue level. A statistically significant relationship was not found to exist between CPI attitudes about management and STS (rho = 0.072, p = .079) or burnout (rho = -.137, p = .079).

Hypothesis 3: Supervision and Compassion Fatigue

In addition to attitudes about management, the utilization of supervision is another variable identified in the literature as having an association with compassion fatigue (Joinson, 1992; Knight, 2010; Pelon, 2017; Tyler, 2012). Hypothesis 3 presents the utilization of supervision in the context of effectiveness as a used resource. In this context, previous researchers indicated that face-to-face supervision helps combat compassion fatigue in social workers (Pelon, 2017). Authors suggested that direct supervision could be an effective preventative strategy to mitigate compassion fatigue (Kinman & Grant, 2016; Knight, 2010;

Tyler, 2012), but there was limited discussion on how supervision influenced compassion fatigue. Items on the CPI demographic form related to Hypothesis 3 asked CPIs to indicate the type of supervision they attended. However, when analyzing the results, responses were collapsed into yes/no responses. Results from the Mann–Whitney test indicated that CPIs who attended supervision had lower STS values than those who did not. A statistically significant inverse relationship was demonstrated between CPI supervision utilization and STS (t = -2.041, p = .041), but not for burnout (t = 1.504, p-value = .132).

Findings from Hypothesis 3 highlight the importance of further exploration as to why CPIs who attended supervision had lower STS scores than those who did not. The topics discussed in supervision and STS severity are two areas that may help stakeholders better understand this relationship. CPIs who attend supervision may feel better supported than those who do not attend. However, the relationship explored in this study did not indicate a directional hypothesis or a causal relationship. The findings do indicate that enhancing supervision and identifying effective tools to deliver supervision may help reduce the trauma experiences of CPIs. Future research could focus on establishing this relationship as a causal relationship, which could result in targeting supervision strategies to decrease CPI compassion-fatigue risk.

Hypothesis 4: Trainings and Compassion Fatigue

There is not enough research to fully understand the relationship between job-related trainings and compassion fatigue in CPIs. The existing research suggests that those professionals who use trainings or workshops may experience a reduction in their overall feelings of stress and trauma (Horowitz, 2010; Jankoski, 2010; Kinman & Grant, 2016, Nelson-Gardell & Harris, 2003; Wright et al., 2006). The goal of testing Hypothesis 4 was to use quantitative methods to understand if a relationship exists between CPI utilization of job-related trainings and

compassion fatigue. Two of the leading studies in child welfare and compassion fatigue suggested that attending a training is important, but they do not provide evidence to support that relationships exist between the two variables (Horwitz, 2006; Jankoski, 2010). This research study used the Mann–Whitney test to explore whether a relationship existed between trainings and compassion fatigue. The results indicated that neither STS nor burnout were statistically significantly related to job-related trainings.

Hypothesis 5: Age and Compassion Fatigue

Hypothesis 5 explored whether CPI age and compassion fatigue displayed a statistically significant relationship, perhaps providing some of the most significant findings. The ranges of ages specific to child-welfare professionals was broadly represented in the existing literature (Harr & Moore, 2011; Kapoulitsas & Corcoran, 2015; Van Hook & Rothenberg, 2009). Van Hook and Rothenberg (2009) provided some of the most important considerations for this research hypothesis. Their findings indicated that younger aged child-welfare (ages 18–29) experienced a higher compassion-fatigue score than older workers (Van Hook & Rothenberg, 2009). This research study revealed similar findings, as reported by the Spearman's rho. The older aged CPIs in this research study demonstrated lower STS scores (rho = -.224, p = .004). However, no statistically significant relationships existed between CPI age and burnout. The results indicate that age is an important variable to further explore in relation to STS and burnout. STS encompasses the sudden onset of symptoms, usually brought on by a traumatic event (Stamm, 2010). Perhaps, younger CPIs have not had the opportunity to implement effective coping skills when presented with investigative trauma exposure. Older CPIs' experience of processing trauma may present as a protective factor, shielding them from the immediate effects of exposure.

The reasons why older age closely aligned with lower STS is unknown and conclusions would be entirely speculative. To better understand the relationship between STS and CPI age, simple linear regression was conducted. The model predicting age on STS was statistically significant ($F = 12.813$, $p < .05$)., and the equation was $y = 25.79 - 0.38x$. As a result of these findings, future researchers might focus on exploring differences between burnout and STS and how they were associated with CPI age. It might also be beneficial to explore the protective and risk factors associated with participants in research studies where these relationships appear to be present.

Hypothesis 6: Time and Compassion Fatigue

The literature on how time spent in the field was associated with CPI compassion fatigue varied (Salloum et al., 2015). Salloum et al. (2015) found lower compassion fatigue had a relationship with more time spent in the child-welfare field. Spearman's rho was used to determine if a relationship between CPI time spent in the field was associated with compassion fatigue. No relationship was found between CPI time spent in the field and burnout (rho = .130, $p = .140$) or STS (rho = .053, $p = .545$). In concert with the findings reported in this research, Van Hook and Rothenberg (2009) found no statistically significant relationship between compassion satisfaction and CWP time spent in the field.

Hypothesis 7: Trauma History and Compassion Fatigue

The trauma types identified for this hypothesis were adapted from the ACEs (Felitti et al., 1998). Research related to relationships between CPI trauma history and compassion fatigue remains limited and minimally understood. One study found that professionals with a personal trauma history had more compassion fatigue than those professionals who did not (Turgoose & Maddox, 2017). This research study adapted ACEs (Felitti et al, 1998) to gain more insight into

the relationship between CPI personal trauma history and compassion fatigue. ACEs found a close dependent relationship between the adverse events occurring under 18 years of age and long-term negative health outcomes (Felitti et al., 1998). Their findings meant that the number of traumas experienced by a participant increased risk of poor health outcomes in adults. This research study did not analyze multiple trauma exposures in relation to the presence of compassion fatigue in CPIs, and this could be an area warranting further study.

Hypothesis 7 was analyzed using a Mann–Whitney test stating that a statistically significant relationship existed between CPI personal trauma history and compassion fatigue. A statistically significant relationship was found to exist between verbal abuse before 18 years of age and STS in CPIs. Those CPIs who reported exposure to verbal abuse had higher STS scores than those CPIs who did not report verbal abuse. No other statistically significant relationships existed between CPI personal trauma history and their level of compassion fatigue. The statistically significant relationship between trauma type, verbal abuse, and STS differs from the most frequently reported trauma type, parental separation and divorce. This relationship could be due to chance. The ACEs study scored their study differently from how it was done in this research study. In ACEs, as the number of adverse childhood experiences increased, so did the number of negative outcomes (Felitti et al., 1998). Future research may benefit from further exploration of which ACEs events influence STS and burnout in CPIs.

Findings Summary

Querying the demographic CPI age revealed that younger age was related to higher STS levels. This relationship may exist because the most frequently reported age range in this study was 27–35 years of age (n = 46, 27.9%). Demographic variables were reported in frequencies in this research study. Harr and Moore (2011) introduced age and time spent in the field as

variables in their research study. The age spread of social workers and students was 21–56 years of age (Harr & Moore, 2011). Unlike this research study, Harr and Moore (2011) found time spent in the field influenced compassion fatigue in social workers and students. Findings from the hypothesis in this research study reported implications for the relationship between CPI age and compassion fatigue. Degree type held important implications in this research study as the majority of CPIs in a helping profession held a bachelor's or higher degree (social work, psychology, education, or healthcare; n = 117, 70.3%).

This research study did not explore whether a relationship between CPI gender was associated with compassion-fatigue level. However, extant studies seemed to suggest that professionals studied in the literature were predominately women (Way et al., 2007). This research study presented similar findings, most CPIs were women (83.7%, n = 123), 24 CPIs were men (16.3%), and the remaining CPIs did not report their gender (10.9%, n = 18). Researchers suggested that women are more likely than men to fall victim to compassion fatigue (Way et al., 2007). It is unknown whether this is because women are the majority in existing studies. Other variables reported in this research study are for descriptive purposes only.

Child-abuse investigations can expose CPIs to daily job-related trauma, resulting in high turnover rates in child-welfare agencies (Van Hook & Rothenberg, 2009). DCF (2016) identifies and reports on position attrition rates to improve retention. The Florida statewide reported CPI attrition rates remained somewhat constant between 2013 and 2016 (DCF, 2016). Attrition rates by year were at 32% (2013–2014), 30% (2014-2015), and 37% (2015–2016; DCF, 2016). A major consideration for this research study was to explore factors associated with compassion fatigue in CPIs to offer insight into what factors might influence retention. This research study did incorporate a research question that explored how certain variables related to CPI turnover

rates; but CPIs were asked if they were planning to stay in their current position. A total of 93 CPIs (54.5%) reported they were planning to stay in the position. A total of 48 reported they were unsure if they would remain in their position (29.1%). The remaining 23 CPIs (13.9%) indicated they would not remain in their current position.

Several preliminary findings can be surmised from the results of data analysis. Colleagues with positive attitudes and the utilization of supervision both aligned with lower STS scores in CPIs. These findings seemed to suggest that addressing compassion fatigue in child welfare is two-fold. First, best-practice strategies related to supervisory direct support appears to be important. However, it is of equal importance to help CPIs maintain supportive relationships with one another as part of workplace morale.

The study provided a significant amount of research that highlights the necessity to understand that compassion fatigue comprises symptoms that have both sudden and gradual symptom onset (Figley, 1995; Stamm, 2010). Because CPIs' age was associated with STS, it is necessary to consider how age and life experiences of CPIs influence coping. A younger CPI may feel more unprepared to address the feelings that arise from witnessing a traumatic event, especially when such exposure is new to them. The relationship between CPI age and compassion fatigue is an important area for further research.

Limitations

Design and Sample

The type of research design and sample were limitations to this research study. This study incorporated a cross-sectional study design, which meant that the CPI's mood from work-related or personal stressors could have influenced their responses. This researcher recruited a purposive sample of a DCF CPIs, which limited accessibility to the study. The recruitment of a purposive

sample from two previously identified data-collection sites could have resulted in sampling bias. The CPIs for this research study only represented a small subset of the overall CPI population. Although the sample was large enough to obtain statistically significant results, and did produce relevant findings for some hypotheses, it is difficult to generalize findings due to usage of a unrepresentative sample. Because the invitational e-mail was administered online through CPI work e-mail addresses, prospective participants may have overlooked the invitation link or elected not to complete the survey. The survey was estimated to take about 20 minutes to complete, which could have discouraged participant responses due to CPI time constraints.

Variables and Instrumentation

Unexpected challenges arose in variable measurement. The researcher-developed CPI demographic form contained items intended to measure the utilization of supervision and job-related trainings. However, the corresponding hypotheses were stated in a manner that required yes/no responses. The supervision variable asked participants to identify whether they attended group supervision, individual supervision, or did not attend supervision. Similarly, CPIs were asked to identify how often they attend job-related trainings. These variables were collapsed and measured as yes/no categories. Although definitive responses indicated some CPIs did not attend supervision or job-related trainings, it is unknown if results were affected by manipulation of these categories.

A major limitation to this study was the exclusion of assessing compassion satisfaction in relation to compassion fatigue. Compassion satisfaction is a subscale included in the ProQOL-5 (Stamm, 2010) and the questions remained in the assessment provided to the CPIs. The addition of the compassion-satisfaction variable does not appear to minimize the current research findings, but would have been beneficial in assisting with the interpretations. There appears to be

some association between compassion satisfaction and compassion fatigue. However, researchers have not been able to fully clarify this relationship (Stamm, 2010). The addition of this variable may have contributed to understanding these relationships better. It is recommended that future studies explore if compassion satisfaction presents as a mediating or moderating variable when examining it in relationship to compassion fatigue.

The researcher-developed demographic form was not a norm-referenced instrument. As such, the form contained some errors in question format, as described above. The introduction of questions related to compassion satisfaction in the ProQOL-5 also extended the length of the survey. Questions related to CPI trauma history were adapted from ACEs (Felitti et al., 1999. However, the study only asked participants to indicate if they had experienced a specific type of trauma as a nominal response. The trauma histories were also not questions pulled from or scored from the ACEs instrument for trauma history. Each trauma type was analyzed separately with STS and burnout. Since there were no statistically significant results for other trauma types except verbal abuse, it is unknown if running them together would have made a difference or if the relationship between verbal abuse and compassion fatigue was only due to chance.

Data Analysis

The usage of a two-tailed hypothesis could have been a limitation in the ability to obtain statistically significant results. The usage of one-tailed hypotheses could have increased the probability of statistically significant results, if results were favorable in the identified direction. However, the limitations in the existing literature's ability to establish direct relationships resulted in limited support in determining directionality. The question pertaining to trauma type and compassion fatigue may have yielded statistically significant results if the hypotheses were identified as one-tailed because one type of trauma did indicate a relationship with STS.

It is also important to consider how unknown or no responses can affect data analysis, especially if a significant amount of data is missing. The only item missing several responses was CPI gender, which could have been due to question placement or wording. The question pertaining to gender was not used in any of the identified hypotheses in this research study. Therefore, lack of responses does not appear to have influenced the overall ability to generate statistically significant results.

Implications and Recommendations for Future Research

Policy and Public Affairs

State governmental agencies are responsible for the intervention decision-making process for children at risk of or with substantiated maltreatment (HHS, 2015). Prevention services are an integral part of preserving families and ensuring children remain safe (HHS, 2015). Funding for such services is federally distributed and provided to local state offices for service implementation. The Child Abuse Prevention and Treatment Act (CAPTA) is responsible for aiding in the prevention of and intervention in child abuse and neglect (HHS, 2015). Title I of CAPTA funds services intended to improve child-protection-services delivery through professional trainings, interdisciplinary team development, enhanced screenings and assessments, and services for babies with life-threatening concerns (HHS, 2015). Title II of CAPTA provides funding to agencies to improve child-abuse intervention and prevention in the community (HHS, 2015).

Sections of the Social Security Act provide additional funding for family preservation and support services. Title IV-B, Subpart 2, Section 430 of this act aims to provide intervention to prevent children from being removed from their homes or mandates the creation of an alternative permanent sheltering plan for children who cannot be permanently returned to their

homes (HHS, 2015). Title XX of the Social Security Act provides grants that fund childcare services, counseling services, foster care, or other services that are responsible for preventing and responding to the abuse of a child (HHS, 2015).

Compassion Fatigue as a Public Health Concern

Although the sample size for this study examined the results of 165 CPIs in a Florida-based sample, the results hold implications for public affairs. Research results show that "caring is an occupational hazard" for professionals across disciplines who witness, hear about, and support individuals experiencing a primary trauma (Jankoski, 2010, p. 117). Professionals working with traumatized clients experience this as a work hazard that must be addressed, just as job-exposure risks are identified and addressed in other fields (Jankoski, 2010; Molnar et al., 2017; Nelson-Gardell & Harris, 2003). The challenges described in the existing literature are that work climate broadly encompasses employee perceptions of colleagues, perceptions about work environment/duties, and perceptions of supervisors (Brady, 2017; Ghesquiere et al., 2018; Henson, 2017; Horowitz, 2010). The first research question included two hypotheses aiming to further clarify what work-climate variables related to compassion fatigue. In the current research study, attitudes about colleagues found an inverse statistically significant relationship with STS. However, CPI attitudes about management did not suggest a statistically significant relationship with compassion fatigue. Although managers and supervisors can negatively or positively influence work environment (Joinson, 1992), results from this study seemed to indicate that future research should focus on improving relationships among colleagues.

These relationships mean that as one value increases, the other value decreases, and vice-versa. In child welfare, compassion fatigue in CPIs can risk the safety of employees and clients alike. The failure of a CWP to thoroughly perform job duties in combination with reduced

empathy (Figley, 1995, 2002a, 2002b) can affect job performance and place abused children at a higher risk of harm (Jankoski, 2010; McFadden et al., 2015). CWPs who experience symptoms of compassion fatigue are more likely to display a decreased capacity for empathy, absence, tardiness, apathy, lack of emotional attachment toward their work, and failure to honor work responsibilities (Boyle, 2015; Figley, 2002b).

Jankoski (2010) called on all child-welfare agencies to evaluate how they operate and what they can do to address trauma exposure to their employees. Molnar et al. (2017) suggested symptoms of work-related trauma exposure present a public health concern. Molnar et al. recommended a proactive approach for responding to job-related trauma exposure. When compassion fatigue remains unaddressed, it results in high attrition and poor employee retention rates in child-welfare agencies that already struggle to maintain staff (Jankoski, 2010; McFadden et al., 2015; Van Hook & Rothenberg, 2009). By being aware of variables that demonstrate a statistically significant relationship (for the current study, age, utilization of supervision, and attitudes about colleagues), future research can focus on better understanding these relationships as a first step toward decreasing CPI compassion fatigue. Teamwork and management climate are believed to influence employee turnover and retention rates among child-welfare professionals (Jankoski, 2010). Future research exploring causal relationships on factors that influence CPI attitudes about colleagues may assist child-welfare agencies in implementing resources designed to support positive workplace morale.

Practice

A gap in the literature is a discussion about how professionals working in the child-welfare field cope with trauma exposure on the job. Some researchers indicated that personal and professional demographics affect trauma experiences. However, most studies did not

demonstrate a direct link between position type, education, years in practice, gender, age, or other demographics specific to professionals (Bride, 2007; Nelson-Gardell & Harris, 2003). The current research study found that older CPIs displayed lower STS values on the ProQOL-5. However, no statistically significant relationship existed between CPI time spent in the field and compassion fatigue. It appears that identifying specific factors that may explain the differences in STS scores, based on age, may help agencies develop interventions to better support younger CPIs.

Researchers consistently demonstrated that adverse reactions to trauma exposure are prevalent among practitioners in human-service fields (Badger et al., 2008; Cohen & Collens, 2013; Cunningham, 2003; Dane, 2002; Horwitz, 2006; Jankoski, 2010; Knight, 2010; Nelson-Gardell & Harris, 2003; Osofsky, 2009). Interventional planning is important because unresolved compassion fatigue can negatively affect a professional's personal and occupational functioning (Badger et al., 2008; Cohen & Collens, 2013). Furthermore, the literature has a paucity of evaluations of intervention effectiveness. Much of the literature to date focuses on the impact of compassion fatigue on professionals in specific human-services fields and recommended interventions to help professionals address secondary trauma without appropriate evaluation of those interventions (Bober & Regehr, 2005; Dane, 2002; Osofsky, 2009; Tyler, 2012).

When secondary trauma is not addressed, it impairs the functioning of the affected professional (Cohen & Collens, 2013). Thus, proper intervention is key to helping professionals overcome these obstacles. This is especially true in the area of child welfare because secondary trauma often accompanies work with this population (Osofsky, 2009). Because a critical part of effective human-services delivery is ensuring the safety of the client, it is even more imperative that all professionals providing these services receive support from each other (Cohen & Collens,

2013). Too few studies examined the effectiveness of any one intervention (Bober & Regehr, 2005).

Supervision is an effective secondary-trauma intervention, although the type and frequency of supervision varies (Osofsky, 2009; Tyler, 2012). However, no studies explicitly defined the meaning of the use of supervision, which further contributes to gaps in knowledge about this topic. Bober and Regehr (2005) come closest by surveying practitioners about their perceptions of supervision effectiveness, along with other self-care strategies. Findings suggested that some practitioners perceive supervision as helpful and, therefore, make time for this intervention. Overall, even if viewed as helpful, not all practitioners experiencing secondary trauma ensure they attend (Bober & Regehr, 2005). The current research study explored how the use of supervision and job-related trainings associated with compassion fatigue. The results indicated that CPIs who used supervision displayed lower STS scores. However, no relationships existed between CPI attendance of job-related trainings and STS scores. Neither resource-utilization variable was associated with burnout. Supervisors and child-welfare administrators may benefit from querying CPIs about what supervision topics they found to be most helpful.

Research

Nelson-Gardell and Harris (2003) explained that a comprehensive definition of secondary trauma exposure has two distinct parts: the professional's exposure to an individual's traumatic event and the professional's response or reaction to the exposure. Exposure means the professional's experience of listening to or processing the traumatic account of another individual. The reaction to exposure can lead to changes in the professional's psychological or behavioral functioning (Cunningham, 2003; Dane, 2002;). The descriptions of VT tend to overlap with definitions of STS, burnout, and compassion fatigue (Figley, 1995). More research

is need to clarify concepts used to explain the effects of trauma on helping professionals (Figley, 1995; Joinson, 1992).

This study used the ProQOL-5 (Stamm, 2010) to conceptualize compassion fatigue most accurately. The instrument identifies STS and burnout as two distinct components of compassion fatigue. The selection of instruments to measure compassion fatigue was challenging due to the limited options that account for both STS and burnout. The ProQOL-5 had three subscales including two to measure compassion fatigue (burnout and STS) and one to measure compassion satisfaction. Researchers do not have to use all three subscales to measure compassion fatigue, but Stamm (2010) believed compassion satisfaction has a moderating effect on compassion fatigue. Although the current research study did not use the compassion-satisfaction subscale, implementing this scale may provide more insight in future studies.

It has been only about 20 years since the negative impact of compassion fatigue on human-service professionals gained recognition as a topic worthy of further research (Cohen & Collens, 2013); however, these concepts existed much longer (Figley, 1995; McCann & Pearlman, 1990). As a result of confusion in terminology, failures to study specific disciplines, and the high frequency of qualitative research designs, few generalizable studies addressed the effects of compassion fatigue in CPIs. Current research shows that lingering STS often interferes with social and occupational functioning among professionals (Badger et al., 2008; Cohen & Collens, 2013), especially in human-services fields such as social workers and CWPs (Knight, 2010; Nelson-Gardell & Harris, 2003).

Researchers also suggested that helping professionals are particularly vulnerable to the negative effects of unaddressed VT because they often provide empathic support when a client is experiencing a current trauma or to help a client process the recollection of a past traumatic event

(Dane, 2002; Palm, Polusny, & Follette, 2004). Consequently, if a helping professional is adversely affected by and fails to address an experience, it will likely cause impairment in responding to the client's needs or forming a therapeutic alliance (Badger et al., 2008). Researchers have paid substantial attention to describing the difficulty that human-services professionals often have in coping with STS exposure (Bober & Regehr, 2005; Cohen & Collens, 2013; Dane, 2002; Horwitz, 2006; Knight, 2010; Nelson-Gardell & Harris, 2003; Palm et al., 2004; Tyler, 2012), but little data exists on the prevalence of compassion fatigue among CPIs. Previous researchers concluded that compassion fatigue can lead to longer term consequences of PTSD or VT (Figley, 1995; McCann & Pearlman, 1990). Thus, the need persists for more research on symptoms, how compassion fatigue and VT are different, and prevention methods for helping professionals. Despite recurring statements in the literature that child-welfare work has particular risk factors for compassion fatigue among professionals (Knight, 2010; Nelson-Gardell & Harris, 2003), few studies have stepped beyond this argument to provide further insights on the factors that are associated with compassion-fatigue level, making this an area warranting further study.

This study provided preliminary data intended to further clarify whether some variables have a relationship with compassion fatigue in a small sample of CPIs. The variables that displayed a relationship to STS provided opportunities to complete more focused research. The independent variables in this study were intentionally analyzed separately with compassion fatigue to account for confounding variables. Future researchers could focus on directional or causal relationships found to have statistical significance among the variables used in this study.

Researchers have assessed the risk and protective factors associated with STS among human-services professionals (Dane, 2002; Horwitz, 2006; Knight, 2010; Nelson-Gardell &

Harris, 2003). Few studies, however, provided recommendations on effective treatments and prevention of compassion fatigue specific to CPIs. Those that did recommended training and supervision most commonly (Knight, 2010; Nelson-Gardell & Harris, 2003; Osofsky, 2009; Tyler, 2012). However, these are general recommendations and fail to provide specific frameworks for effective implementation. Bober and Regehr (2005) presented one of the first attempts to evaluate the effectiveness of commonly recommended interventions to address VT in practitioners. Their findings revealed that these interventions were not as effective with their study population as expected.

Supervision and other work-related support interventions should be evaluated along with other less commonly used strategies that may be effective. For example, CPIs perceived support from colleagues as helpful in addressing STS, but studies did not indicate how they mitigate symptoms of compassion fatigue (Wright et al., 2006). Dane (2002) and Cunningham (2003) suggested preparatory and proactive interventions may help social workers better cope with work-related trauma exposure, but these recommendations did not specifically address compassion fatigue in CPIs. Finally, finding ways to reduce occupational stress may also warrant further study (Horwitz, 2006; Badger et al., 2008). Theoretical models exist for addressing trauma exposure in professionals (Bober & Regehr, 2005), and implementing these strategies is an essential next step.

APPENDIX A

DEFINITIONS

Burnout: "The experience of physical, emotional and mental exhaustion that can arise from long-term involvement in occupational situations that are emotionally demanding" (McFadden, Campbell, & Taylor, 2015, p. 1547).

Child Protective Investigator (CPI): A professional responsible for providing assessment and appropriate intervention (ensuring child safety and/or removal of the child from the environment, if necessary) to a child at the time that an abuse allegation warrants investigation, as per Florida Department of Children and Families statutes (2014).

Child Protective (Welfare) Professional: A professional with varying levels of education and training required to assess and determine intervention in child abuse allegations (HHS, 2015).

Child welfare: "Network of public and private agencies with services that include identifying and responding to children who are being abused and neglected, working with families to prevent out-of-home placement, placing children out of their homes, monitoring out-of-home placements (including services to children and families), and arranging for the adoption of children" (Van Hook & Rothenberg, 2009, p. 37).

Compassion fatigue: "A state of exhaustion and dysfunction biologically, psychologically, and socially as a result of prolonged exposure to compassion stress and all it invokes" (Figley, 1995, p. 253).

Compassion satisfaction: The positive meaning one finds from providing care to others or being exposed to trauma (Kelly & Lefton, 2017).

Empathy: A series of behaviors and emotional responses that are supportive to one's needs (Sulzer, Feinstein, & Wendland, 2016).

Helping professional: A profession that provides support to others, such as, social workers, teachers, child welfare workers, or healthcare workers.

Perceptions of management: The feelings that the professional holds regarding the actions of their supervisors (Sexton et al., 2006).

Perceptions of teamwork: The manner in which the professional appraises the quality of interactions between others in their work environment (Sexton et al., 2006).

Posttraumatic Stress Disorder (PTSD): A collection of symptoms that adversely affect an individual exposed to a trauma.

Vicarious resilience: The manner in which helping professionals appraise traumatic experiences in order to make positive meaning from those experiences.

Vicarious trauma: A change in perceptions and cognitive schemas resulting from repeated exposure to the trauma of others (McCann & Pearlman, 1990).

Secondary traumatic stress: "The natural consequent behaviors and emotions resulting from knowing about a traumatizing event experienced by a significant other-the stress resulting from helping or wanting to help a traumatized or suffering person" (Figley, 1993, as cited in Figley, 2002b, p. 1435).

Trauma: The psychological and emotional effects to an individual, commonly associated with an individual's direct or indirect exposure to threatened or actual death, serious injury, and/or sexual assault (American Psychological Association, 2013).

Work climate: The perceptions of teamwork, safety, management, working conditions, and stress held by an employee in regards to their job (Sexton et al., 2006).

APPENDIX B

COPY OF SELECT QUESTIONS FOR SAQ

Safety Attitudes Questionnaire

(Modified) questions to be used to satisfy this research.

Teamwork Climate is gauged using Questions 1–6.

1. Employee input is well-received in my job
    a. Disagree strongly
    b. Disagree Slightly
    c. Neutral
    d. Agree Slightly
    e. Strongly Agree
    f. Not applicable
2. In this job, it is difficult to speak up if I perceive a problem with client care.
    a. Disagree strongly
    b. Disagree Slightly
    c. Neutral
    d. Agree Slightly
    e. Strongly Agree
    f. Not applicable
3. Disagreements in my job are resolved appropriately (i.e., not who is right, but what is best for client care).
    a. Disagree strongly
    b. Disagree Slightly
    c. Neutral
    d. Agree Slightly
    e. Strongly Agree
    f. Not applicable

4. I have the support I need from other personnel to provide services to my clients.
    a. Disagree strongly
    b. Disagree Slightly
    c. Neutral
    d. Agree Slightly
    e. Strongly Agree
    f. Not applicable
5. It is easy for employees to ask questions when there is something they do not understand.
    a. Disagree strongly
    b. Disagree Slightly
    c. Neutral
    d. Agree Slightly
    e. Strongly Agree
    f. Not applicable
6. Everyone here works together as a well-coordinated team.
    a. Disagree strongly
    b. Disagree Slightly
    c. Neutral
    d. Agree Slightly
    e. Strongly Agree
    f. Not applicable

Management Climate is gauged using Questions 24–28

24. Management supports my daily efforts.
    a. Disagree strongly
    b. Disagree Slightly
    c. Neutral
    d. Agree Slightly
    e. Strongly Agree
    f. Not applicable
25. Management does not knowingly compromise client safety
    a. Disagree strongly
    b. Disagree Slightly
    c. Neutral
    d. Agree Slightly
    e. Strongly Agree
    f. Not applicable
26. Management is doing a good job.
    a. Disagree strongly
    b. Disagree Slightly
    c. Neutral
    d. Agree Slightly
    e. Strongly Agree
    f. Not applicable

27. Problem personnel are dealt with constructively by our manager.

    a. Disagree strongly

    b. Disagree Slightly

    c. Neutral

    d. Agree Slightly

    e. Strongly Agree

    f. Not applicable

28. I get adequate timely info about events that might affect my work.

    a. Disagree strongly

    b. Disagree Slightly

    c. Neutral

    d. Agree Slightly

    e. Strongly Agree

    f. Not applicable

APPENDIX C

SURVEY

Child Protective Investigator Demographic Form

The information that you are being asked to complete on this survey will be returned anonymously. Research results will only be reported in aggregate form (reported in groups rather than individualized form). Your employer will not have access to your individual results. The researcher will not seek out information in order to identify you and/or link your responses to your identity. Please answer the survey questions in their entirety.

1. How long have you been employed in YOUR CURRENT POSITION? Please enter in years and months.

_____

2. Please indicate your highest level of education.
   - ☐ A high school diploma
   - ☐ An Associate of Arts Degree
   - ☐ An Associates of Science Degree
   - ☐ A Bachelor's Degree in a Helping Profession (Social Work, Mental Health, Psychology)
   - ☐ A Bachelor's Degree in a Healthcare Profession (Nursing, Occupational Therapy, etc.)
   - ☐ A Degree in a health care discipline (LPN, Speech/Language, OTA, etc.)
   - ☐ A Master's Degree in a Helping Profession (Social Work, Mental Health, Psychology)
   - ☐ A Master's Degree in a Health-related field (Nursing, physical therapy)
   - ☐ A Bachelor's degree in a non-helping or health care related field (physics, accounting, sciences)
   - ☐ A Master's degree in a non-helping or health care related field (physics, accounting, sciences, etc.)
   - ☐ A Bachelor's degree in education or early childhood development
   - ☐ A Master's degree in education or early childhood development
   - ☐ A Ph.D. or other terminal degree. Please Specify: _____
   - ☐ I do not have a degree (If other, please specify)

3. Please indicate your gender.

_____

4. What is your race?

   ☐ African-American/Black

   ☐ Hispanic/Latino

   ☐ White/Caucasian

   ☐ Asian

   ☐ Multi-racial

   ☐ Bi-racial

   ☐ Other (If other, please enter race:_____)

5. How many different positions have you had in child welfare within the past 3 years?

   ☐ 0

   ☐ 1

   ☐ 2

   ☐ 3

   ☐ 4

   ☐ 5

   ☐ More than five

6. Please mark ALL of the types of trauma you have personally experienced as a child before you were 18 years of age. Please check all that apply.

   ☐ Verbal abuse

   ☐ Physical abuse

   ☐ Sexual abuse

   ☐ Felt unloved by your family

   ☐ Neglect,

   ☐ Parental divorce or separation

   ☐ Abused by your mother/stepmother

   ☐ Exposed to an alcoholic or drug abuser in your home

   ☐ Exposed to a family member with significant mental illness (I.e., suicidal)

   ☐ Someone in your household went to prison

   ☐ I do not wish to respond to this question

   ☐ I have never experienced a personal trauma

*Source: Adapted from the Adverse Childhood Experience Study (ACEs, Felitti et al., 1998.

7. How frequently do you attend job-related trainings?

   ☐ One time per week.

   ☐ More than one time per week.

   ☐ One time per month.

   ☐ More than one time per month.

   ☐ Less than one time per month.

   ☐ I have not attended any job-related trainings.

8. What type of supervision do you attend most of the time at DCF? Please select one response.

   ☐ Group Supervision

   ☐ Individual Supervision

   ☐ I do not attend regular supervision

9. If you indicated that you attended supervision, how often do you attend?

   ☐ One time per week.

   ☐ More than one time per week.

   ☐ Less than one time per week.

   ☐ One time per month.

   ☐ More than one time per month.

   ☐ Less than one time per month.

10. Please check the training topics that you have had at DCF within the past 6 months.

    ☐ Compassion Fatigue

    ☐ Stress Management

    ☐ Responding to trauma

    ☐ Burn out

    ☐ Responding to violence

    ☐ Self-care

11. If you have attended a training on a topic not listed, please specify.

    _____

12. What is your age?

- ☐ 18–20
- ☐ 21–23
- ☐ 24–26
- ☐ 27–29
- ☐ 30–32
- ☐ 33–35
- ☐ 35–38
- ☐ 39–41
- ☐ 42–44
- ☐ 45–47
- ☐ 48–51
- ☐ 52–54
- ☐ 55–57
- ☐ 58–60
- ☐ 61–63
- ☐ 64–66
- ☐ Over 66

13. In the next 12 months, are you considering remaining in your current DCF position as a Child Protective Investigator?

    ☐ Yes

    ☐ Maybe

    ☐ No.

14. If you are NOT CONSIDERING staying in your position as a CPI for the next 12 months, what is the reason you are considering leaving?

    _____

Professional Quality of Life (5th Edition)

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

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

15. I am happy.

    ☐ Never

    ☐ Rarely

    ☐ Sometimes

    ☐ Often

    ☐ Very Often

16. I am preoccupied with more than one person I help.

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Very Often

17. I get satisfaction from being able to help people

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Very Often

18. I feel connected to others.

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Very Often

19. I jump or am startled by unexpected sounds.

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Very Often

20. I feel invigorated after working with those I help.

    ☐ Never

    ☐ Rarely

    ☐ Sometimes

    ☐ Often

    ☐ Very Often

21. I find it difficult to separate my personal life from my life as a helper.

    ☐ Never

    ☐ Rarely

    ☐ Sometimes

    ☐ Often

    ☐ Very Often

22. I am not as productive at work because I am losing sleep over traumatic experiences of a person I help.

    ☐ Never

    ☐ Rarely

    ☐ Sometimes

    ☐ Often

    ☐ Very Often

23. I think that I might have been affected by the traumatic stress of those I help.

    ☐ Never

    ☐ Rarely

    ☐ Sometimes

    ☐ Often

    ☐ Very Often

24. I feel trapped by my job as a helper.

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Very Often

25. Because of my helping, I have felt “on edge” about various things.

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Very Often

26. I like my work as a helper.

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Very Often

27. I feel depressed because of the traumatic experiences of the people I help.

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Very Often

28. I feel as though I am experiencing the trauma of someone I have helped.

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Very Often

29. I have beliefs that sustain me.

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Very Often

30. I am pleased with how I am able to keep up with helping] techniques and protocols.

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Very Often

31. I am the person I always wanted to be.

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Very Often

32. My work makes me feel satisfied.

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Very Often

33. I feel worn out because of my work as a helper.

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Very Often

34. I have happy thoughts and feelings about those I help and how I could help them.

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Very Often

35. I feel overwhelmed because my case [work] load seems endless.

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Very Often

36. I believe I can make a difference through my work.

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Very Often

37. I avoid certain activities or situations because they remind me of frightening experiences of the people I help.

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Very Often

38. I am proud of what I can do to help.

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Very Often

39. As a result of my helping, I have intrusive, frightening thoughts.

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Very Often

40. I feel “bogged down” by the system.

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Very Often

41. I have thoughts that I am a “success” as a helper.

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Very Often

42. I can’t recall important parts of my work with trauma victims.

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Very Often

43. I am a very caring person.

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Very Often

44. I am happy that I chose to do this work.

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Very Often

SAQ

DIRECTIONS: Please select your level of agreement to each statement below.

45. Employee input is well-received in my job

- ☐ Disagree strongly
- ☐ Disagree Slightly
- ☐ Neutral
- ☐ Agree Slightly
- ☐ Strongly Agree
- ☐ Not applicable

46. In this job, it is difficult to speak up if I perceive a problem with client care.

- ☐ Disagree strongly
- ☐ Disagree Slightly
- ☐ Neutral
- ☐ Agree Slightly
- ☐ Strongly Agree
- ☐ Not applicable

47. Disagreements in my job are resolved appropriately (i.e., not who is right, but what is best for client care).

☐ Disagree strongly

☐ Disagree Slightly

☐ Neutral

☐ Agree Slightly

☐ Strongly Agree

☐ Not applicable

48. I have the support I need from other personnel to provide services to my clients.

☐ Disagree strongly

☐ Disagree Slightly

☐ Neutral

☐ Agree Slightly

☐ Strongly Agree

☐ Not applicable

49. It is easy for employees to ask questions when there is something they do not understand. a. Disagree strongly

☐ Disagree Strongly

☐ Disagree Slightly

☐ Neutral

☐ Agree Slightly

☐ Strongly Agree

☐ Not applicable

50. Everyone here works together as a well-coordinated team.

- ☐ Disagree strongly
- ☐ Disagree Slightly
- ☐ Neutral
- ☐ Agree Slightly
- ☐ Strongly Agree
- ☐ Not applicable

51. Management supports my daily efforts.

- ☐ Disagree strongly
- ☐ Disagree Slightly
- ☐ Neutral
- ☐ Agree Slightly
- ☐ Strongly Agree
- ☐ Not applicable

52. Management does not knowingly compromise client safety

- ☐ Disagree strongly
- ☐ Disagree Slightly
- ☐ Neutral
- ☐ Agree Slightly
- ☐ Strongly Agree
- ☐ Not applicable

53. Management is doing a good job.

- ☐ Disagree strongly
- ☐ Disagree Slightly
- ☐ Neutral
- ☐ Agree Slightly
- ☐ Strongly Agree
- ☐ Not applicable

54. Problem personnel are dealt with constructively by our manager.

- ☐ Disagree strongly
- ☐ Disagree Slightly
- ☐ Neutral
- ☐ Agree Slightly
- ☐ Strongly Agree
- ☐ Not applicable

55. I get adequate timely info about events that might affect my work.

- ☐ Disagree strongly
- ☐ Disagree Slightly
- ☐ Neutral
- ☐ Agree Slightly
- ☐ Strongly Agree
- ☐ Not applicable

APPENDIX D

COPY OF INSTRUMENT (PROQOL STAMM, 2010)

Professional Quality of Life (to be placed on Qualtrics Website)

When you [help] people you have direct contact with their lives. As you may have found, your compassion for those you [help] can affect you in positive and negative ways. Below are some questions about your experiences, both positive and negative, as a [helper]. Consider each of the following questions about you and your current work situation.

Select the number that honestly reflects how frequently you experienced these things in the last 30 days.

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

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

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

APPENDIX E

LETTER OF SUPPORT FROM DCF

State of Florida
Department of Children and Families

Rick Scott
Governor

Mike Carroll
Secretary

William S. D'Aiuto
Regional Managing Director

April 11, 2018

Ana M. Leon, PhD
University of Central Florida
College of Health & Public Affairs
School of Social Work
HPA 1, Room 245

Dear Dr. Leon,

It is with great pleasure that I support the research prospectus proposed by Shannon Holliker, MSW, LCSW, doctoral student in the University of Central Florida PAF program. I understand that Shannon's dissertation research will focus on exploring the relationship between work climate, the utilization of support resources, and compassion Fatigue and that she wishes to recruit a sample of Protective Investigators from the Central Florida region. Shannon is aware that she must submit her research proposal to the UCF Institutional Review Board. She is also aware that her research proposal must be submitted and reviewed by the Human Subjects Research Re-Committee through the Department of Children and Families. Shannon understands that she must obtain approval by both UCF and DCF prior to collecting any data.

I am aware that Shannon's timeline for completing her research that entitled, An Exploration of the Relationship between Work Climate, the Utilization of Support Resources, and Compassion Fatigue in a sample of Child Protective Investigators, requires that she collect data in the early part of the Fall 2018 semester so that she can complete her dissertation and her doctorate degree before the end of the Spring 2019 semester. Our Central Region Special Projects Coordinator will serve as a point of contact to Shannon for any questions she may have throughout the design and implementation of her research study. Mrs. Bowden can be best reached via e-mail at Amanda.Bowden@myflfamilies.com

I am also aware that Shannon will share aggregate data of her findings with me and with other designated supervisory staff.

Sincerely,

William S. D'Aiuto
Regional Managing Director

APPENDIX F

INSTITUTIONAL REVIEW BOARD

State of Florida
Department of Children and Families

Rick Scott
Governor

Rebecca Kapusta
Interim Secretary

September 25, 2018

Shannon Holliker
UCF, College of Health Professional Sciences
12865 Pegasus Drive
HPA 1, Suite 204
Orlando, FL 32816

Dear Ms. Holliker:

The Department of Children and Families Human Protections Review Committee has approved your proposed research project "An Exploration of the Relationship between Work Climate, the Utilization of Support Resources, and Compassion Fatigue Level in Child Protective Investigators." Study data must be password and computer firewall protected. Any transfers of data must be consistent with industry encryption standards.

The Department requires adherence to the procedures described in your proposal and to ethical principles and statutory regulations. We also require that you send us a copy of the study results upon completion of your study. Please send study results to:

Jodi Abramowitz, Human Protections Administrator
Assistant General Counsel
Department of Children and Families
1317 Winewood Blvd.
Building 2, Room 204N
Tallahassee, FL 32399-0700

If you have any questions, please feel free to contact me at 850-717-4470 or Jodi.Abramowitz@myflfamilies.com.

Sincerely,

Jodi Abramowitz

University of Central Florida Institutional Review Board
Office of Research & Commercialization
12201 Research Parkway, Suite 501
Orlando, Florida 32826-3246
Telephone: 407-823-2901 or 407-882-2276
www.research.ucf.edu/compliance/irb.html

Determination of Exempt Human Research

From: **UCF Institutional Review Board #1**
FWA00000351, IRB00001138

To: **Shannon Holliker**

Date: **August 15, 2018**

Dear Researcher:

On 08/15/2018, the IRB reviewed the following activity as human participant research that is exempt from regulation:

Type of Review:	Exempt Determination
Project Title:	An Exploration of the Relationship between Work Climate, the Utilization of Support Resources, and Compassion Fatigue Level in Child Protective Investigators
Investigator:	Shannon Holliker
IRB Number:	SBE-18-14241
Funding Agency:	
Grant Title:	
Research ID:	N/A

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

This letter is signed by:

Signature applied by Gillian Morien on 08/15/2018 09:38:41 AM EDT

Designated Reviewer

APPENDIX G

INVITATIONAL E-MAIL

Dear Participant,

My name is Shannon Holliker, LCSW. I am a pursuing my Ph.D. at the University of Central Florida. My research is being supervised by Dr. Ana M. Leon, LCSW. I am conducting my dissertation research on factors associated with compassion fatigue in CPIs.

As a Child Protective Investigator you serve as a frontlines professional responsible for maintaining the safety and welfare of our children. As a result, you have valuable input on the factors associated with stress experiences and successes in your line of work. My research study is related to those factors and how they affect you as a Child Protective Investigator.

The term compassion fatigue defines those feelings, thoughts, and behaviors associated with caring for others and/or being routinely exposed to trauma. You are being asked to complete an online survey that will take about 20 minutes which is hosted by Qualtrics.com. Your responses will be returned to me anonymously. Your individual responses will not be shared with your employer nor will you be individually identified. Data will be reported in aggregate form. This means that your employer will not receive raw data nor will they receive information that links you back to your responses.

The results from this research study will primarily be used to address research questions and hypotheses for this researcher's dissertation, to provide aggregate data to DCF, and for possible scholarly publication (using only aggregate data) to add to the child welfare literature.

You are being asked to participate in this research because you have been identified as a professional working as a Child Protective Investigator in Florida. The questions are comprised of three areas: 1) Demographic Information; 2) Questions that help to gauge the presence of compassion fatigue; and 3) questions regarding your work environment. You may choose to opt out of the study or not answer any of the questions. However, it is requested that you do complete the survey in its entirety in order to eliminate incomplete data sets. There are no anticipated risks to you for participating in this study and you will not be compensated for your time. If you choose to participate, the informed consent that follows after you begin the survey will provide more information on the participation process.

There are no right or wrong answers. Your participation is greatly appreciated. The link below will take you to the survey. If you elect to participate, I am requesting that you complete this survey by December 28, 2018

Follow this link to the Survey:
Or copy and paste the URL below into your internet browser:
Follow the link to opt out of future emails:

Thank you again for your time and participation in this survey.
Respectfully,
Shannon Holliker, LCSW, MSW, MS

APPENDIX H

INFORMED CONSENT

EXPLANATION OF RESEARCH

Title of Project: *An Exploration of the Relationship between Work Climate, the Utilization of Support Resources, and Compassion Fatigue Level in Child Protective Investigators*

Principal Investigator: *Shannon M. Holliker, LCSW, MSW, MS*

Faculty Supervisor: *Dr. Ana M. Leon, Ph.D., LCSW, Professor, University of Central Florida*

You are being invited to take part in a research study.
Whether or not you participate is up to you.
You must be 18 years or older to participate.

You are being asked to participate in this research study because you have been identified as a Child Protective Investigator in one of the identified areas in Florida. Your contact information was obtained from a master email list where all CPIs in your area were recruited to participate. The research study being conducted is on factors associated with compassion fatigue among CPIs in Florida. Compassion fatigue is a concept used to describe feelings and behaviors experienced by professionals when they provide care to others and/or are routinely exposed to traumatic events. This research study will help this researcher fulfill dissertation requirements and may be used for possible scholarly publications. This research study aims to gain more insight into relationships between CPI work climate, resource utilization, and CPI characteristics and compassion fatigue.

You will be asked to complete an anonymous online survey that should take about 20 minutes to complete.
Your employer will not have access to your individual responses.
Your responses will be reported in aggregate (collective) form only.
The results of this research study (including aggregate responses) will be reported in this researcher's dissertation, shared with DCF, and may be used for scholarly publications that contribute to the child welfare field.

There are no expected risks associated with participation in this research study. However, some people become anxious or upset when answering questions about their experiences, behaviors, and well-being. Please skip over any questions that you do not feel comfortable answering or opt out of the research study completely. You may also consider seeking out counseling support, should you experience feelings of continued discomfort.

Study contact for questions about the study or to report a problem:
If you have questions, concerns, or complaints, you may contact, Shannon Holliker at Shannon.Holliker@ucf.edu.
This research is being supervised by Dr. Ana M. Leon, LCSW, Professor, UCF School of Social Work. She can be contacted at Ana.Leon@ucf.edu.

IRB contact about your rights in the study or to report a complaint:
Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). Th*is research has been determined to be exempted from IRB review unless changes are made. For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901.*
Do you agree to continue? By selecting Yes, you are consenting to participate in this study.

APPENDIX I

INSTRUMENT PERMISSIONS

Permission to Use ProQOL-5

Permission Statement obtained from: http://www.proqol.org/ProQol_Test.html

Below, is the permission statement, as stated on the ProQOL-5 website.

PERMISSION TO USE THE ProQOL

"We encourage people to use the ProQOL. The following permission is on the measure. If you would like further information about permissions, or would like to request specific permission, use the link above.

The ProQOL measure may be freely copied as long as a) author is credited, b) no changes are made other than those authorized below, and c) it is not sold. You may substitute the appropriate target group for / [helper] / if that is not the best term. For example, if you are working with teachers, replace / [helper] /with teacher. Word changes may be made to any word in italicized square brackets to make the measure read more smoothly for a particular target group."

Source: http://www.proqol.org/ProQol_Test.html

Email Correspondence Regarding Permission to Use ProQOL

Hello Shannon,

Thank you for your note and I apologize again for the delay. You are welcome to put the ProQOL into Qualtrics.

This request you sent (below; which we will keep on file) and the document attached here together comprise your permission to use the ProQOL. Please consider donating your de-identified baseline data to the ProQOL office if possible, as this helps us maintain the measure.

Please let me know if you have any questions,

Alyce

ProQOL Office

The Center for Victims of Torture

2356 University Ave W., Suite 430 / St. Paul, MN 55114

http://proqol.org / www.cvt.org

CVT: Restoring the Dignity of the Human Spirit

From: submission@secureserver.net [submission@secureserver.net]
Sent: Monday, April 16, 2018 6:28 PM
To: proqol
Subject: Request Permission to Use the ProQOL

Wording Change: True
Customized Permission: True
Other Wording Chang: True
Other: True

Please tell us briefly about your project (1-3 sentences is fine): : I am using the ProQOL to measure the level of compassion fatigue in child protective investigators, for in order to meet the requirements of my Ph.D. This is all Ph.D. dissertation research. I would like to put the questions in a Qualtrics survey. I do not see any changes to the wording. I just want to change the format to online. Proposed wording change (if appropriate): : Translation Request: (if appropriate). Please tell us what language and if you want to create a new translation or improve an existing one. :

Other: : The questions will be added to an online survey, hosted by Qualtrics. First or Given Name: : Shannon
Family or Last Name: : Holliker
Organization (if appropriate): : University of Central Florida
Address 1: : School of Social Work
Address 2: :
City: : Orlando
Postal Code: : 32817
Country: : USA
State or Provence: : FL
e-mail: : shannon.holliker@ucf.edu

Permission for Use of the ProQOL (Professional Quality of Life Scale: Compassion Satisfaction and Compassion Fatigue) www.proqol.org

Accompanied by the email to you, this document grants you permission to use for your study or project

The ProQOL (Professional Quality of Life Scale: Compassion Satisfaction and Compassion Fatigue) www.ProQOL.org

Prior to beginning your project and at the time of any publications, please verify that you are using the latest version by checking the website. All revisions are posted there. If you began project with an earlier version, please reference both to avoid confusion for readers of your work.

This permission covers non-profit, non-commercial uses and includes permission to reformat the questions into a version that is appropriate for your use. This may include computerizing the measure.

Please print the following reference or credit line in all documents that include results gathered from the use of the ProQOL.

Stamm, B. H. (2010). The ProQOL (*Professional Quality of Life Scale: Compassion Satisfaction and Compassion Fatigue*). Pocatello, ID: ProQOL.org. retrieved [date] www.proqol.org

Permission granted by
Beth Hudnall Stamm, PhD
Author, ProQOL
ProQOL.org
info@proqol.org

Help us help all of us. Please consider donating a copy of your raw data to the data bank. You can find more about the data bank and how you can donate at www.proqol.org and www.proqol.org/Donate_Data.html. Data donated to the ProQOL Data Bank allow us to advance the theory of compassion satisfaction and compassion fatigue and to improve and norm the measure itself.

Permission to Use SAQ

UTHealth
The University of Texas
Health Science Center at Houston

Medical School
University of Texas at Houston-Memorial Hermann
Center for Healthcare Quality and Safety

March 29, 2018

Dear Shannon Holliker,

You have our permission to use any of the following Safety Attitudes Questionnaires and the corresponding scoring keys:

Safety Attitudes Questionnaire – Short Form
Safety Attitudes Questionnaire – Teamwork and Safety Climate
Safety Attitudes Questionnaire – Ambulatory Version
Safety Attitudes Questionnaire – ICU Version
Safety Attitudes Questionnaire – Labor and Delivery Version
Safety Attitudes Questionnaire – Operating Room Version
Safety Attitudes Questionnaire – Pharmacy Version
Safety Climate Survey

Please note, we do not have editable versions for any of the SAQ surveys but feel free to modify the surveys to meet your research endeavors.

Respectfully,

University of Texas at Houston-Memorial Hermann
Center for Healthcare Quality and Safety Team

6410 Fannin Street
UTPB Suite 1100
Houston, TX 77030
https://med.uth.edu/chqs/

APPENDIX J

CODEBOOK

Variable name	Variable label	Values (response options)	Variable measurement level
PARTID	Participant ID Number assigned.	Participant Number 99 = No Response/No Answer	Nominal
CURPOS	Time spent in current position.	Listed in months 99 = No Response/No Answer	Scale
EDU	Highest level of education.	1 = A high school diploma 2 = An Associate of Arts Degree 3 = An Associates of Science Degree 4 = A Bachelor's Degree in a Helping Profession (Social Work, Mental Health, Psychology) 5 = A Bachelor's Degree in a Healthcare Profession (Nursing, Occupational Therapy, etc.) 6 = A Degree in a health care discipline (LPN, Speech/Language, OTA, etc.) 7 = A Master's Degree in a Helping Profession (Social Work, Mental Health, Psychology) □ 8 = A Master's Degree in a Health-related field (Nursing, physical therapy) 9 = A Bachelor's degree in a non-helping or health care related field (physics, accounting, sciences) 10 = A Master's degree in a non-helping or health care related field (physics, accounting, sciences, etc.) 11 = A Bachelor's degree in education or early childhood development 12 = A Master's degree in education or early childhood development 13 = A Ph.D. or other terminal degree. Please Specify: _____ 14 = I do not have a degree 15 = Other. 99 = No Response/Unable to use	Nominal
EDUOTHER	If you have other education, please specify.	Qualitative	
GENDER	Please indicate your gender.	1 = Male 2 = Female 99 = No Response/No Answer	Nominal

Variable name	Variable label	Values (response options)	Variable measurement level
AGE	What is your age?	1 = 8-20 2 = 21-23 3 = 24-26 4 = 27-29 5 = 30-32 6 = 33-35 7 = 36-38 8 = 39-41 9 = 42-44 10 = 45-47 11 = 48-50 12 = 51-53 13 = 54-56 14 = 57-59 15 = 60-62 16 = 63-65 17 = 66 OR OVER 99 = NO ANSWER/NO RESPONSE	Scale
RACE	What is your race?	1 = Black/African-American 2 = Hispanic/Latino 3 = White/Caucasian 4 = Pacific Islander 5 = Asian 6 = Multi-racial 7 = Bi-Racial 8 = Other, please specify_____ 99 = No answer	Nominal
POSITIONS	How many different positions have you had at DCF?	1 = ONE 2 = TWO 3 = THREE 4 = FOUR 5 = FIVE 6 = SIX 7 = MORE THAN 6 99 = No Response/Unable to use	Nominal

Variable name	Variable label	Values (response options)	Variable measurement level
TRAUVERBAL	Verbal abuse	1 = Yes 2 = No 3 = Choose not to disclose. 99 = No Answer/No Response	Nominal
TRAUPHYS	Physical abuse	1 = Yes 2 = No 3 = Choose not to disclose 99 = No Answer/No Response	Nominal
TRAUSEX	Sexual abuse	1 = Yes 2 = No 3 = Choose not to disclose 99 = No Answer/No Response	Nominal
TRAUNLOVED	Felt unloved	1 = Yes 2 = No 3 = Choose not to disclose 99 = No Answer/No Response	Nominal
TRAUNEGLECT	Experienced neglect	1 = Yes 2 = No 3 = Choose not to disclose 99 = No Answer/No Response	Nominal
TRAUDIVOR	Parental divorce or separation	1 = Yes 2 = No 3 = Choose not to disclose 99 = No Answer/No Response	Nominal
TRAUMATABUS	Abuse by mother or stepmother	1 = Yes 2 = No 3 = Choose not to disclose 99 = No Answer/No Response	Nominal
TRAUDRUG	Exposed to drugs or alcohol in your home.	1 = Yes 2 = No 3 = Choose not to disclose 99 = No Answer/No Response	Nominal
TRAUSUICIDE	Family member suffered from mental illness.	1 = Yes 2 = No 3 = Choose not to disclose 99 = No Answer/No Response	Nominal

Variable name	Variable label	Values (response options)	Variable measurement level
TRAUPRISON	Household member went to prison.	1 = Yes 2 = No 3 = Choose not to disclose 99 = No Answer/No Response End of trauma-related questions	Nominal
TRAINATT	How frequently do you attend job-relate trainings?	1 = One time per week 2 = More than one time per week 3 = One time per month 4 = More than one time per month 5 = Less than one time per month 6 = I have not attended any job-related trainings 99 = No answer/No response	Nominal
SUPVATT	What type of supervision do you attend?	1 = YES 2 = NO 99 = No Answer/No Response	Nominal
SUPVFREQ	How frequently do you attend supervision?	1 = One time per week 2 = More than one time per week 3 = Less than one time per week. 4 = One time per month 5 = More than one time per month. 6 = Less than one time per month 99 = No answer/No response	Nominal
TRAINTYPE	Indicate the trainings that you attended in the last 6 months.	99 = NOT APPLICABLE/NO RESPONSE	Nominal
STAYDCF	Are you staying at DCF for next 12 months in your CPI position?	1 = Yes 2 = No 3 = Maybe 99 = No Answer/No Response	Nominal

Variable name	Variable label	Values (response options)	Variable measurement level
LEAVING	If you are leaving, what is the reason?	Please specify	Nominal
HAPPY	I am happy.	1 = Very Often 2 = Often 3 = Sometimes 4 = Rarely 5 = Never 99 = No response/unable to use	**Scale**
PREOCCUPIED	I am preoccupied with more than one person I help.	1 = Never 2 = Rarely 3 = Sometimes 4 = Often 5 = Very Often 99 = No Response/Unable to use	Scale
SATISFIED	I get satisfaction from being able to help people.	1 = Never 2 = Rarely 3 = Sometimes 4 = Often 5 = Very Often 99 = No Response/Unable to use	Scale
CONNECTED	I feel connected to others.	1 = Very Often 2 = Often 3 = Sometimes 4 = Rarely 5 = Never 99 = No Response/Unable to use	Scale
STARTLED	I jump or am startled by unexpected sounds.	1 = Never 2 = Rarely 3 = Sometimes 4 = Often 5 = Very Often 99 = No Response/Unable to use	Scale
INVIGORATED	I feel invigorated after working with those I help.	1 = Never 2 = Rarely 3 = Sometimes 4 = Often 5 = Very Often 99 = No Response/Unable to use	Scale

Variable name	Variable label	Values (response options)	Variable measurement level
SEPARATE	I find it difficult to separate my personal life from my life as a helper.	1 = Never 2 = Rarely 3 = Sometimes 4 = Often 5 = Very Often 99 = No Response/Unable to use	Scale
PRODUCTIVITY	I am not as productive at work because I am losing sleep over traumatic experiences of a person I help.	1 = Never 2 = Rarely 3 = Sometimes 4 = Often 5 = Very Often 99 = No Response/Unable to use	Scale
AFFECTED	I think that I might have been affected by the traumatic stress of those I help.	1 = Never 2 = Rarely 3 = Sometimes 4 = Often 5 = Very Often 99 = No Response/Unable to use	Scale
TRAPPED	I feel trapped by my job as a helper.	1 = Never 2 = Rarely 3 = Sometimes 4 = Often 5 = Very Often 99 = No Response/Unable to use	Scale
EDGE	Because of my helping, I have felt "on edge" about various things.	1 = Never 2 = Rarely 3 = Sometimes 4 = Often 5 = Very Often 99 = No Response/Unable to use	Scale

Variable name	Variable label	Values (response options)	Variable measurement level
LIKEWORK	I like my work as a helper.	1 = Never 2 = Rarely 3 = Sometimes 4 = Often 5 = Very Often 99 = No Response/Unable to use	Scale
DEPRESSED	I feel depressed because of the traumatic experiences of the people I help.	1 = Never 2 = Rarely 3 = Sometimes 4 = Often 5 = Very Often 99 = No Response/Unable to use	Scale
HELPTRAU	I feel as though I am experiencing the trauma of someone I have helped.	1 = Never 2 = Rarely 3 = Sometimes 4 = Often 5 = Very Often 99 = No Response/Unable to use	Scale
SUSTAIN	I have beliefs that sustain me.	1 = Very Often 2 = Often 3 = Sometimes 4 = Rarely 5 = Never 99 = No Response/Unable to use	Scale
PLEASED	I am pleased with how I am able to keep up with helping techniques and protocols	1 = Never 2 = Rarely 3 = Sometimes 4 = Often 5 = Very Often 99 = No Response/Unable to use	Scale

Variable name	Variable label	Values (response options)	Variable measurement level
WANTEDTOBE	I am the person I always wanted to be.	1 = Very Often 2 = Often 3 = Sometimes 4 = Rarely 5 = Never 99 = No Response/Unable to use	Scale
SATISFIED	My work makes me feel satisfied.	1 = Never 2 = Rarely 3 = Sometimes 4 = Often 5 = Very Often 99 = No Response/Unable to use	Scale
WORNOUT	I feel worn out because of my work as a helper.	1 = Never 2 = Rarely 3 = Sometimes 4 = Often 5 = Very Often 99 = No Response/Unable to use	Scale
HAPPTHOUG	I have happy thoughts and feelings about those I help and how I could help them	1 = Never 2 = Rarely 3 = Sometimes 4 = Often 5 = Very Often 99 = No Response/Unable to use	Scale
ENDLESS	I feel overwhelmed because my case work load seems endless.	1 = Never 2 = Rarely 3 = Sometimes 4 = Often 5 = Very Often 99 = No Response/Unable to use	Scale
DIFFERENCE	I believe I can make a difference through my work.	1 = Never 2 = Rarely 3 = Sometimes 4 = Often 5 = Very Often 99 = No Response/Unable to use	Scale

Variable name	Variable label	Values (response options)	Variable measurement level
AVOID	I avoid certain activities or situations because they remind me of frightening experiences of the people I help.	1 = Never 2 = Rarely 3 = Sometimes 4 = Often 5 = Very Often 99 = No Response/Unable to use	Scale
PROUD	I am proud of what I can do to help.	1 = Never 2 = Rarely 3 = Sometimes 4 = Often 5 = Very Often 99 = No Response/Unable to use	Scale
INTRUSIVE	As a result of my helping, I have intrusive, frightening thoughts	1 = Never 2 = Rarely 3 = Sometimes 4 = Often 5 = Very Often 99 = No Response/Unable to use	Scale
SYSTEM	I feel “bogged down” by the system.	1 = Never 2 = Rarely 3 = Sometimes 4 = Often 5 = Very Often 99 = No Response/Unable to use	Scale
SUCCESS	I have thoughts that I am a “success” as a helper	1 = Never 2 = Rarely 3 = Sometimes 4 = Often 5 = Very Often 99 = No Response/Unable to use	Scale
CANTRECALL	I can’t recall important parts of my work with trauma victims	1 = Never 2 = Rarely 3 = Sometimes 4 = Often 5 = Very Often 99 = No Response/Unable to use	Scale

Variable name	Variable label	Values (response options)	Variable measurement level
CARING	I am a very caring person	1 = Very Often 2 = Often 3 = Sometimes 4 = Rarely 5 = Never 99 = No Response/Unable to use	Scale
HAPPYWORK	I am happy that I chose to do this work.	1 = Never 2 = Rarely 3 = Sometimes 4 = Often 5 = Very Often 99 = No Response/Unable to use	Scale
SCORECS	Compassion Satisfaction Score	1 = Low 2 = Average 3 = High 99 = No Score/Unable to Total	Scale (Interval)
SCOREBO	Burn Out Score	1 = Low 2 = Average 3 = High 99 = No score/Unable to Total	Scale (Interval)
SCORESTSS	STSS Score	1 = Low 2 = Average 3 = High 99 = No score/Unable to Total	Scale (Interval)
RAWCS	Raw Score for Compassion Satisfaction	Straight reporting of raw score 99 = No answer/No sum	Scale
RAWBO	Raw Score for Burn Out	Straight reporting of raw score 99 = No answer/No sum	Scale
RAWSTSS	Raw Score for STSS	Straight reporting of raw score 99 = No answer/No sum	Scale
INPUT	Employee input is well-received.	1 = Disagree strongly 2 = Disagree Slightly 3 = Neutral 4 = Agree Slightly 5 = Strongly Agree 6 = Not applicable 99 = No response	Scale

Variable name	Variable label	Values (response options)	Variable measurement level
SPEAKUP	In this job, it is difficult to speak up if I perceive a problem with client care.	1 = Strongly Agree 2 = Agree Slightly 3 = Neutral 4 = Disagree Slightly 5 = Strongly Disagree 6 = Not applicable 99 = No response	Scale
DISAGRERESOLVE	Disagreements in my job are resolved appropriately (i.e., not who is right, but what is best for client care).	1 = Disagree strongly 2 = Disagree Slightly 3 = Neutral 4 = Agree Slightly 5 = Strongly Agree 6 = Not applicable 99 = No response	Scale
HAVESUPPORT	I have the support I need from other personnel to provide services to my clients.	1 = Disagree strongly 2 = Disagree Slightly 3 = Neutral 4 = Agree Slightly 5 = Strongly Agree 6 = Not applicable 99 = No response	Scale
EASYTOASK	It is easy for employees to ask questions when there is something they do not understand.	1 = Disagree strongly 2 = Disagree Slightly 3 = Neutral 4 = Agree Slightly 5 = Strongly Agree 6 = Not applicable 99 = No response	Scale

Variable name	Variable label	Values (response options)	Variable measurement level
COORDINATED	Everyone here works together as a well-coordinated team.	1 = Disagree strongly 2 = Disagree Slightly 3 = Neutral 4 = Agree Slightly 5 = Strongly Agree 6 = Not applicable 99 = No response	Scale
SUPVSUPPORT	Management supports my daily efforts.	1 = Disagree strongly 2 = Disagree Slightly 3 = Neutral 4 = Agree Slightly 5 = Strongly Agree 6 = Not applicable 99 = No response	Scale
SAFETY	Management does not knowingly compromise client safety	1 = Disagree strongly 2 = Disagree Slightly 3 = Neutral 4 = Agree Slightly 5 = Strongly Agree 6 = Not applicable 99 = No response	Scale
GOODJOB	Management is doing a good job.	1 = Disagree strongly 2 = Disagree Slightly 3 = Neutral 4 = Agree Slightly 5 = Strongly Agree 6 = Not applicable 99 = No response	Scale
CONSTRUCTIVE	Problem personnel are dealt with constructively by our manager.	1 = Disagree strongly 2 = Disagree Slightly 3 = Neutral 4 = Agree Slightly 5 = Strongly Agree 6 = Not applicable 99 = No response	Scale

Variable name	Variable label	Values (response options)	Variable measurement level
EVENTS	I get adequate and timely info about events that might affect my work.	1 = Disagree strongly 2 = Disagree Slightly 3 = Neutral 4 = Agree Slightly 5 = Strongly Agree 6 = Not applicable 99 = No response	Scale
TEAMSCORE	Teamwork Climate	Percent/Point Score	Scale
MGMTSCORE	Management Climate	Percent/Point score	Scale
TEAMRAW	Raw score for attitudes about team	Sum 999 = No response/Unable to score	Scale
MGMTSCORE	Raw score for attitudes about supervisor	Sum 999 = No response/Unable to score	Scale

REFERENCES

Ahern, E. C., Sadler, L. A., Lamb, M. E., & Gariglietti, G. M. (2017). Practitioner perspectives on child sexual exploitation: Rapport building with young people. *Journal of Child Sexual Abuse, 26,* 78–91. doi:10.1080/10538712.2016.1257529

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.

American Psychological Association. (2018). *Trauma.* Retrieved from https://www.apa.org /topics/trauma/

Audin, K., Burke, J., & Ivtzan, I. (2018). Compassion fatigue, compassion satisfaction and work engagement in residential child care. *Scottish Journal of Residential Child Care, 17*(3), 1–25. Retrieved from https://www.celcis.org

Badger, K., Royse, D., & Craig, C. (2008). Hospital social workers and indirect trauma exposure: An exploratory study of contributing factors. *Health & Social Work, 33,* 63–71. doi:10.1093/hsw.33.1.63

Baldschun, A., Hämäläinen, J., Töttö, P., Rantonen, O., & Salo, P. (2019). Job-strain and well-being among Finnish social workers: Exploring the differences in occupational well-being between child protection social workers and social workers without duties in child protection. *European Journal of Social Work, 22,* 43–58. doi:10.1080/13691457.2017 .1357025

Baugerud, G. A., Vangbæk, S., & Melinder, A. (2018). Secondary traumatic stress, burnout and compassion satisfaction among Norwegian child protection workers: Protective and risk factors. *British Journal of Social Work, 48,* 215–235. doi:10.1093/bjsw/bcx002

Bober, T., & Regehr, C. (2005). Strategies for reducing secondary or vicarious trauma: Do they work? *Brief Treatment and Crisis Intervention, 6,* 1–9. doi:10.1093/brief-treatment /mhj001

Boyas, J. F., Wind, L. H., & Ruiz, E. (n.d.). Exploring patterns of employee psychosocial outcomes among child welfare workers. *Children and Youth Services Review, 52,* 174–183. doi:10.1106/j.childyouth.2014.11.002

Brady, P. Q. (2017). Crimes against caring: Exploring the risk of secondary traumatic stress, burnout, and compassion satisfaction among child exploitation investigators. *Journal of Police and Criminal Psychology, 32,* 305–318. doi:10.1007/s11896-016-9223-8

Bride, B. E. (2007). Prevalence of secondary traumatic stress among social workers. *Social Work, 52,* 63–70. doi:10.1093/sw/52.1.63

Bride, B. E., Jones, J. L., & Macmaster, S. A. (2007). Correlates of secondary traumatic stress in child protective service workers. *Journal of Evidence-Based Social Work, 4,* 69–80. doi: 10.1300/J394v04n03_05

Bride, B. E., Robinson, M. M., Yegidis, B., & Figley, C. (2004). Development and validation of the secondary traumatic stress scale. *Research on Social Work Practice, 14,* 27–35. doi: 10.1177/1049731503254106

Caringi, J. C., Hardimann, E. R., Weldon, P., Fletcher, S., Devlin, M., & Stanick, C. (2017). Secondary traumatic stress and licensed clinical social workers. *Traumatology, 23,* 186–195. doi:10.1037/trm0000061

Center for Healthcare and Quality Safety. (2018). *Safety Attitudes and Safety Climate Questionnaire.* Retrieved from https://med.uth.edu/chqs/survey/

Centers for Disease Control and Prevention. (2013). Adverse childhood experiences: Looking at how ACEs affect our lives and society. Retrieved from https://vetoviolence.cdc.gov/apps/phl/resource_center_infographic.html

Centers for Disease Control and Prevention. (2018). *Adverse childhood experiences (ACEs).* Atlanta, GA. Retrieved from https://www.cdc.gov/violenceprevention/acestudy/index.html

Centrano, G., Tedeschi, F., Rabbi, L., Gossetti, G., Lora, A., Lamonaca, D., … Ammadeo, F. (2017). How are compassion fatigue, burnout, and compassion satisfaction affected by quality of working life? Findings from a survey of mental health in Italy. *BMC Health Services Research, 17,* Art. 755. doi:10.1186/s12913-017-2726-x

Clark, A. (2010). Empathy and sympathy: Therapeutic distinctions in counseling. *Journal of Mental Health Counseling, 32,* 95–101. doi:10.17744/mehc.32.2.228n116thw397504

Cocker, F., & Joss, N. (2016). Compassion fatigue among healthcare, emergency and community service workers: A systematic review. *International Journal of Environmental Research and Public Health, 13,* E618. doi:10.3390/ijerph13060618

Cohen, K., & Collens, P. (2013). The impact of trauma work on trauma workers: A metasynthesis on vicarious trauma and vicarious posttraumatic growth. *Psychological Trauma: Theory, Research, Practice, and Policy, 5,* 570–580. doi:10.1037/a0030388

Cornille, T. A., & Meyers, T. W. (1999). Secondary traumatic stress among child protective service workers: Prevalence, severity and predictive factors. *Traumatology, 5,* 15–31. doi:10.1177/153476569900500105

Cuartero, M. E., & Campos-Vidal, J. F. (2018). Self-care behaviours and their relationship with satisfaction and compassion fatigue levels among social workers. *Social Work in Health Care, 58,* 274–290. doi:10.1080/00981389.2018.1558164

Cunningham, M. (2003). Impact of trauma work on social work clinicians: Empirical findings. *Social Work, 48,* 451–459. doi:10.1093/sw/48.4.451

Dane, B. (2002). Duty to inform: Preparing social work students to understand vicarious traumatization. *Journal of Teaching in Social Work, 22,* 3–20. doi:10.1300/J067v22n03_02

Edelkott, N., Engstrom, D. W., Hernandez-Wolfe, P., & Gangsei, D. (2016). Vicarious resilience: Complexities and variations. *American Journal of Orthopsychiatry, 86,* 713–724. doi:10.1037/ort0000180

Emergency Nurses Association. (2014). *ENA topic brief: Compassion fatigue.* Retrieved from https://www.ena.org/docs/default-source/resource-library/practice-resources/topic-briefs/compassion-fatigue.pdf?sfvrsn = c1bc886d_8

Felitti, B., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., … Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to the many leading causes of death: The adverse childhood experiences (ACE) study. *American Journal of Preventative Medicine, 14,* 245–258. doi:10.1016/S0749-3797(98)00017-8

Figley, C. R. (Ed.). (1995). *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized.* New York, NY: Routledge.

Figley, C. R. (2002a). Compassion fatigue: Psychotherapists' chronic lack of self care. *Journal of Clinical Psychology, 58,* 1433–1441. doi:10.1002/jclp.10090

Figley, C. R. (Ed.). (2002b). *Treating compassion fatigue.* New York, NY: Brunner Routledge.

Finzi-Dottan, R., & Kormosh, M. B. (2016). Social workers in Israel: Compassion fatigue and spillover into married life. *Journal of Social Service Research, 42,* 703–717. doi:10.1080/01488376.2016.1147515

Florida Department of Children and Families. (2016). *Child protective investigator and child protective investigator supervisor educational qualifications, turnover, and working conditions status report: Annual report.* Retrieved From https://www.myflfamilies.com/service-programs/child-welfare/docs/2016LMRs/CPI%20CPI%20Supv%20Workforce%20Report.pdf

Geoffrion, S., Morselli, C., & Guay, S. (2016). Rethinking compassion fatigue through the lens of professional identity: The case of child-protection workers. *Trauma, Violence, & Abuse, 17,* 270–283. doi:10.1177/1524838015584362

Ghesquiere, A., Plitchta, S. B., McAfee, C., & Rogers, G. (2018). Professional quality of life of adult protective service workers. *Journal of Elder Abuse & Neglect, 30,* 1–19. doi:10.1080/08946566.2017.1352550

Hansen, E. M., Eklund, J. H., Hallén, A., Bjurhager, C. S., Norrström, E., Viman, A., & Stocks, E. L. (2018). Does feeling empathy lead to compassion fatigue or compassion satisfaction? The role of time perspective. *Journal of Psychology, 15,* 1–16. doi:10.1080/00223980.2018.1495170

Harr, C. R., Brice, T. S., Riley, K., & Moore, B. (2014). The impact of compassion fatigue and compassion satisfaction on social work students. *Journal of the Society for Social Work and Research, 5,* 233–251. doi:10.1086/676518

Harr, C., & Moore, B. (2011). Compassion fatigue among social work students in field placements. *Journal of Teaching in Social Work, 31,* 350–363. doi:10.1080/08841233.2011.580262

Henson, J. S. (2017). When compassion is lost. *Medsurg Nursing, 26,* 139–142. Retrieved from http://www.medsurgnursing.net

Hernández, P., Gangsei, D., & Engstrom, D. (2007). Vicarious resilience: A new concept in work with those who survive trauma. *Family Process, 46,* 229–241. doi:10.1111/j.1545-5300.2007.00206.x

Hernandez-Wolfe, P., Killian, K., Engstrom, D., & Gangsei, D. (2015). Vicarious resilience, vicarious trauma, and awareness of equity in trauma work. *Journal of Humanistic Psychology, 55,* 153–172. doi:10.1177/0022167814534322

Hinderer, K. A., VonRueden, K. T., Friedmann, E., McQuillan, K. A., Gilmore, R., Kramer, B., & Murray, M. (2014). Burnout, compassion fatigue, compassion satisfaction, and secondary traumatic stress in trauma nurses. *Journal of Trauma Nursing, 21,* 160–169. doi:10.1097/JTN.0000000000000055

Hodge, L., & Lockwood, S. (2013). Meaningfulness, appropriateness and effectiveness of structured interventions by nurse leaders to decrease compassion fatigue in healthcare providers, to be applied in acute care oncology settings: A systematic review protocol. *JBI Database of Systematic Reviews & Implementation Reports, 11*(12), 81–93. doi:10.11124/jbisrir-2013-1027

Horwitz, M. J. (2006). Work-related trauma effects in child protection social workers. *Journal of Social Service Research, 32,* 1–18. doi:10.1300/J079v32n03_01

IBM. (2017). *SPSS for Windows, version 25.0.* Armonk, NY: Author. Retrieved from https://www.ibm.com

Jankoski, J. (2010). Is vicarious trauma the culprit? A study of child welfare professionals. *Child Welfare, 89,* 105–131.

Joinson, C. (1992). Coping with compassion fatigue: Burned out and burned up—has caring for others made you too tired to care for yourself? *Nursing, 22*(4), 116, 118–120.

Jones, L. K., & Cureton, J. L. (2014). Trauma redefined in the DSM-5: Rationale and implications for counseling practice. *Professional Counselor: Research & Practice, 4*(3), 257–271. doi:10.15241/lkj.4.3.257

Kapoulitsas, M., & Corcoran, T. (2015). Compassion fatigue and resilience: A qualitative analysis of social work practice. *Qualitative Social Work, 14,* 86–101. doi:10.1177/1473325014528526

Kelly, L. A., & Lefton, C. (2017). Effect of meaningful recognition on critical care nurses' compassion fatigue. *American Journal of Critical Care, 26,* 438–444. doi:10.4037/ajcc2017471

Kelly, L., & Todd, M. (2017). Compassion fatigue and the healthy work environment. *AACN Advanced Critical Care, 28,* 351–358. doi:10.4037/aacnacc2017283

Killian, K., Hernandez-Wolfe, P., Engstrom, D., & Gangsei, D. (2017). Development of the Vicarious Resilience Scale (VRS): A measure of positive effects of working with trauma survivors. *Psychological Trauma: Theory, Research, Practice, and Policy, 9,* 23–31. doi:10.1037/tra0000199

Kinman, G., & Grant, L. (2016). Building resilience in early-career social workers: Evaluating a multi-modal intervention. *British Journal of Social Work, 47,* 1979–1998. doi:10.1093/bjsw/bcw164

Kintzle, S., Yarvis, J. S., & Bride, B. E. (2013). Secondary traumatic stress in military primary and mental health providers. *Military Medicine, 178,* 1310–1315. doi:10.7205/MILMED-D-13-00087

Knight, C. (2010). Trauma-informed social work practice: Practice considerations and challenges. *Clinical Social Work Journal, 43,* 25–37. doi:10.1007/s10615-014-0481-6

LaFauci Schutt, J. M., & Marotta, S. A. (2011). Personal and environmental predictors of posttraumatic stress in emergency management professionals. *Psychological Trauma: Theory, Research, Practice, and Policy, 3,* 8–15. doi:10.1037/a0020588

Laubmeier, K. K., Zakowski, S. G., & Bair, J. P. (2004). The role of spirituality in the psychological adjustment to cancer: A test of the transactional model of stress and coping. *International Journal of Behavioral Medicine, 11,* 48–55. doi:10.1207/s15327558ijbm1101_6

Lazarus, R. S. & Folkman, S. (1984). *Stress, appraisal, and coping.* New York, NY: Springer.

Levenson, J. (2017). Trauma-informed social work practice. *Social Work, 62,* 105–113. doi:10.1093/sw/swx001

Lowe, C. (2016). The professional's influence within the client system: Exploring counter-transference and adult attachment within the therapeutic relationships with children experiencing abuse and their caregivers. *Journal of Social Work Practice, 30,* 59–68. doi:10.1080/02650533.2015.1035236

Matey, L. (2016). Compassion fatigue is a safety concern. *ONS Connect, 31*(5), 20.

McCann, I. L., & Pearlman, L.A. (1990). Vicarious traumatization: A framework for understanding the psychological effects of working with victims. *Journal of Traumatic Stress, 3,* 131–149. doi:10.1002/jts.2490030110

McFadden, P., Campbell, A., & Taylor, B. (2015). Resilience and burnout in child protection social work: Individual and organisational themes from a systematic literature review. *British Journal of Social Work, 45,* 1546–1563. doi:10.1093/bjsw/bct210

Miller, G. E., Buckholdt, D. R., & Shaw, B. (2008). Introduction: Perspectives on stress and work. *Journal of Human Behavior in the Social Environment, 17,* 1–18. doi:10.1080 /10911350802165403

Molnar, B. E., Sprang, G., Killian, K. D., Gottfried, R., Emery, V., & Bride, B. E. (2017). Advancing science and practice for vicarious traumatization/secondary traumatic stress: A research agenda. *Traumatology, 23,* 129–142. doi:10.1037/trm0000122

National Child Traumatic Stress Network. (n.d.). *Secondary traumatic stress.* Retrieved from https://www.nctsn.org/trauma-informed-care/secondary-traumatic-stress

Nelson-Gardell, D., & Harris, D. (2003). Childhood abuse history, secondary traumatic stress, and child welfare workers. *Child Welfare, 82,* 5–26. Retrieved from https://www.cwla .org/child-welfare-journal/

O'Mahony, S., Ziadni, M., Hoerger, M., Levine, S., Baron, A., & Gerhart, J. (2018). Compassion fatigue among palliative care clinicians: Findings on personality factors and years of service. *American Journal of Hospice and Palliative Medicine, 35,* 343–347. doi:10.1177 /1049909117701695

Osofsky, J. D. (2009). Perspectives on helping traumatized infants, young children, and their families. *Infant Mental Health Journal, 30,* 673–677. doi:10.1002/imhj.20236

Palm, K. M., Polusny, M. A., & Follette, V. M. (2004). Vicarious traumatization. Potential hazards and interventions for disaster and trauma workers. *Prehospital and Disaster Medicine, 6,* 73–78. doi:10.1017/S1049023X00001503

Pearlman, L. A. (2003). *Trauma and Attachment Belief Scale.* Los Angeles, CA: Western Psychological Services. Retrieved from http://www.nctsnet.org/content/trauma-and-attachment-belief-scale

Pelon, S. B. (2017). Compassion fatigue and compassion satisfaction in hospice social work. *Journal of Social Work in End-Of-Life & Palliative Care, 13,* 134–150. doi:10.1080 /15524256.2017.1314232

Pottie, C., & Ingram, K. (2008). Daily stress, coping, and well-being in parents of children with autism: A multilevel modeling approach. *Journal of Family Psychology, 22,* 855–864. doi:10.1037/a0013604

Qualtrics.com (2018). *Home page.* Retrieved from https://www.qualtrics.com/

Quine, L., & Pahl, J. (1991). Stress and coping in mothers caring for a child with severe learning difficulties: A test of Lazarus' transactional model of coping. *Journal of Community & Applied Social Psychology, 1,* 57–70. doi:10.1002/casp.2450010109

Sacco, T. L., Ciurzynski, S. M., Harvey, M. E., & Ingersoll, G. L. (2015). Compassion satisfaction and compassion fatigue among critical care nurses. *Critical Care Nurse, 35*(4), 32–44. doi:10.4037/ccn2015392

Sacco, T. L., & Copel, L. C. (2018). Compassion satisfaction: A concept analysis in nursing. *Nursing Forum, 53,* 76–83. doi:10.1111/nuf.12213

Schmidt, M., & Haglund, K. (2017). Debrief in emergency departments to improve compassion fatigue and promote resiliency. *Journal of Trauma Nursing, 24,* 317–322. doi:10.1097/JTN.0000000000000315

Sexton, L. (1999). Vicarious traumatisation of counsellors and effects on their workplaces. *British Journal of Guidance & Counselling, 27,* 393–403. doi:10.1080/03069889908256279

Sexton, J. B., Helmreich, R. L., Neilands, T. B., Rowan, K., Vella, K., Boyden, J., … Thomas, E. J. (2006). The Safety Attitudes Questionnaire: Psychometric properties, benchmarking data, and emerging research. *BMC Health Services Research, 6,* 44. doi:10.1186/1472-6963-6-44

Shaw, C. (1999). A framework for the study of coping, illness behavior and outcomes. *Journal of Advanced Nursing, 29,* 1246–1255. doi:10.1046/j.1365-2648.1999.01010.x

Shih, T-H., & Fan, X. (2009). Comparing response rates in e-mail and paper surveys: A meta-analysis. *Educational Research Review, 4,* 26–40. doi:10.1177/1525822x08317085

Salloum, A., Kondrat, D. C., Johnco, C., & Olson, K. R. (2015). The role of self-care on compassion satisfaction, burnout, and secondary trauma among child welfare workers. *Children and Youth Services Review, 49,* 54–61. doi:10.1016/j.childyouth.2014.12023

Sorenson, C., Bolick, B., Wright, K., & Hamilton, R. (2015). Understanding compassion fatigue in healthcare providers: A review of current literature. *Journal of Nursing Scholarship, 48,* 456–465. doi:10.1111/jnu.12229

Sorenson, C., Bolick, B., Wright, K., & Hamilton, R. (2017). An evolutionary concept analysis of compassion fatigue. *Journal of Nursing Scholarship, 49,* 557–563. doi:10.1111/jnu.12312

Sprang, G., Craig, C., & Clark, J. (2011). Secondary traumatic stress and burnout in child welfare workers: A comparative analysis of occupational distress across professional groups. *Child Welfare, 90,* 149–168. Retrieved from https://www.cwla.org/child-welfare-journal/

Stamm, B. H. (2005). *The Pro-QOL manual (Professional Quality of Life Scale: Compassion Satisfaction, Burnout & Compassion Fatigue/Secondary Trauma Scales).* Baltimore, MD: Sidran Press.

Stamm, B. H. (2010). *The concise PROQOL manual* (2nd ed.). Pocatello, ID: ProQOL.org.

Sulzer, S. H., Feinstein, N. W., & Wendland, C. L. (2016). Assessing empathy development in medical education: A systematic review. *Medical Education, 50,* 300–310. doi:10.1111/medu.12806

Thomas, J. (2013). Association of personal distress with burnout, compassion fatigue, and compassion satisfaction among clinical social workers. *Journal of Social Service Research, 39,* 365–379. doi:10.1080/01488376.2013.771596

Ting, L., Jacobson, J. M., Sanders, S., Bride, B. E., & Harrington, D. (2005). The secondary traumatic stress scale (STSS). Confirmatory factor analyses with a national sample of mental health social workers. *Journal of Human Behavior in the Social Environment, 11,* 177–194. doi:10.1300/J137v11n03_09

Travis, D. J., Lizano, E. L., & Mor Barak, M. E. (2016). 'I'm so stressed!': A longitudinal model of stress, burnout and engagement among social workers in child welfare settings. *British Journal of Social Work, 46,* 1076–1095. doi:10.1093/bjsw/bct205

Turgoose, D., & Maddox, L. (2017). Predictors of compassion fatigue in mental health professionals: A narrative review. *Traumatology, 23,* 172–185. doi:10.1037/trm0000116

Tyler, T. (2012). The limbic model of systemic trauma. *Journal of Social Work Practice, 26,* 125–138. doi:10.1080/02650533.2011.602474

U.S. Department of Health and Human Services, Administration for Children and Families. (2015). *Child maltreatment.* Washington, DC: Author.

Van Hook, M., & Rothenberg, M. (2009). Quality of life and compassion satisfaction/fatigue and burnout in child welfare workers: A study of the child welfare workers in community-based care organizations in central Florida. *Social Work & Christianity, 36,* 36–54. Retrieved from https://www.nacsw.org

Way, I., Van Deusen, K., & Cottrell, T. (2007). Vicarious trauma: Predictors of clinicians' disrupted cognitions about self-esteem and self-intimacy. *Journal of Child Sexual Abuse, 16,* 81–98. doi:10.1300/J070v16n04_05

Wright, R., Powell, M. B., & Ridge, D. (2006). Child abuse investigation: An in-depth analysis of how police officers perceive and cope with daily work challenges. *Policing, 29,* 498–512. doi:10.1108/13639510610684728

Wright, T. (2014). Too scared to learn: Teaching young children who have experienced trauma. *Young Children*, *69*(5), 88–93. Retrieved from https://www.naeyc.org/resources/pubs/yc