THE "COST OF CARING": IDENTIFYING CORRELATES OF BURNOUT, SECONDARY TRAUMATIC STRESS, AND COMPASSION SATISFACTION AMONG TEXAS VICTIM ASSISTANCE COORDINATORS

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by

Alexander H. Updegrove

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THE "COST OF CARING": IDENTIFYING CORRELATES OF BURNOUT, SECONDARY TRAUMATIC STRESS, AND COMPASSION SATISFACTION AMONG TEXAS VICTIM ASSISTANCE COORDINATORS

by

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DEDICATION

To Jacey, my wife and best friend, for modeling intellectual curiosity and compassion. I love you.

To my parents, Timothy and Vivian, for all of the sacrifices they have made to support my education. I learn something new about you every day.

To my siblings, Ben, Jon, Dan, Liz, Matthew, and Katie, for who they are and who they are becoming. You are always there for me.

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ABSTRACT

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Many victim service provider agencies experience high turnover rates as a result of staff suffering from burnout and trauma symptomatology. High turnover rates are problematic because they increase workloads for remaining staff members and decrease the quality of services delivered as new hires are trained. Consequently, many agencies seek ways to reduce symptomatology among their victim service providers. Before agencies can identify effective methods for reducing symptomatology, however, they must first identify the factors that are associated with higher levels of those symptoms.

The current study consisted of four primary objectives: (1) identify the prevalence of burnout, secondary traumatic stress, and compassion satisfaction among victim service providers; (2) identify factors that predict burnout among victim service providers; (3) identify factors that predict secondary traumatic stress among victim service providers; and (4) identify factors that predict compassion satisfaction among victim service providers.

Data for the current study were derived from 76 victim assistance coordinators (VACs) housed in Texas district attorney's offices. Results demonstrated that one in four VACs reported high levels of burnout, one in five VACs reported high levels of secondary traumatic stress, and one in four VACs reported low levels of compassion satisfaction. Purpose in life, religiosity, social support from family, and child care responsibility emerged as the strongest predictors of the dependent variables in multivariate analyses. Findings highlight the need for agencies to redouble their efforts to

protect staff from the negative effects of victim service work and to celebrate their successes.

KEY WORDS: Burnout; Secondary traumatic stress; Compassion satisfaction; Victim assistance coordinator; Victim services; Trauma

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CHAPTER I

INTRODUCTION

In 1985, the Texas Legislature enacted House Bill 235, which detailed the rights individuals possess when they become victims of crime (McDaniel, 2012). This legislation passed amid strong public support for the notion that crime victims deserve greater responsiveness from the criminal justice system (Smith, Sloan, & Ward, 1990). Prior to the reforms won by the victims' rights movement, victims were often kept in the dark regarding pivotal case and trial developments. Similarly, criminal justice system actors often acted without input from victims, and the system itself rarely—if ever—provided victims with an opportunity to express themselves and address criminal justice decision-makers (Cauthen, 2015). Thus, starting in the 1970s, the victims' rights movement tasked criminal justice system actors with learning what victims wanted from the criminal justice system, listening respectfully to victims' requests and concerns, and providing victims with opportunities to participate at key junctures throughout the process (Mastrocinque, 2010). Traditional criminal justice system actors such as prosecutors and judges, however, managed large caseloads and were severely overworked. As a result, they were poorly situated to take on the additional responsibilities required to help victims exercise their new rights. In response, the Texas Legislature introduced the role of Victim Assistance Coordinators (VACs).

By law, any Texas district attorney's (DA) office that serves a jurisdiction of 150,000 residents or more is required to employ at least one victim assistance coordinator (McDaniel, 2012). Because victim assistance coordinators work closely with victims (while prosecutors try the alleged perpetrator), VACs are housed within the local district

attorney's office (Tex. Code Crim. Proc. § 56.04; Yun, Swindell, & Kercher, 2009). Many victims first learn of victim assistance coordinators' existence in the immediate aftermath of a crime, when a crime victim liaison stationed with the law enforcement agency of jurisdiction provides victims with the VAC's contact information (Tex. Code Crim. Proc. § 56.07(a)(4)).

Victim assistance coordinators' primary responsibility is "to ensure that a victim, guardian of a victim, or close relative of a deceased victim is afforded the rights granted victims, guardians, and relatives by Articles 56.02 and 56.021" (Tex. Code Crim. Proc. § 56.04(b)). These rights include the right to notification of courtroom proceedings, the right to victim compensation, the right to complete a victim impact statement, and the right to present an oral or written allocution at trial (Hendrickson, 2013; Schuster & Propen, 2011; Tex. Code Crim. Proc. § 56.02). While carrying out their job responsibilities, victim assistance coordinators interact with individuals from many other agencies, including law enforcement, prosecutors, judges, and the Board of Pardons and Paroles (Tex. Code Crim. Proc. § 56.04(b)). Outside of Texas, victim assistance coordinators may be alternatively referred to as victim advocates (Cauthen, 2015; Schuster & Propen, 2011), prosecution-based advocates, court advocates (Camacho & Alarid, 2008, p. 289), prosecutor-employed advocates (Globokar, Erez, & Gregory, 2016, p. 13), system-based advocates, victim-witness assistance advocates (Lonsway & Archambault, 2013, p. 14; Ricj & Seffrin, 2013, p. 682), legal advocates (Sallee, 2016, p. 6), victim service providers, victim/witness coordinators, or victim/witness specialists (Sallee, 2016, p. 25).

The subfield of victimology has grown rapidly in recent years, largely focusing on crime victims, their experiences, and their needs. As a result, few scholars have studied the experiences of victim service providers (Boesdorfer, 2011; Kolb, 2014). Victimologists have yet to fully explore the many different forms victim service work takes within the community and within specific criminal justice agencies (Globokar et al., 2016, p. 18). This oversight is unfortunate, because victim service providers offer resources for victims of gendered violence above and beyond those available at more traditional outlets, such as medical centers, police stations, and the judicial system (Ganz, 2015, p. 161). In Texas, victim assistance coordinators play an indispensable role in the state's response to crime. Like other types of victim advocates (Englebrecht, Mason, & Adams, 2014; Maier, 2008), victim assistance coordinators seek to empower victims to exercise their rights while shielding them from the more harsh and impersonal aspects of the criminal justice system. In doing so, victim assistance coordinators interject care and compassion for victims back into the criminal justice system. Despite the necessity for victim assistance coordinators, the only study to date that examined this population in Texas collected demographic information on gender, level of education, and years of experience (Yun et al., 2009). As a result, additional research is required in order to better understand this unique population of victim service providers.

Problem Statement

The victim services profession suffers from an abnormally high turnover rate among agencies' staff. For example, a victim service provider recounted that, "Over the course of my short five years as a domestic violence advocate I have seen dozens of advocates not only leave my organization but permanently abandon the field as a whole

within their first year or two" (Bangs, 2010, p. 1). This observation is supported by empirical research demonstrating that one-to-two out of every five child protective services (CPS) workers will quit their job before their one-year anniversary with the agency (Westbrook, Ellis, & Ellett, 2006). Furthermore, Bemiller and Williams (2011) estimated that victim service providers spend six to 10 years in the profession before moving on to another career. Together, these statistics suggest that victim assistance coordinators in Texas are at risk for turnover.

Background of the Problem

Problems caused by turnover. Employee turnover harms both victim service agencies and the clients to whom they provide services (Boesdorfer, 2011). Agencies experiencing high turnover rates face a constant influx of new service providers and must allocate time, money, and personnel to training these new hires (Bangs, 2010; Meyers & Cornille, 2002). Many of these agencies operate on a tight budget and can ill afford the additional resources this hiring process requires (Berger & Quiros, 2016). Newly trained service providers come into the job without knowledge of community partners and the services they offer, and without goodwill stored up from previous interactions. New hires may also second-guess their decisions and abilities more than veteran staff, thereby increasing the likelihood that they will make a mistake (Bangs, 2010; Meyers & Cornille, 2002). As a result, new hires are poorly equipped to meet clients' needs at the outset (Bahner & Berkel, 2007; Bangs, 2010). Agencies may attempt to minimize the risks new hires pose by assigning veteran service providers to monitor and oversee them. Constantly mentoring new recruits, however, may exhaust or frustrate more experienced service providers. At the very least, it increases their workload.

Demand for victim services does not decrease following a service provider's departure. Thus, victim service agencies must divide the same amount of work among a smaller number of workers until they fill the vacant position (Meyers & Cornille, 2002). This places an intense pressure on the remaining service providers, many of who already bear unwieldy workloads. Worse, service providers may still be processing their coworker's sudden exit when their workload increases. Unanticipated resignations jeopardize staff morale (Pearlman & Saakvitne, 1995). As one scholar observed, "hope could rise or fall depending on whether or not [victim service providers'] colleagues had hope" (Crain & Koehn, 2012, p. 183). Victim service providers suffering from low morale are at risk for passing their negative attitudes on to clients (Dutton & Rubinstein, 1995; Pearlman & Saakvitne, 1995).

Service providers who assume responsibility for a departing provider's clients are often forced to start over from the beginning with the client-provider relationship. This is because client-provider rapport does not transfer from one provider to another, but rather must be established separately for each provider and client. Building rapport takes times. As with any relationship, clients are unlikely to fully trust service providers on their first or second interaction. Instead, providers must greet clients with friendliness and mutual respect across multiple visits, accumulating goodwill with each visit. Establishing rapport with clients may take longer than other relationships due to the trust-violating nature of victimization (Munroe et al., 1995). Victimization consists of one human being (a perpetrator) intentionally harming another (the victim), often without warning (Daigle & Muftic, 2015). As a result, clients may be more guarded and view others with greater suspicion.

Turnover disrupts client-provider rapport. At best, turnover represents "setbacks to [clients'] recovery" because time is lost while a new victim service provider builds rapport with the client (Clawson & Dutch, 2008, p. 4). In some cases, however, new service providers may struggle to establish rapport. Each client-provider relationship is unique, with its own dynamics, and new service providers bring different personalities and working styles with them to this relationship. Some clients may not respond well to these changes. Turnover, for example, may cause clients to feel betrayed and disillusioned with the benefits offered by victim service provider agencies (Bemiller & Williams, 2011). Clients who feel this way may cut all contact with the new service provider and stop participating in the criminal justice process (Clawson & Dutch, 2008). Worse, these clients may forego seeking help from other victim service agencies in the future if they are victimized again.

Soul weariness: The cause of turnover. Scholars contend that "soul weariness" is one of the primary causes of turnover within the victim services profession (Bonach & Heckert, 2012; Bride, Hatcher, & Humble, 2009; Bride & Kintzle, 2011; Maslach, 1978; Stamm, 1999a, p. xix). As early as the 1990s, scholars recognized that "there is a cost to caring" (Figley, 1995, p. 1). A few years later, (Stamm, 1999a, p. xix) elaborated on this "cost," clarifying that, "there is a soul weariness that comes with caring." Soul weariness increases the likelihood that victim service providers will leave the agency where they are employed. One study reported, for example, that two-thirds of victim service providers considered quitting their job due to soul weariness (Bangs, 2010). Soul weariness stems from one of the most important aspects of victim service providers' work—empathetic listening. Empathetic listening helps service providers build rapport with their clients, but

also functions like "a double-edged sword" (Baranowsky, 2002, p. 157). Many clients develop trauma symptoms after suffering victimization. As a result, service providers who empathize with their clients risk taking on some of that pain (Magen & Konasewich, 2011). If left unaddressed, this trauma becomes soul weariness.

Trauma scholars argue that pain and suffering can be transmitted from one host to another without either individual realizing the transaction has taken place. This concept is known as "the psychological version of the germ theory" (Bloom, 1999, p. 258). Although germs and trauma share many similarities, important differences exist. Most notably, germs are spread through *physical* proximity to a contaminated individual (Centers for Disease Control and Prevention, 2017), while trauma spreads through *emotional* closeness to a traumatized individual (Bloom, 1999; Pearlman & Saakvitne, 1995). Because empathetic listening requires a degree of emotional closeness to the speaker, victim service providers risk experiencing their clients' trauma secondhand (McCann & Pearlman, 1990; Meyers & Cornille, 2002). Scholars have described this transmission of trauma as "emotional taint" (Ganz, 2015, p. 33). Emotional taint operates in the following manner:

> victim advocates may not realize they are experiencing the feelings of being survivors, but like the pebbles thrown into the pond, the ripples from the acts of the [perpetrator] are felt at many levels; the victims/survivors, the victim advocates, the case managers, and their counselors and therapists. These professionals may experience being survivors of [their client's victimization] as well. (Sallee, 2016, p. 101)

The link between empathetic listening and the transmission of trauma, or emotional taint, is best illustrated by a rhetorical question: "If [victim service providers] are not engaged with others sufficiently to understand their pain and their experiences, then how could [victim service providers] truly be with them?" (Stamm, 1999b, p. xxxiv). Empathetic listening is perhaps the most important aspect of victim service providers' job (Baranowsky, 2002; Gentry, Baranowsky, & Dunning, 2002). Nevertheless, the act of empathetic listening itself renders service providers vulnerable to taking on their clients' trauma. If left unaddressed, the trauma that service providers take on from their clients naturally progresses to "soul weariness" (Stamm, 1999a, p. xix). Victim service providers who feel like they can no longer manage their soul weariness may be motivated to quit their job or seek out a new career (Maslach, Shaufeli, & Leiter, 2001; Pearlman & Saakvitne, 1995). Thus, soul weariness likely contributes to agency turnover.

Other problems caused by soul weariness. Soul weariness has many other consequences besides turnover. First, victim service providers who take on their clients' trauma may experience a wide range of emotions, including anger, confusion, distress, fear, frustration, grouchiness, helplessness, meaningless, numbness, sadness, and shock (Beaton & Murphy, 1995; Maslach & Jackson, 1981; Fischman, 2008). Service providers may also manifest physical and psychological symptoms, such as anxiety, digestive problems, insomnia, a lack of focus, memory loss, nightmares, pervasive and unwelcome thoughts, restlessness, tension headaches, and tiredness (Cerney, 1995; Fischman, 2008; Johnson, 2016; Maslach & Jackson, 1981; Wies & Coy, 2013).

Second, trauma exposure alters how victim service providers view the world around them (Anderson, 2004). Service providers who experience soul weariness, for

example, may trust strangers less, worry about loved ones being victimized, and perceive danger in innocuous situations (McCann & Pearlman, 1990). Soul weariness also distorts how service providers view themselves. Service providers experiencing soul weariness may lose faith in their personal agency and ability to effect positive change (Bandura, 2000; McCann & Pearlman, 1990; Pearlman & Saakvitne, 1995). Consequently, these service providers may become fatalistic and project negativity onto future outcomes. This mentality is dangerous because it threatens to disempower clients and overwhelm them with despair. After all, if victim service providers are experts and even the experts consider the situation hopeless, who are clients to disagree?

Third, soul weariness interferes with victim service providers' ability to maintain healthy relationships with their significant other, family, and friends (Baird & Jenkins, 2003; Cerney, 1995; Srdanovic, 2009). Because trauma is contagious (Coddington, 2017; Knox, 2014; Mcclelland, 2013; Reuben, 2015), service providers who take on their clients' trauma risk transmitting that pain and suffering to their own loved ones, if they discuss what is bothering them (Cerney, 1995). Vivid stories of clients' victimization, for example, may prove traumatic for both service providers and their family members, should they recount those stories to loved ones. Recognizing this risk, some service providers may emotionally withdraw from their loved ones in a misguided attempt to spare them pain (Pearlman & Saakvitne, 1995). Both methods of managing soul weariness—confiding in loved ones or withdrawing from them—have the potential to cause friction in service providers' relationships outside of the office (Maslach & Jackson, 1981). Some service providers cope with this friction by abusing alcohol, cigarettes, or illicit drugs (Edmund & Bland, 2011; Fischman, 2008; Maslach & Jackson,

1981). Service providers who use these problematic coping mechanisms more frequently than their loved ones are accustomed to may find that they have an alienating effect.

Fourth, although some traumatized service providers quit the victim services profession, others elect to remain at their agency. This choice poses several challenges. To begin with, traumatized individuals are perpetually stuck in crisis mode and prioritize self-preservation (Dutton & Rubinstein, 1995; Valent, 1995). Service providers who engage in self-preservation may blame clients for unwittingly transmitting their trauma, or acting cold and distant toward them (Valent, 1995). Within minutes, service providers can seriously undermine rapport that took weeks or months to build (Dutton & Rubinstein, 1995; Valent, 1995). Even if the client-provider relationship survives this behavior, traumatized service providers deliver poorer quality care to clients (Boone & Castillo, 2008; Brady, Guy, Poelstra, & Brokaw, 1999; Edmund & Bland, 2011). Service providers concerned with self-preservation may also withdraw from their coworkers or erupt in anger (Pearlman & Saakvitne, 1995). Furthermore, traumatized service providers may postpone important work responsibilities, skip major meetings, ignore voicemails, arrive at work late, or call in sick (Campbell, 2008; Esaki & Holloway, 2013; Maslach, 1978; Osofsky, Putnam, & Lederman, 2008). These strategies function to limit the personal resources and energy victim service providers spend interacting with other human beings.

Some service providers avoid engaging in self-preservation and instead assume "excessive responsibility" for their clients' well-being (Dutton & Rubinstein, 1995, p. 88). Service providers guilty of this response try to micromanage clients' actions and make their decisions for them. Consequently, clients who encounter this behavior are

disempowered because service providers violate their personal agency. Victim empowerment is defined as "having (or taking) control, having a say, being listened to, being recognized and respected as an individual and having the choices one makes respected by others" (United Nations Office on Drugs and Crime, 2009, p. 3). On some occasions, respecting clients' choices means watching them make choices that are detrimental to their well-being, such as getting back together with an abusive partner (Kolb, 2014).

Although service providers can and should encourage victims to explore all of their options and think through the consequences of their choices, this decision must ultimately rest with victims if they are to be empowered. Kolb (2014) describes the delicate balancing act service providers face. On the one hand, service providers are morally obligated to prevent victims from experiencing revictimization. On the other hand, the victim empowerment philosophy that many victim service agencies adhere to discourages service providers from trying to rescue victims from their choices. Empowering traumatized victims is important because the act of being victimized is characterized by the inability to control one's own experiences (Berger & Quiros, 2016). Victim service providers who feel responsible for preventing their clients from experiencing additional trauma by controlling victims' choices undermine the client-service provider relationship and disregard healthy boundaries (Choi, 2011a, p. 114). The blurring of professional boundaries is dangerous because it creates an environment where either party (service provider or client) may become emotionally dependent on the other (Fischman, 2008). In some cases, the blurring of professional boundaries may lead to both parties becoming sexually involved (Esaki & Holloway, 2013).

Service provider resiliency. One criticism of the soul weariness literature is that scholars primarily focus on the negative aspects of social work without highlighting the flip side—all of the positive aspects of the helping profession (Tsai, El-Gabalawy, Sledge, Southwick, & Pietrzak, 2015). Scholars who raise this criticism recommend reframing the issue to celebrate victim service providers' compassion and commitment to creating positive change in their clients' lives. As one service provider observed, "We also need to begin to talk about...how resilient we are. This work can deepen our sense of connection in the world because we can overcome trauma and suffering" (Anderson, 2004, p. 3). Resilient service providers recognize their vulnerability to soul weariness and take appropriate steps to manage the inevitable transfer of their clients' trauma. Without denying their clients' pain, resilient service providers choose to focus on their success stories and the positive outcomes of the therapeutic interaction with clients. Thus, resilient service providers are energized by the feeling that they are making a difference in the lives of the people who need it most (Bemiller & Williams, 2011; Stamm, 2002).

Purpose of the Study

The present study strives to accomplish several goals. First, although victim assistance coordinators have been legislatively mandated in Texas since 1985 (McDaniel, 2012), the sole study to date that has examined this population only collected demographic data on VACs' gender, level of education, and years of experience (Yun et al., 2009). Thus, the present study seeks to better understand victim assistance coordinators in general. Specifically, this study uses descriptive statistics to explore basic demographic information about those who serve as VACs beyond that reported by Yun and colleagues (2009).

Second, before victim assistance coordinators can develop coping mechanisms to manage soul weariness symptoms, scholars first need to identify the associated risk factors related to it. Understanding risk factors for soul weariness will allow for early identification and intervention. In turn, early interventions may slow the rate of agency turnover by restoring victim assistance coordinators' psychological well-being (Babin, Palazzolo, & Rivera, 2012). As scholars and practitioners alike have recognized, "in the end, retaining dedicated and effective [victim service providers] is the goal" (Bemiller & Williams, 2011, p. 90). Thus, the present study seeks to identify predictors of soul weariness among victim assistance coordinators.

A third goal of this study is to establish the prevalence of soul weariness among victim assistance coordinators. Statistics on the prevalence of soul weariness among this population will empirically document the phenomenon's occurrence. Victim service provider agencies can then use this information to begin normalizing the experience and reduce the stigma surrounding soul weariness (Bangs, 2010; Dutton & Rubinstein, 1995). Victim assistance coordinators who understand that soul weariness is commonplace and "inevitable" may be more likely to seek help than service providers who feel as if they are "bad," "weak," or "defective" for taking on their clients' trauma (Bangs, 2010; Campbell, 2008, p. 110; Dutton & Rubinstein, 1995, p. 96; Newell & MacNeil, 2010; Srdanovic, 2009, p. 45). Agencies that raise awareness of soul weariness will provide victim assistance coordinators with a label and terminology that can help them better understand their experiences as a compassionate helper. The benefits of labeling trauma are evident from the American Psychiatric Association's (APA) formal introduction of posttraumatic stress disorder (PTSD) as a diagnosis in 1980. As scholars have noted, this diagnosis "

serve[s] several important roles within psychiatry, including those which do not require any particular level of scientific reliability, such as to validate a person's reactions to an event or encourage a person to pursue treatment" (Smith, 2011, p. 68). The same may be true for the concept and study of soul weariness (Woods, 2015).

Soul weariness is operationally defined as two separate constructs in the present study: burnout and secondary traumatic stress. Burnout is a broad construct that encompasses "the generalized stress of work" (Campbell, 2008, p. 37). As such, burnout is the product of unfavorable work environments that unnecessarily complicate and hinder employees' ability to carry out their job duties effectively (Baird, 1999). Maslach and Jackson (1981, p. 99) defined burnout as "emotional exhaustion and cynicism" that stems from "people work." In contrast to burnout, secondary traumatic stress is a narrower construct. The symptoms of secondary traumatic stress are identical to those of posttraumatic stress disorder (PTSD), with the key distinction that onset is caused by exposure to traumatized individuals rather than firsthand experiences of a traumatic event (Baird, 1999; Bride & Kintzle, 2011; Figley, 1995). Other scholars contend that secondary traumatic stress and PTSD symptoms "parallel" each other (Bonach & Heckert, 2012, p. 296). Secondary traumatic stress symptoms tend to be less severe than those of PTSD because the trauma is experienced secondhand (Baird, 1999; Bonach & Heckert, 2012; Bride & Kintzle, 2011; Figley, 1995; Fischman, 2008). Secondary traumatic stress is a more narrow construct than burnout because it is explicitly caused by exposure to traumatized individuals, while burnout is caused by "general workplace conditions" (Baird & Jenkins, 2003, p. 82; Vermilyea, 2014).

Despite conceptual differences between burnout and secondary traumatic stress, victim service providers who experience either phenomenon exhibit many of the same symptoms (Anderson, 2004; Campbell, 2008; Edmund & Bland, 2011; Munroe, 1999; Pearlman & Saakvitne, 1995; Trippany, Kress, & Wilcoxon, 2004; Williams & Sommer Jr., 1999). Research also suggests that victim service providers view their experiences more simplistically than scholars do (Hendrickson, 2013). Thus, rather than differentiating between causes of soul weariness (e.g. trauma exposure or poor working environments), service providers appear to simply view their experiences as a negative consequence of "caring too much" (Hendrickson, 2013, p. 104). For these reasons, the present study uses the lay concept of soul weariness (Stamm, 1999a, p. xix) to collectively refer to the symptoms associated with the more precise and nuanced psychological constructs of burnout and secondary traumatic stress.

A fourth goal of this study is to identify the factors that correspond with victim assistance coordinators who are resilient, psychologically well-adjusted, and display healthy coping styles. Emphasizing the positive aspects of social work is referred to as "compassion satisfaction" (Stamm, 2002). Stamm (2002, p. 109) explained the need to study compassion satisfaction in the following words: "[in order] to understand the negative 'costs of caring,' it is necessary to understand the credits or positive 'payments' that come from caring." Stamm (2002) defined compassion satisfaction as: (1) "the satisfaction derived from the work of helping others" (p. 107), and (2) "happiness with what one can do to make the world in which one lives a reflection of what one thinks it should be" (p. 113).

Research Questions

In order to address the present study's goals, an electronic survey was emailed to the entire population of victim assistance coordinators employed in Texas's 254 counties (N = 345). The final sample consisted of 76 victim assistance coordinators from 69 Texas counties, resulting in a response rate of 22.03%. Within the final sample, 27.17% of Texas counties were represented.

The present study explores four research questions:

(1) What is the prevalence of burnout, secondary traumatic stress, and compassion satisfaction among victim assistance coordinators?

(2) What factors predict burnout among victim assistance coordinators?

(3) What factors predict secondary traumatic stress among victim assistance coordinators?

(4) What factors predict compassion satisfaction among victim assistance coordinators?

Dissertation Overview

Chapter two of the dissertation summarizes the literature on burnout, secondary traumatic stress, and compassion satisfaction. This chapter begins by tracing the origin of trauma as a scholarly area of interest throughout the past couple of centuries. Special attention is given to the time period starting with the diagnosis of posttraumatic stress disorder (PTSD) in 1980 up through the longitudinal studies of PTSD conducted in the wake of the September 11, 2001 terrorist attacks. This chapter also details how the study of trauma expanded from focusing almost exclusively on Vietnam war veterans to include survivors of natural disasters, man-made events, crime victims, and people caring

for traumatized individuals. Next, the chapter discusses burnout, secondary traumatic stress, and other constructs associated with the lay concept of soul weariness. Chapter two concludes by reviewing common predictors of soul weariness identified in prior literature.

Chapter three specifies the methodology used in the present study. This chapter consists of a full description of the sample and how it was obtained, a list of dependent, independent, and control variables and how they were coded, details on the treatment of missing data, and an overview of the analyses.

Chapter four presents results from the analyses. Descriptives provide basic demographic information about those who serve as victim assistance coordinators. Next, bivariate analyses explore the relationship between each dependent and independent variable included in the study. Following this, ordinary least squares (OLS) regression analyses examine the effect of the independent variables on each dependent variable while holding other variables constant.

Chapter five highlights the main findings of interest, discusses policy implications for practitioners, and identifies study limitations. The chapter concludes with suggestions for future research in this area.

CHAPTER II

REVIEW OF THE LITERATURE

The study of trauma has changed drastically from the Industrial Revolution of the 18th and 19th centuries to the post-September 11th, 2001 landscape. Major developments include: (1) the beginning of the formal, scientific study of trauma; (2) the introduction of posttraumatic stress disorder as a psychological disorder in the American Psychiatric Association's third edition of the *Diagnostic and Statistical Manual of Mental Disorders*; (3) the realization that individuals can develop trauma symptomatology as a result of emotional proximity to traumatized persons; and (4) calls to identify factors predictive of resiliency among service providers who routinely interact with traumatized individuals.

The History of Trauma

The origin of trauma. The earliest accounts of trauma appear in passages of popular literature that describe the psychological effects of war on those who survived combat (Andreasen, 2010; Lasiuk & Hegadoren, 2006). Birmes, Hatton, Brunet, and Schmitt (2003), for example, highlight how the *Epic of Gilgamesh*, *The Iliad*, and several of Shakespeare's plays detail various symptoms (e.g. flashbacks and nightmares) characters developed after experiencing combat-related trauma. Although anecdotal, these accounts provided the first indication that there is a psychological component to warfare and situations where death is imminent (e.g. torture or natural disasters) (Crocq & Crocq, 2000). Nevertheless, the fictional nature of these accounts prevented the scientific study of trauma and the compilation of a list of symptoms associated with combat exposure (Birmes et al., 2003).

Trauma during the Industrial Revolution. Many ancient cultures recognized a link between combat and mental health (Lommel, 2013), but the formal study of trauma did not emerge until the Industrial Revolution in England during the late 1700's and early-to-mid 1800's (Crocq & Crocq, 2000). The proliferation of railways and steam-powered trains characterized this time period, and consequently, the world caught its first glimpse of the terrible destruction caused by high-speed collisions and derailments. Individuals who observed these disasters radically differed from those who served on the front lines in war (Crocq & Crocq, 2000). Throughout much of history, the horrors of war were largely confined to isolated battlefields outside the presence of civilians. As a result, the psychological effects of combat (e.g. flashbacks and nightmares) were primarily manifested by military survivors rather than civilian populations. The Industrial Revolution changed this by introducing steam-powered trains into the lives of ordinary people (Lasiuk & Hegadoren, 2006).

Railways started to appear everywhere, but this expansion came at a price (Lasiuk & Hegadoren, 2006). As railroads grew, more people relied on trains as a mode of transportation. More people traveling by rail meant more trains, and more trains meant more opportunities for train wrecks—trains colliding with each other or derailing at breakneck speeds. Railway accidents marked one of the first times in history that civilians were exposed to traumatic events on a large scale (Smith, 2011). Passengers who survived these near-death encounters often developed physical and psychological symptoms, and many communities witnessed loved ones or neighbors undergo abrupt changes following such incidents (Lasiuk & Hegadoren, 2006). These inexplicable transformations included experiencing anxiety around trains, trouble sleeping, and having

terrifying dreams involving train crashes (Lasiuk & Hegadoren, 2006), and captured the attention of both the public and the medical community (Birmes et al., 2003; Keller & Chappell, 1996; O'Brien, 1998; Smith, 2011).

Erichsen (1867), a British surgeon, coined the term *railway spine* to refer to physical injuries caused by train accidents and associated with the onset of psychological symptoms. Railway spine was an important concept for its time because it suggested that individuals' experiences in the physical world contributed to the development of psychological symptoms. Railway spine also prompted medical professionals to question if everyone who experienced a train accident responded similarly, or if individuals' thoughts about the accident influenced whether or not they developed symptoms (Lasiuk & Hegadoren, 2006). Scholars credit the Industrial Revolution (and the railway accidents of this era) with raising awareness about physical and psychological conditions stemming from traumatic events. Railway spine itself served as a precursor for what would later become known as posttraumatic stress disorder (PTSD) (Smith, 2011).

Trauma during the American Civil War. The American Civil War, waged from 1861 to 1865, resulted in an estimated total of 752,000 deaths for the Union and Confederates—the most of any U.S.-involved conflict to date (DeBruyne, 2017; Hacker, 2011). As a result, the war produced a virtually endless supply of combat survivors who suffered the psychological effects of wartime trauma (Friedman, n.d.). This left no shortage of case studies for medical practitioners to examine and develop a cluster of symptoms to describe (Birmes et al., 2003; Talbott, 1996).

One prominent example is Jacob Mendes Da Costa (1951), who published findings on what he labeled *irritable heart* disorder in 1871 based on a sample of

approximately 300 Civil War soldiers. In a testament to its enduring importance, the paper was reissued in 1951. Symptoms associated with irritable heart included tightness in the chest, a rapid heart rate, and feeling unable to breathe (Birmes et al., 2003; Horwitz, 2015). Laypeople more commonly referred to irritable heart as *soldier's heart* (Crocq & Crocq, 2000; Roche, 2011). Irritable heart was an important concept for its time because it accurately described many of the symptoms associated with anxiety disorders currently listed in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) published by the American Psychiatric Association (APA, 2013). Medical professionals also observed a phenomenon they called *nostalgia* during the Civil War, in which soldiers became severely despondent, presumably because they missed home and their loved ones (Horwitz, 2015). In several cases, soldiers died from this condition. Some scholars consider nostalgia to be the first recorded scientific mention of PTSD in history (Birmes et al., 2003). It is important to note here, too, that literature from this era continued to present fictional accounts of war, highlighting the terror many soldiers experienced as a result of facing combat. Friedman (n.d.) lists Stephen Crane's 1895 novel, *The Red Badge of Courage*, as one such testimony to wartime trauma.

Trauma during World War I. Following the end of the American Civil War, concerns over combat-related trauma faded from public consciousness (Lasiuk & Hegadoren, 2006). The start of World War I in 1914, however, forced physicians to once again reckon with the reality of wartime trauma. American soldiers first witnessed the brutality of trench warfare during the nine-month siege of Petersburg, Virginia at the end of the Civil War (Hess, 2013). Trench warfare enjoyed even broader use in World War I,

with trenches cutting through much of France and Belgium on the Western Front (Dunleavy, 2018). As a military tactic, trench warfare consisted of heavily bombarding the enemy's trenches with artillery fire. After a period of extensive bombardment, swarms of infantry would then leap out of their trenches and storm the enemy's trenches just a short distance ahead.

Physicians confronted with combat-related trauma symptoms assumed they were caused by soldiers surviving artillery blasts in their immediate vicinity (Andreasen, 2010). More specifically, exploding shells created overpressure (intense shockwaves) thought to damage soldiers' neurology and brains (Roche, 2011; Shively et al., 2016). As a result, Charles S. Myers (1916), a British physician, popularized the term *shell shock* to describe the primarily physical symptoms soldiers displayed post-combat (Jones, 2012). Shell shock lent medical legitimacy to what military officers had previously deemed *cowardice* (Roche, 2011, p. 19). The British military provided brief frontline treatment to individuals suffering from *cowardice* according to the philosophy of proximity, immediacy, and expectancy (PIE) before sending them back to the trenches (Matson, 2016). *Proximity* allowed soldiers experiencing *cowardice* to maintain contact with their peers, *immediacy* indicated that soldiers' symptoms only represented a brief interruption to their responsibilities, and *expectancy* communicated that affected soldiers were required to return to combat as soon as possible (Solomon & Benbenishty, 1986). During the course of World War I, the British military also killed more than 150 soldiers for presenting symptoms associated with *cowardice* (Matson, 2016).

As the war continued, physicians discovered that many soldiers presented shell shock symptoms even if they had never experienced an artillery shell explosion (Smith,

2011). Physicians also observed soldiers manifest symptoms on a delayed timeline, including after returning to civilian life (Smith, 2011). Abram Kardiner (1941) documented all of this in his book *The Traumatic Neuroses of War*, which served as an authority on combat-related trauma and, ultimately, helped inform the first conceptualization of posttraumatic stress disorder (Smith, 2011). Birmes and colleagues' (2003, p. 20) credit World War I with generating "the first large-scale observations and studies" on combat-related trauma. Psychologists and physicians from many countries, including Britain, France, Germany, and the United States, sought to understand this trauma (Crocq & Crocq, 2000). Nevertheless, explicit links between individuals' experiences (e.g. combat) and subsequent development of symptomatology remained elusive (Lasiuk & Hegardoren, 2006).

Trauma during World War II. Psychologists devoted little attention to combat-related trauma in the interim between World War I and World War II (Lasiuk & Hegardoren, 2006). The onset of World War II in 1939, however, spurred another intense period of study on the phenomenon. This time, physicians focused on how individuals' interactions with the environment changed the way their bodies and brains operated (Lasiuk & Hegardoren, 2006; Ozer, Best, Lipsey, & Weiss, 2003). Prior to World War II, physicians assumed soldiers with physiological shortcomings developed shell shock symptoms, and soldiers with robust physiology did not (Lasiuk & Hegadoren, 2006). In contrast, psychologists during World War II recognized that traumatic environments alter *all* soldiers' neurology and coping abilities to some degree (Lasiuk & Hegadoren, 2006). This new understanding produced updated terminology for combat-related trauma such as "traumatic war neurosis, combat fatigue, battle stress, and gross stress reaction"

(Andreasen, 2010, p. 67). Additional terms included "old sergeant's syndrome" and "the two-thousand-mile stare," although "battle fatigue" enjoyed the most widespread use (Roche, 2011, p. 9).

Trauma during the Korean War. By the time the Korean War commenced in 1950, psychologists preferred the term gross stress reaction, although the label combat/battle fatigue remained in circulation (Roche, 2011). The first edition of the *Diagnostic and Statistical Manual of Mental Disorders*, published by the American Psychiatric Association in 1952, listed gross stress reaction as an official diagnosis (Andreasen, 2010). This diagnosis was removed, however, from the second edition (Andreasen, 2010). The Korean War helped solidify psychologists' understanding of combat-related stress. Specifically, they now recognized that intense physical conditions and psychologically stressful situations could both trigger trauma symptoms in individuals (Roche, 2011).

Trauma, Vietnam, and Posttraumatic Stress Disorder. The conclusion of the Vietnam War and the emergence of posttraumatic stress disorder as an official DSM diagnosis are closely linked (Roche, 2011). Several factors contributed to this development. First, Vietnam veterans exhibited trauma symptoms in far greater numbers than veterans from previous wars (Roche, 2011). Second, many of these soldiers returned home to a public that was more critical of the U.S. war effort than previous generations (Andreasen, 2010). This taxed soldiers' already limited coping resources. Third, some healthcare providers viewed Vietnam veterans with suspicion and misdiagnosed their trauma symptoms as antisocial behavior (Kolb, 1993). Finally, Veterans Affairs (VA) hospitals turned veterans away without providing care because their trauma symptoms

were not considered a service-connected disability (Lasiuk & Hegadoren, 2006; Smith, 2011).

In order to rectify these problems, returning soldiers joined with the organization Vietnam Veterans Against the War (VVAW) to demand reparations from the United States (U.S.) government (Smith, 2011). Healthcare professionals also urged the medical field to validate the cluster of trauma symptoms they routinely observed in veterans (Lasiuk & Hegadoren, 2006). In 1980, the American Psychiatric Association (APA) published the third edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-III). The DSM-III debuted diagnostic criteria for a new psychological disorder, posttraumatic stress disorder (PTSD), that described the presence of severely intrusive trauma symptoms in both civilian and veteran populations (Crocq & Crocq, 2000; Neria, DiGrande, & Adams, 2011). Health professionals generally heralded the classification as long overdue, although detractors argued that the APA's decision was guided more by politics than incontrovertible empirical support (Lasiuk & Hegadoren, 2006).

Nevertheless, the introduction of PTSD as a diagnosis had several important ramifications. First, it settled the debate over whether individuals who developed trauma symptomatology possessed inherently inferior neurology. PTSD criteria explicitly stated that individuals developed trauma symptomatology as a result of exposure to stressful environments and experiences (Lasiuk & Hegadoren, 2006; Smith, 2011). This meant that anyone could develop trauma symptomatology under the right circumstances, regardless of the weakness or robustness of their neurology. Second, as anticipated, APA's classification of PTSD as a psychological disorder opened up the possibility for Vietnam veterans to receive treatment for trauma symptomatology at VA hospitals

(Roche, 2011). PTSD criteria attributed veterans' trauma symptoms to their military service, thereby overcoming the objection that they were not entitled to VA healthcare because they did not suffer from a service-connected disability (Lasiuk & Hegadoren, 2006; Smith, 2011). Vietnam veterans were not the only population to benefit from the new diagnosis, however, as mental health practitioners wrote PTSD criteria broad enough to encompass various civilian populations as well (Lasiuk & Hegadoren, 2006; Smith, 2011).

Smith (2011) highlighted two additional ways PTSD proved useful as a diagnosis. Assigning a medical term, PTSD, to the previously nameless cluster of trauma symptoms reassured individuals that they were not imagining the phenomenon, were not alone in their struggle, and were not abnormal or defective. The medical term PTSD also suggested that if the symptoms could be diagnosed, they could be treated. As a result, the introduction of PTSD served as a public service announcement regarding the importance for traumatized individuals to seek help from medical professionals.

Post-Vietnam developments on trauma. The study of trauma grew rapidly following publication of the DSM-III and the introduction of PTSD as a psychological disorder (Andreasen, 2010). Much of this research focused on measuring the extent of PTSD symptomatology among soldiers who had returned from Vietnam. For example, the federal government authorized the National Vietnam Veterans Readjustment Study (NWRS) in 1983 (Schlenger et al., 1992). Results from this nationally representative project revealed that more than 1 in 7 male Vietnam veterans met the criteria for PTSD over a decade after their military service had ended. Approximately 1 in 12 female Vietnam veterans satisfied PTSD criteria during the same time period.

Not all research relied on military populations, however. A parallel body of literature examining trauma in civilian populations emerged around the same time (Kolb, 1993). This literature highlighted the presence of trauma symptomatology among sexual assault and rape victims (Becker, 1982; Burgess & Holmstrom, 1974; Kramer & Green, 1991; Ozer et al., 2003). When the APA formulated PTSD as a diagnosis, they drew from trauma research on both military combat veterans *and* civilian rape victims. The APA maintained that both populations exhibited similar symptomatology, but gender conditioned the types of environments individuals inhabited and the experiences they encountered (Ozer et al., 2003). In other words, trauma developed according to gendered pathways. During the Vietnam War, more men witnessed military combat than women. As a result, men were more likely to develop combat-related trauma. Women, however, faced a greater risk for sexual assault compared to men. Thus, more women developed sexual assault-related trauma.

Stamm (1999b, p. xxxiv) contends that the study of trauma unfolded according to a natural progression, whereby scholars initially "attended to those who were most obviously in pain: the veterans and the rape victims." Consequently, trauma-related research is more readily available on these populations (Kaylor, King, & King, 1987; Weaver & Clum, 1995). Research on trauma in other populations also existed at this time, but appeared with less frequency. For example, Nathan, Eitinger, and Winnik (1964) and Krystal (1968) described trauma symptoms among individuals who had lived through the Holocaust. Similarly, Andreasen, Norris, and Hartford (1971) and Andreasen (1974) reported on trauma-related issues as they pertained to burn victims.

Since 1980, scholars have published over 4,200 studies on PTSD (Ozer et al., 2003). According to a meta-analysis conducted at the turn of the century, the majority of this research has relied on samples comprised of men with prior military service (Brewin, Andrews, & Valentine, 2000). Representative citations from this body of literature include Ahmadi, Azampoor-Afshar, Karami, and Mokhtari (2011), Kulka and colleagues (1990; 1991), and Tsai and colleagues (2015). As the field of trauma expanded, scholars focused on trauma symptomatology among special populations like crime victims (Badour, Resnick, & Kilpatrick, 2017; Christiansen & Hansen, 2015; Kilpatrick, Saunder, Veronen, Best, & Von, 1987; Resnick, Kilpatrick, Dansky, Saunders, & Best, 1993; Riggs, Dancu, Gershuny, Greenberg, & Foa, 1992; Ulmman, 2014) and Holocaust survivors (Kellermann, 2001; Lev-Wiesel & Amir, 2003; Prot, 2009). Scholars also explored the effects of trauma on individuals who developed symptomatology under more mundane circumstances, such as burn injuries (Gaylord, Holcomb, & Zolezzi, 2009; Hobbs, 2015; Patterson et al., 1993) and car wrecks (Khodadadi-Hassankiadeh, Nayeri, Shahsavari, Yousefzadeh-Chabok, & Haghani, 2017).

Some of the most important work on trauma published in recent years has involved disaster survivors. Studies on disaster survivors typically fall into one of two categories. The first category consists of natural disasters, such as earthquakes (Feder et al., 2013), hurricanes (Paxson, Fussell, Rhodes, & Waters, 2012; Rhodes et al., 2010), shipwrecks (Jeon et al., 2018), tornadoes (Adams et al., 2015), and other phenomena (Neria, Nandi, & Galea, 2008; Rubonis & Bickman, 1991). The second category concerns disasters orchestrated by humans with malicious intent, such as the 1995 Oklahoma City Bombing in the U.S. (Tucker, Dickson, Pfefferbaum, McDonald, &

Allen, 1997) and the 2011 Oslo bombing in Norway (Hansen, Nissen, & Heir, 2013). Individuals who experience manmade disasters typically develop greater trauma symptomatology than natural disaster survivors (Smith, 2011). As might be expected, the September 11, 2001 terrorist attacks have generated an especially large quantity of research on the effects of trauma (Bowler et al., 2017; DiGrande, Neria, Brackbill, Pulliam, & Galea, 2010; DiGrande et al., 2008; Feder et al., 2016; Horn et al., 2016; Pietrzak et al., 2014; Resnick, Galea, Kilpatrick, & Vlahov, 2004; Silver et al., 2004). This work has produced some valuable findings. Chief among these was the discovery that individuals who viewed media depictions of the attacks, but were not physically present or involved in cleanup efforts, developed trauma symptomatology as a result of their vicarious exposure (Neria et al., 2011).

DSM-5 PTSD Criteria

The APA has included PTSD as a diagnosis in every edition of its *Diagnostic and Statistical Manual of Mental Disorders* (DSM) since the publication of the third edition in 1980. Nevertheless, new developments in the trauma literature have required scholars to critically evaluate how they understand and diagnose the disorder. As a result, the diagnostic criteria for PTSD published in the *DSM-5*, the most recent manual, differ from previous formulations in a couple of important ways. First, the *DSM-5* created a new category, "Trauma- and Stressor-related Disorders," for disorders that could only be diagnosed in individuals who had experienced a traumatic event. PTSD is now listed under this new designation rather than grouped with the anxiety disorders. This move was prompted by the realization that individuals with PTSD can experience a range of negative emotions beyond anxiety and fear (Pai, Suris, & North, 2017). Second,

individuals who would otherwise meet the criteria for PTSD cannot be diagnosed with the disorder if they have not experienced a traumatic event. In other words, the onset or intensification of PTSD symptoms must have begun following exposure to a traumatic event (Pai et al., 2017). This marked a change from the *DSM-IV* to the *DSM-5*.

In order to be diagnosed with PTSD, an individual must first have been exposed to "death, threatened death, actual or threatened serious injury, or actual or threatened sexual violence" (APA, 2013, p. 271). Phrased differently, individuals must have personally experienced a traumatic event, been present as the event unfolded, worked closely with individuals who experienced the event, or been informed that a loved one experienced the event. Second, individuals must relive the traumatic event in some manner. This may occur through the replaying of unwanted memories, traumatizing dreams, experiencing past events as if they are presently taking place (flashbacks), or experiencing severe/extended mental suffering or hyperarousal triggered by something associated with the traumatic event. Third, individuals must exhibit signs of trying to suppress emotions and cognitions related to the traumatic event, or of avoiding anything that could trigger memory of the incident (e.g., the location where it occurred).

The fourth criterion for PTSD is that individuals must experience two or more of the following symptoms: (a) memory gaps associated with the event; (b) sustained shifts in how they evaluate themselves and the world around them (e.g., low self-worth and viewing everything/everyone as a potential threat); (c) engaging in constant self-blame or becoming obsessed with others' perceived role in perpetrating the trauma or contributing to its impact; (d) chronic experience of negative emotions; (e) lack of pleasure from events, behaviors, and hobbies that once brought joy; (f) inability to establish or

experience meaningful connections with those around them; and (g) prolonged absence of positive emotions.

Similarly, individuals must also exhibit two or more of the following symptoms: (a) grouchiness and hostility; (b) actions that are personally harmful or show little forethought; (c) a constant state of arousal; (d) skittishness; (e) short attention span and easily distracted; and (f) problems sleeping. Additional requirements stipulate that individuals must have presented PTSD symptoms longer than a month. Furthermore, the symptoms must have caused substantial problems at work or home and manifested independently of drug use (legal or illegal), prescriptions, and other medical explanations.

Secondary Traumatic Stress

When the field of traumatology first emerged, scholars concentrated on populations that could be readily identified as suffering in the aftermath of a life-altering event (Stamm, 1999b). This meant that the bulk of research examined the effects of trauma on soldiers returning from Vietnam (Brewin et al., 2000; Schlenger et al., 1992) and, to a lesser extent, sexual assault victims (Becker, 1982; Burgess & Holmstrom, 1974). From here, the field expanded to include research on Holocaust survivors (Nathan et al., 1964; Krystal, 1968), burn victims (Adreasen et al., 1971; Andreasen, 1974), and disaster survivors (Neria et al., 2008; Rubonis & Bickman, 1991), among others. By studying trauma in these populations, scholars displayed a budding awareness that individuals could develop trauma symptomatology from exposure to more than just military combat and crime. Nevertheless, researchers at this stage continued to fundamentally misunderstand the nature of trauma.

All of this changed with the next breakthrough—the observation that people who share an empathetic link with a traumatized individual risk taking on some of that individual's trauma symptoms (Stamm, 1999b). As early as the 1990s, psychologists cautioned that "there is a cost to caring" (Figley, 1995, p. 1). A few years later, Stamm (1999a, p. xix) elaborated on this cost, clarifying that, "there is a soul weariness that comes with caring." Mental health professionals now recognize that trauma can be transmitted from one host to another without their knowledge. Trauma scholars refer to this as "the psychological version of the germ theory" (Bloom, 1999, p. 258). Germs, however, spread through *physical* proximity to contaminated individuals, while trauma spreads through *emotional* closeness to traumatized individuals (McCann & Pearlman, 1990; Meyers & Cornille, 2002). Scholars have coined the term "emotional taint" to describe how trauma is transferred from one person to another (Ganz, 2015, p. 33).

Service providers establish emotional closeness with their clients through empathetic listening, a core component of every victim service providers' job (Stamm, 1999b). Empathetic listening is vital, but poses challenges that service providers must overcome. Empathetic listening, for example, helps service providers establish rapport with their clients. Empathetic listening also opens the door for service providers to take on their clients' trauma via emotional taint, however. This dilemma has led some scholars to call empathetic listening "a double-edged sword" (Baranowsky, 2002, p. 157). Sallee (2016, p. 101) described the dangers of empathetic listening in the following manner:

> victim advocates may not realize they are experiencing the feelings of being survivors, but like the pebbles thrown into the pond, the ripples from the acts of the [perpetrator] are felt at many levels; the victims/survivors,

> the victim advocates, the case managers, and their counselors and therapists. These professionals may experience being survivors of [their client's victimization] as well.

Victim service providers who exhibit trauma symptoms after interacting with traumatized crime victims suffer from *secondary traumatic stress* (Bride, Robinson, Yegidis, & Figley, 2004; Pearlman & Saakvitne, 1995). Figley (1995, p. 7) originally defined secondary traumatic stress as "the natural consequent behaviors and emotions resulting from knowing about a traumatizing event experienced by a significant other." A few years later, Figley (1999, p. 15) clarified that secondary traumatic stress is the "natural consequence of caring between two people: one [who] has been traumatized initially and the other [who] is affected by the first's traumatic experiences." Figley (2002, p. 3) provided his clearest definition yet when he stated that secondary traumatic stress is "nearly identical to PTSD, except that it applies to those emotionally affected by the trauma of another (usually a client or family member)." Other scholars have also noted the similarities between the symptomatology associated with the two constructs (Beaton & Murphy, 1995; Dutton & Rubinstein, 1995).

Today, scholars generally agree that secondary traumatic stress is virtually indistinguishable from PTSD, with the caveat that symptoms are typically less severe because the individual has only experienced the traumatic event secondarily (Baird, 1999; Bonach & Heckert, 2012; Bride & Kintzle, 2011; Figley, 1995; Fischman, 2008). No consensus exists, however, regarding who can experience secondary traumatic stress. Some contend that the term should be strictly reserved for social workers and therapists, since they are especially vulnerable to developing secondary traumatic stress as a result

of their disproportionate contact with traumatized individuals (Choi, 2011a). Proponents of this view argue that secondary traumatic stress represents a unique "occupational hazard" (Baird & Jenkins, 2003, p. 71). Fischman (2008, p. 108), for example, restricted her definition of secondary traumatic stress to only those "professionals" who empathically listen to "traumatized clients." Other scholars, however, have rejected this definition as too narrow. Figley (2002, p. 3) adopted this stance when he specified that secondary traumatic stress could result from exposure to "a [traumatized] client *or family member*" (emphasis added).

Beaton and Murphy (1995, p. 53) identified three key features of secondary traumatic stress: (1) an individual must have undergone a traumatic experience; (2) the traumatic event must have produced feelings, such as "fear, horror, and helplessness"; and (3) a second individual, after interacting with the traumatized individual, must display a negatively altered mental and/or physiological state. As with Figley (2002), nothing in this definition suggests that secondary traumatic stress is limited to mental health professionals. These requirements closely mirror the criteria for PTSD listed in the *DSM-5* (APA, 2013), strengthening the argument that secondary traumatic stress and PTSD describe the same basic cluster of symptoms (Figley, 2002). The similarities between the two constructs are even more pronounced when considering the additional symptoms Fischman (2008, p. 108) listed for secondary traumatic stress: "horror, anger, rage, sleep disturbances, alterations in memory, irritability, difficulty concentrating, avoidance or numbing to avoid thoughts and feelings connected with traumatic events, detachment, and estrangement from others."

Two other terms are commonly used to reference symptoms similar to those associated with secondary traumatic stress (Choi, 2011a; Vermilyea, 2014). These terms are *vicarious traumatization* (McCann & Pearlman, 1990) and *compassion fatigue* (Figley, 1995; Joinson, 1992). The field is sharply divided over whether secondary traumatic stress, vicarious traumatization, and compassion fatigue are different terms for the same phenomenon (Bangs, 2010; Campbell, 2008; Figley, 1995; Hendrickson, 2013; Hensel, Ruiz, Finney, & Dewa, 2015; Osofsky, Putnam, & Lederman, 2008), or whether they represent unique constructs that share some similarities in symptomatology (Anderson, 2004; Brady, Guy, Poelstra, & Brokaw, 1999; Cieslak et al., 2014; Jenkins & Baird, 2002; Srdanovic, 2009). Craig and Sprang (2010, p. 320), for example, argue that it is "premature" to conclude that the constructs are different from each other. Opponents of this view, however, contend that "these terms are often erroneously used interchangeably in the literature" (Newell & MacNeil, 2010, p. 60).

Scholars who attempt to bridge the divide between the two camps suggest that the terms describe similar symptomatology stemming from exposure to traumatized clients, but these symptoms result from separate processes (Vermilyea, 2014). The benefit to this approach is that scholars can disagree over how the processes involved work while still recognizing that because the constructs describe similar symptomatology, treatment methods that are effective for addressing symptoms associated with one construct are likely to be equally appropriate for addressing symptoms associated with the other constructs (Cieslak et al., 2014; Craig & Sprang, 2010; Hensel et al., 2015; Pearlman & Saakvitne, 1995). Given the unsettled nature of the trauma literature, all that can be said with certainty at this point is that: (1) further research is needed to clarify the

relationships between secondary traumatic stress, vicarious traumatization, and compassion fatigue, and (2) such research is beyond the scope of the present study.

In the absence of any clear guidance, the present study focuses on *secondary traumatic stress* because the construct is practically indistinguishable from PTSD, with the exception that symptoms are typically less severe because the individual has only been secondarily exposed to the traumatic event (Baird, 1999; Bonach & Heckert, 2012; Bride & Kintzle, 2011; Figley, 1995; Fischman, 2008). Although APA has yet to recognize *vicarious traumatization* or *compassion fatigue* as psychological disorders, it has provided a DSM diagnosis for PTSD since 1980 (American Psychiatric Association, 1980). Additionally, while the *DSM-5* never mentions secondary traumatic stress by name, it does recognize that individuals who experience "repeated or extreme indirect exposure to aversive details of the [traumatic] event(s), usually in the course of professional duties" may be diagnosed with PTSD (APA, 2013). Thus, the *DSM-5* provides some precedent for using the lens of secondary traumatic stress to examine the symptoms service providers take on from their traumatized clients.

Burnout

Burnout is a broad construct that encompasses "the generalized stress of work" (Campbell, 2008, p. 37). According to Baird (1999), burnout is the product of an unfavorable work environment that unnecessarily complicates and hinders employees' ability to carry out their job duties effectively. Others have proposed similar definitions. For example, Valent (2002, p. 19) suggested that burnout is caused by "frustration, powerlessness, and inability to achieve work goals." Maslach and Jackson (1981, p. 99)

offered a slightly different take on the construct when they described burnout as "emotional exhaustion and cynicism" that stems from "people work."

Maslach and Jackson's (1981) definition most closely matches that of secondary traumatic stress, since both highlight how symptoms develop from connections with other people. In other words, burnout and secondary traumatic stress both require a relational component to have been present prior to the development of symptoms. For secondary traumatic stress, the nature of this relationship is positive because trauma is transmitted from one individual to another via a close emotional bond. Burnout, however, occurs when someone feels that a supervisor, coworker, client, or loved one is demanding too much from them and they lack the resources or social support necessary to meet those expectations. As a result, burnout is the product of fractured or actively deteriorating relationships with other people. In some cases, the inability to draw on help from others may indicate a relative *absence* of relationships.

According to Maslach and Jackson (1981), burnout consists of three components: emotional exhaustion, depersonalization, and personal accomplishment (Maslach et al., 2001). Emotional exhaustion serves as the defining characteristic of burnout and refers to feeling overwhelmed with impossible work demands and having insufficient time to relax and recuperate. Depersonalization occurs when an individual feels distant from their clients and struggles to interact authentically with them. Finally personal accomplishment involves feeling productive and effective in assisting clients (Maslach, 1978). Emotional exhaustion and depersonalization are positively related to burnout, while personal accomplishment is negatively related to burnout (Maslach & Jackson, 1981; Maslach et al., 2001). Collins and Long (2003) view the three components of burnout as a

progression, with service providers' emotional exhaustion from work stressors leading to depersonalizing clients and depersonalization hindering service providers' ability to experience personal accomplishment (Collins & Long, as cited in Vermilyea, 2014).

Burnout and secondary traumatic stress are positively related to each other (Nelson, 2015), but differ in important ways. First, burnout is a "more established construct" than secondary traumatic stress (Jenkins & Baird, 2002, p. 423). Second, secondary traumatic stress requires exposure to traumatized individuals, whereas burnout can develop anywhere adverse working conditions exist (Baird & Jenkins, 2003; Vermilyea, 2014). As such, burnout is a broader construct that may impact a wider range of people. Third, while service providers may exhibit symptoms of secondary traumatic stress immediately following exposure to a traumatized client, individuals develop burnout at a much slower pace (Figley, 1999). Finally, secondary traumatic stress involves more than just "work-related pathology," and therefore may profoundly affect the "most private areas of [service providers'] lives" in ways that burnout does not (Stamm, 1999b, p. xxv).

Despite these differences, victim service providers who experience either phenomenon share similar symptomatology (Anderson, 2004; Campbell, 2008; Edmund & Bland, 2011; Munroe, 1999; Pearlman & Saakvitne, 1995; Trippany, Kress, & Wilcoxon, 2004; Williams & Sommer Jr., 1999). Evidence also suggests that victim service providers view their experiences more straightforward than scholars do. Specifically, service providers who develop symptomatology care more about obtaining relief from their symptoms than identifying the precise origin of those symptoms (trauma exposure versus an adverse working environment). As a result, affected service providers

simply regard their experiences as a negative consequence of "caring too much" (Hendrickson, 2013, p. 104).

Compassion Satisfaction

In response to criticisms that scholars focused on the negative aspects of social work (e.g. secondary traumatic stress and burnout) without acknowledging its many positive aspects (Tsai et al., 2015), Stamm (2002) introduced the concept of compassion satisfaction. According to Stamm (2002), compassion satisfaction consists of: (1) feeling personally fulfilled as a result of providing care to those in need; and (2) joy stemming from participation in the realization of a more humane world. Compassion satisfaction is a conscious reframing of social work intended to celebrate the compassion and dedication victim service providers display toward their clients.

Stamm (2002, p. 109) first highlighted the importance of changing how scholars view social work when she argued that "[in order] to understand the negative 'costs of caring,' it is necessary to understand the credits or positive 'payments' that come from caring." Shortly afterward, Anderson (2004, p. 3) observed that "We also need to begin to talk about...how resilient we are. This work can deepen our sense of connection in the world because we can overcome trauma and suffering." These calls continue today, as demonstrated by Sacco and Copel (2018, p. 76), who write that "there is a need to focus on the positive effects of caring." Other disciplines have reached similar conclusions. Scholars who study polyvictimization, for example, have criticized this literature for only focusing on the negative consequences associated with experiencing multiple abuse types. Instead, these scholars advocate for research examining how multiple *protective* factors combine to produce exponentially greater resiliency in individuals (Hamby,

Grych, & Banyard, 2018; Hamby et al., 2018). To date, research on compassion satisfaction has been largely relegated to the nursing literature (Fahey, 2016; Saco, Ciurzynski, Harvey, & Ingersoll, 2015), although scholars have also examined compassion satisfaction among social workers (Wagaman, Geiger, Shockley, & Segal, 2015).

Protective and Risk Factors

Scholars have conducted a sizeable body of research dedicated to identifying protective and risk factors for secondary traumatic stress, burnout, and compassion satisfaction. The most commonly explored variables include sex, personal trauma/victimization history, social support, level of experience, and caseload.

Sex. Victim service providers are primarily women, which disproportionately burdens them with performing the "emotional labor" associated with helping clients (Martin, 2005, p. 210). This configuration is the product of a U.S. society organized around patriarchy and characterized by gendered labor that relegates many women to the caring professions. Some evidence suggests that men who work in caring professions are less vulnerable to developing symptomatology (Baum, 2016). Bourke and Craun (2014), for example, reported that male child exploitation personnel displayed lower levels of secondary traumatic stress than female personnel. This relationship was limited to the U.S., however, and did not extend to personnel in the United Kingdom. Within the U.S. general population, women who console a distressed friend become more distressed themselves as a result of listening to their friend's experience than men do (Magen & Konasewich, 2011). This lends additional support to the notion that female victim service providers face an elevated risk for secondary traumatic stress. According to a recent

study, men also possess reduced levels of burnout relative to women (Beauregard et al., 2018). Meta-analysis findings, however, failed to reveal substantial differences in burnout levels between men and women (Purvanova & Muros, 2010).

Personal trauma/victimization history. Scholars have devoted considerable attention to victim service providers who report experiencing personal trauma or victimization prior to entering the profession. This makes sense, as trauma rates are particularly high among this population (Alani & Stroink, 2015; Bangs, 2010; Srdanovic, 2009). Jenkins and Baird (2002), for example, noted that 55% of sexual assault and domestic violence counselors disclosed trauma experiences similar in nature to those encountered in their line of work. Other scholars estimate that more than 70% of victim advocates may have experienced sexual or physical victimization (Boesdorfer, 2011; Choi, 2011a).

Numerous studies have linked personal trauma histories to an increased likelihood of secondary traumatic stress (Baird, 1999; Dworkin, Sorell, & Allen, 2016; Nelson, 2015; Pearlman & Mac Ian, 1995; Siebert, 2005; Slattery & Goodman, 2009; Vermilyea, 2014). Personal trauma histories do not, however, appear to predict burnout (Baird, 1999; Boesdorfer, 2011; Vermilyea, 2014). This may be explained by the lack of a theoretical underpinning to explain why service providers with personal trauma histories would be expected to face greater general work stressors than service providers without such histories. In other words, at face value, general work stressors would appear to be uniform for all employees across the workplace, regardless of whether they had personal trauma histories. Some scholars consider a history of personal trauma to be an asset that helps victim service providers better relate to their clients (Wood, 2016). Furthermore,

service providers who have personally accessed victim services may possess greater awareness of the resources available in their community. Unresolved personal trauma, however, may hinder service providers' ability to effectively assist their clients (Figley, 1995; Kulkarni & Bell, 2011).

Social support. Social support is inversely related to secondary traumatic stress and burnout symptomatology (Babin et al., 2012; Boesdorfer, 2011; Bourke & Craun, 2014; Chiarelli-Helminiak, 2014; Choi, 2011a; Maslach et al., 2001; Na, Choo, & Klingfuss, 2018; Nelson, 2015), although researchers occasionally find no relationship at all. Baker, O'Brien, and Salahuddin (2007), for example, reported that social support was unrelated to burnout in crisis shelter workers. Despite such anomalies, social support generally serves as a protective factor against both phenomena. Social support can stem from many sources, including coworkers (Bourke & Craun, 2014; Slattery & Goodman, 2009), supervisors (Maslach et al., 2001), and loved ones outside of work (Bonach & Heckert, 2012).

Coworkers are valuable within the victim service field because they provide opportunities for service providers to express their frustration in an understanding environment (Hendrickson, 2013), can help identify additional resources, and serve as a sounding board for advocates who may be unsure how to proceed with difficult clients (Merchant & Whiting, 2015). Research shows that service providers who have held their current position longer view their coworkers as more supportive (Dekel & Peled, 2000). This finding is intuitive, since more experienced service providers have had more time to develop relationships and benefit from their coworkers' help. Coworkers represent a double-edged sword, however, because they contribute to the overall mood of the office.

If the majority of coworkers are exhausted and cynical, they will feed off each others' misery and increase the overall sense of hopelessness. Secondary trauma contagion may also spread from one coworker to another via emotional taint (Bemiller & Williams, 2011). Conversely, positively-oriented coworkers can help buoy the spirits of service providers suffering the effects of secondary traumatic stress or burnout (Crain & Koehn, 2012).

Maslach and colleagues (2001) argued that supervisors' social support is more important than coworkers' support. Although some studies report a positive relationship between supervisory support and symptomatology (Townsend & Campbell, 2008), far more studies find that supervisory support corresponds with lower symptomatology (Armstrong, Atkin-Plunk, & Wells, 2015; Bonach & Heckert, 2012; Bourke & Craun, 2014; Dworkin et al., 2016; Rittschof & Fortunato, 2016; Slattery & Goodman, 2009; Yurur & Sarikaya, 2012). Findings from at least one study suggest that the *presence* of supervisory support matters more than its *quality* (Choi, 2011a). In other words, even negative interactions with supervisors are better than a complete lack of interaction between service providers and supervisors.

Good supervisors offer social support to staff through a variety of means. To begin with, they maintain an open communication channel and are always available "just to talk" (Bemiller & Williams, 2011; Hendrickson, 2013; Merchant & Whiting, 2015; Srdanovic, 2009). They also listen to service providers' struggles and offer feedback and insight (Bangs, 2010). This reframing process helps service providers understand that they are not failures for experiencing secondary traumatic stress or burnout symptomatology. Instead, they are sharing in a common experience that everyone in the

agency deals with from time-to-time. Supervisors can model healthy self-care behaviors for their staff, too. In doing so, supervisors create an informal workplace culture that gives staff permission to take care of themselves. If a staff member shows signs of being overwhelmed, the agency supervisor can require them to take time off or step back from the situation (Berger & Quiros, 2016; Chiarelli-Helminiak, 2014; Merchant & Whiting, 2015).

Social support from family and friends may matter more for protecting against soul weariness than social support from work (Bonach & Heckert, 2012). This is because loved ones function "as a social distraction" from job-related secondary trauma (Srdanovic, 2009, p. 66). According to Stamm (1999c, p. 188), friendship is one of the "most effective elements of self-care." Secondary traumatic stress and burnout symptomatology facilitate withdrawal from human connections; authentic friendships, however, actively buffer against this compulsion. As Rosenbloom and colleagues (1999, p. 72) recognized, human relationships are powerful "antidotes" capable of counteracting secondary traumatic stress and burnout symptomatology.

Age and level of experience. Evidence suggests that secondary trauma and burnout disproportionately affect victim service providers just starting out in the field (Anderson, 2004; Baird, 1999; Stebnicki, 2000). A study of forensic child interviewers, for example, demonstrated that younger clinicians were more likely to meet criteria for secondary traumatic stress than older clinicians (Bonach & Heckert, 2012). Other scholars, however, have suggested that participants' age may operate as a proxy measure for level of experience (Maslach et al., 2001). Recent research lends support to the notion that age effects may actually be capturing level of experience. Specifically, sex offender

therapists with greater levels of experience scored lower on multiple aspects of burnout (Moore, 2014). Another study found a positive relationship between age and compassion satisfaction, but this relationship became nonsignificant after controlling for level of experience (Craig & Sprang, 2010). The authors of this study concluded that level of experience likely matters more than age, and that age simply serves as a proxy measure for experience.

Age and level of experience may be related to trauma symptomatology for a number of reasons. First, younger/less experienced service providers may have had less time to heal from personal trauma. Second, they may be less knowledgeable about coping strategies. Third, younger/less experienced service providers may be less educated about the dangers of secondary traumatic stress and burnout, or their vulnerability to these phenomena. Finally, most victim service providers leave the field within a few years (Bangs, 2010; Bemiller & Williams, 2011; Westbrook et al., 2006). This creates a risk for selection bias to skew results, since service providers who are more resilient may remain in the field longer. In contrast, less resilient service providers may change careers after only a few years. This perspective contends that age and level of experience ultimately serve as proxy measures for resiliency.

Caseload. The number of hours service providers work, and the number of clients they are responsible for, may also contribute to secondary traumatic stress and burnout. For example, a study conducted on Israeli service providers found that increased work hours reduced their ability to cope with secondary trauma (Dekel & Peled, 2000). A second study demonstrated that sexual assault nurse examiners (SANEs) with prolonged workdays were more likely to get burnt out (Maier, 2011). Higher caseloads have also

been associated with increased secondary traumatic stress and burnout symptomatology (Kulkarni, Bell, Hartman, & Herman-Smith, 2013). This finding echoes research on nursing home staff (Rai, 2010), but not sex offender therapists, whose caseloads failed to predict burnout (Moore, 2014).

Summary

The concept of trauma dates back to ancient times (Lasiuk & Hegadoren, 2006), but did not receive serious attention from the medical field until the Industrial Revolution took hold in the United Kingdom, United States, and other countries (Crocq & Crocq, 2000). Early trauma research focused on railroad accidents (Erichsen, 1867), the American Civil War (Da Cost, 1951), World War I (Jones, 2012), World War II (Lasiuk & Hedadoren, 2006), and the Korean War (Roche, 2011). Following the Vietnam War, traumatized veterans were barred from accessing free or discounted healthcare from Veteran Affairs (VA) hospitals because providers did not view their symptoms as a service-connected disability (Smith, 2011). This prompted the American Psychiatric Association (APA) to create an official diagnosis for trauma symptomatology, referred to as posttraumatic stress disorder (PTSD) and first published in the third edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-III) released in 1980 (Roche, 2011).

Trauma research grew rapidly following the classification of PTSD as an official psychological disorder (Andreasen, 2010). Combat-related trauma generated the largest quantity of research (Ozer et al., 2003), but scholars also studied crime victims (Resnick et al., 1993), Holocaust survivors (Kellermann, 2001), burn victims (Patterson et al., 1993, and car wreck survivors (Khodadadi-Hassankiadeh et al., 2017). From here,

scholars directed their attention toward survivors of natural disasters (Rubonis & Bickman, 1991) and terrorist attacks (Bowler et al., 2017). Eventually, scholars recognized that individuals without trauma exposure could secondarily contract symptomatology through emotional connections with traumatized individuals (Stamm, 1999b). This realization prompted scholars to study secondary traumatic stress, burnout, and compassion satisfaction among several new populations, including first responders, nurses, and mental health professionals. Secondary traumatic stress is identical to PTSD, with the caveat that individuals must have experienced the trauma secondarily (Figley, 1995). In contrast, burnout is a broader construct that refers to general workplace stressors (Campbell, 2008). Finally, compassion satisfaction describes the deep sense of personal fulfillment individuals experience after helping someone in need (Stamm, 2002). Common protective and risk factors associated with these constructs include sex, personal trauma/victimization history, social support, age/level of experience, and caseload.

To date, research on secondary traumatic stress, burnout, and compassion satisfaction remains limited among victim service providers. This is problematic for several reasons. First, scholars have yet to study these issues among victim assistance coordinators (VACs), despite VACs having been legislatively mandated in Texas since 1985 (McDaniel, 2012). Unlike other service providers, VACS are employed by county district attorney offices rather than community-based nonprofit organizations. Thus, research is required to: (1) understand general demographic information beyond that provided by Yun and colleagues (2009), and (2) establish prevalence rates of secondary traumatic stress, burnout, and compassion satisfaction, among this unique population.

Second, the majority of research conducted on compassion satisfaction relies on nursing samples (Fahey, 2016). Scholarship addressing compassion satisfaction among social workers is underrepresented but growing (Wagaman et al., 2015); however, no prior work has explored this concept using victim service providers.

This subject warrants investigation because the victim services profession suffers from an abnormally high turnover rate (Bang, 2010; Bemiller & Williams, 2011; Westbrook et al., 2006). High turnover rates, in turn, negatively impact agencies' ability to deliver services to crime victims in a timely and professional manner (Bahner & Berkel, 2007; Meyer & Cornille, 2002). Scholars consider secondary traumatic stress and burnout to be among the leading causes of turnover within the victim services profession (Bride et al., 2009). Compassion satisfaction, on the other hand, may ameliorate the most severe symptoms of these phenomena (Stamm, 2002). Thus, the present study uses a sample of Texas victim assistance coordinators (VACs) to explore various aspects of secondary traumatic stress, burnout, and compassion satisfaction. Four basic research questions are examined:

Research Question #1: What is the prevalence of burnout, secondary traumatic stress, and compassion satisfaction among victim assistance coordinators?

Research Question #2: What factors predict burnout among victim assistance coordinators?

Research Question #3: What factors predict secondary traumatic stress among victim assistance coordinators?

Research Question #4: What factors predict compassion satisfaction among victim assistance coordinators?

CHAPTER III

METHODS

Data

The Victim Services Division of the Texas Department of Criminal Justice (TDCJ) provided email addresses for the entire population of victim assistance coordinators (VACs) employed in the state of Texas. This list was current as of May 8th, 2018 and contained 368 email address, 363 of which were not duplicates. Data collection started on June 5th, 2018, with the mass distribution of an email to all 363 VACs. The initial email contained two paragraphs explaining the project, a message from the director of TDCJ's Victim Services Division discussing the project's potential value, a link to the online Qualtrics survey, and an attachment outlining VACs' rights as research participants. Follow-up email reminders were sent every two-to-three weeks until data collection ended on August 9th, 2018. Data was collected as part of a larger project designed to identify county-level predictors of victim impact statement (VIS) form completion rates.

Fifteen (15) of the emails sent to the 363 VACs proved undeliverable. Three individuals also responded to the original email stating that they no longer worked as a VAC, or the contacted agency did not currently employ a VAC. These events reduced the total population to 345 VACs employed in Texas during the data collection period. Of these, 117 VACs (33.9%) agreed to participate in the study. Fifteen (15) VACs, however, did not answer a single item after providing consent. An additional 26 VACs demonstrated survey fatigue and stopped answering items before they reached the measures of interest in the present study. Thus, the final sample consisted of 76 VACs

(22.0% of the total population; 65.0% of those who consented to participate) employed by 69 of Texas' 254 counties (27.2%).

Dependent Variables

Three broad outcomes were examined in this study: (1) burnout, (2) secondary traumatic stress, and (3) compassion satisfaction.

Burnout. A recent meta-analysis demonstrated that researchers overwhelmingly rely on the Professional Quality of Life Scale (ProQOL) to measure secondary traumatic stress and burnout (Cieslak et al., 2014). Of the 41 studies that examined secondary traumatic stress and burnout in the meta-analysis, 14 (34.1%) used the ProQOL. The most recent version of the ProQOL, the ProQOL-5, defines *burnout* as employees' "feelings of hopelessness and difficulties in dealing with work or in doing [their] job effectively" (Stamm, 2010, p. 13). The ProQOL-5 burnout scale is comprised of 10 items. Sample items include "I feel trapped by my job as a helper," and "I have beliefs that sustain me." Participants used a Likert scale (1 = n*ever*, 2 = *rarely*, 3 = *sometimes*, 4 = *often*, 5 = *very often*) to rate how often they had experienced each item within the past 30 days.

Following Stamm's (2010) recommendation, all 10 items were summed to create a total burnout score ($\alpha = .64$). This burnout score was used to calculate the prevalence of burnout among VACs in the present study. Participants' total burnout score was standardized by transforming the sum of the 10 items to a Z score. Following this, a t-score was created by multiplying the Z score by 10 and adding 50. Values were rounded to the closest whole number, with higher values indicating greater levels of burnout ($\bar{x} = 49.96$; $SD = 9.97$).

An exploratory factor analysis using the oblique direct oblimin rotation method, however, revealed that items loaded onto two factors with an eigenvalue greater than one (Gaskin & Happell, 2014; Patil, Singh, Mishra, & Donavan, 2008): (1) burnout-exhaustion (α = .74) and (2) burnout-negative personal identity (α = .60; see Table 1). The two factors that comprised the burnout scale cumulatively explained 50.7% of the variance in participants' burnout scores. Because the 10 items loaded onto two distinct factors, each factor will be treated as a separate dependent variable. Higher values indicate greater burnout-exhaustion ($\bar{x}$ = 11.79; SD = 3.47; range: 6-22) and burnout-negative personal identity ($\bar{x}$ = 6.71; SD = 2.59; range: 4-17).

Table 1

Results for Exploratory Factor Analysis of Burnout Items

Item	Rotated Factor Loadings	
	Factor 1	Factor 2
Factor 1: Exhaustion		
1. I am not as productive at work because I am losing sleep over traumatic experiences of a person I help.	0.59	0.17
2. I feel trapped by my job as a helper.	0.68	0.32
3. I am the person I always wanted to be.[a]	0.54	0.48
4. I feel worn out because of my work as a helper.	0.69	-0.05
5. I feel overwhelmed because my casework load seems endless.	0.66	-0.32
6. I feel "bogged down" by the system.	0.74	0.03
Factor 2: Negative Personal Identity		
7. I am happy.[a]	0.24	0.73
8. I feel connected to others.[a]	0.01	0.83
9. I have beliefs that sustain me.[a]	-0.31	0.55
10. I am a very caring person.[a]	-0.02	0.59
Eigenvalue	2.94	2.13
% of variance	27.3%	23.4%
Cronbach's α	0.74	0.60
Scale Cronbach's α	0.64	

[a] Denotes reverse coded item.

Secondary traumatic stress. Secondary traumatic stress was also measured using items from the ProQOL-5. The ProQOL-5 conceptualizes secondary traumatic stress as "work-related, secondary exposure to people who have experienced extremely or traumatically stressful events" (Stamm, 2010, p. 13). Sample items include "I jump or am startled by unexpected sounds," and "I think that I might have been affected by the traumatic stress of those I help." Participants used a Likert scale (1 = n*ever*, 2 = *rarely*, 3 = *sometimes*, 4 = *often*, 5 = *very often*) to rate how often they had experienced each of the 10 items within the past 30 days.

Following Stamm's (2010) recommendation, all 10 items were summed to create a total secondary traumatic stress score ($\alpha = .76$). This secondary traumatic stress score was used to calculate the prevalence of secondary traumatic stress among VACs in the present study. Participants' secondary traumatic stress score was standardized by transforming the sum of the 10 items to a Z score. Following this, a t-score was created by multiplying the Z score by 10 and adding 50. Values were rounded to the closest whole number, with higher values indicating greater levels of secondary traumatic stress ($\bar{x} = 49.93$; $SD = 9.88$).

An exploratory factor analysis using the oblique direct oblimin rotation method, however, revealed that items loaded onto three factors with an eigenvalue greater than one: (1) trauma symptoms ($\alpha = .84$), (2) memory loss (single item), and (3) fixation (single item; see Table 2). The three factors that comprised the secondary traumatic stress scale cumulatively explained 62.6% of the variance in participants' secondary traumatic stress score. Because two of the three factors consisted of a single item, a one factor

measure of secondary traumatic stress that included eight items was retained for use as a dependent variable ($\bar{x}$ = 13.36; SD = 4.12; range: 8-25).

Table 2

Results for Exploratory Factor Analysis of Secondary Traumatic Stress Items

Item	Rotated Factor Loadings		
	Factor 1	Factor 2	Factor 3
Factor 1: Trauma Symptoms			
1. I jump or am startled by unexpected sounds.	0.52	0.47	0.06
2. I find it difficult to separate my personal life from my life as a helper.	0.55	0.40	0.04
3. I think that I might have been affected by the traumatic stress of those I help.	0.78	-0.02	-0.11
4. Because of my helping, I have felt "on edge" about various things.	0.79	0.07	-0.25
5. I feel depressed because of the traumatic experiences of the people I help.	0.73	0.25	0.03
6. I feel as though I am experiencing the trauma of someone I have helped.	0.75	-0.05	-0.12
7. I avoid certain activities or situations because they remind me of frightening experiences of the people I help.	0.64	-0.19	0.42
8. As a result of my helping, I have intrusive, frightening thoughts.	0.72	-0.17	0.39
Factor 2: Memory Loss			
9. I can't recall important parts of my work with trauma victims.	0.05	0.83	0.11
Factor 3: Fixation			
10. I am preoccupied with more than one person I help.	-0.03	0.15	0.87
Eigenvalue	3.92	1.25	1.08
% of variance	38.3%	12.4%	11.9%
Cronbach's α	0.84	-	-
Scale Cronbach's α		0.76	

Compassion satisfaction. As with burnout and secondary traumatic stress, compassion satisfaction was measured using 10 items from the ProQOL-5. The ProQOL-5 defines compassion satisfaction as "the pleasure [individuals] derive from being able to

do [their] work well" (Stamm, 2010, p. 12). Sample items include "I get satisfaction from being able to help people," and "I like my work as a helper." Participants used a Likert scale (1 = n*ever*, 2 = *rarely*, 3 = *sometimes*, 4 = *often*, 5 = *very often*) to rate how often they had experienced each of the 10 items within the past 30 days.

Following Stamm's (2010) recommendation, all 10 items were summed to create a total compassion satisfaction score ($\alpha = .87$). This compassion satisfaction score was used to calculate the prevalence of compassion satisfaction among VACs in the present study. Participants' compassion satisfaction score was standardized by transforming the sum of the 10 items to a Z score. Following this, a t-score was created by multiplying the Z score by 10 and adding 50. Values were rounded to the closest whole number, with higher values indicating greater levels of compassion satisfaction ($\bar{x} = 50.20$; SD = 10.03).

An exploratory factor analysis using the oblique direct oblimin rotation method, however, revealed that items loaded onto two factors with an eigenvalue greater than one: (1) compassion satisfaction-fulfilled helper ($\alpha = .87$), and (2) compassion satisfaction: excited helper ($\alpha = .66$; see Table 3). The two factors that comprised the compassion satisfaction scale cumulatively explained 60.6% of the variance in participants' compassion satisfaction scores. Because the 10 items loaded onto two distinct factors, each factor will be treated as a separate dependent variable. Higher values indicate greater compassion satisfaction-fulfilled helper ($\bar{x} = 30.51$; SD = 4.00; range: 20-35) and compassion satisfaction-enthusiastic helper ($\bar{x} = 12.63$; SD = 2.05; range: 3-15).

Table 3

Results for Exploratory Factor Analysis of Compassion Satisfaction Items

Item	Rotated Factor Loadings	
	Factor 1	Factor 2
Factor 1: Fulfilled Helper		
1. I like my work as a helper.	0.69	0.12
2. My work makes me feel satisfied.	0.71	0.32
3. I have happy thoughts and feelings about those I help and how I could help them.	0.74	-0.00
4. I believe I can make a difference through my work	0.83	0.17
5. I am proud of what I can do to help.	0.84	0.08
6. I have thoughts that I am a "success" as a helper.	0.70	-0.12
7. I am happy that I chose to do this work.	0.86	-0.03
Factor 2: Enthusiastic Helper		
8. I get satisfaction from being able to help people.	0.43	0.69
9. I feel invigorated after working with those I help.	0.37	0.68
10. I am pleased with how I am able to keep up with helping techniques and protocols.	0.40	0.59
Eigenvalue	5.01	1.05
% of variance	46.1%	14.5%
Cronbach's α	0.87	0.66
Scale Cronbach's α	0.87	

Independent Variables

Eight (8) different independent variables were included in the present study. These variables consisted of social support from coworkers, social support from family, social support from supervisors, personal victimization, victimization of a loved one, childhood trauma, general life outlook, and purpose in life.

Social support. Social support items were modified from Armstrong and colleagues' (2015) research. In their study, Armstrong and colleagues (2015) measured coworker, family, and supervisor support as three separate constructs, each comprised of four items. Sample items included "My supervisors encourage us to do the job in a way that we really would be proud of," and "Members of my family understand how tough my

job can be." All items were measured according to a Likert scale (1 = *strongly disagree*, 2 = *somewhat disagree*, 3 = *neither agree nor disagree*, 4 = *somewhat agree,* 5 = *strongly agree*). An exploratory factor analysis using the oblique direct oblimin rotation method was conducted on all 12 items in order to determine whether they measured a single construct. Factor analysis results demonstrated that the 12 items loaded onto three distinct factors as originally conceptualized by Armstrong and colleagues (2015): (1) Coworker support ($\alpha = .87$); (2) Family support ($\alpha = .84$); and (3) Supervisor support ($\alpha = .84$). As a result, each factor will be treated as a separate independent variable. Higher values indicate greater coworker support ($\bar{x} = 15.41$; SD = 3.93; range: 4-20), family support ($\bar{x} = 16.42$; SD = 4.09; range: 4-20), and supervisor support ($\bar{x} = 14.57$; SD = 2.22; range: 8-20).

Table 4

Results for Exploratory Factor Analysis of Social Support Items

Item	Rotated Factor Loadings		
	Factor 1	Factor 2	Factor 3
Factor 1: Coworker Support			
1. My coworkers often compliment someone who has done his or her job well.	0.91	0.02	0.08
2. My coworkers don't blame each other when things go wrong.	0.79	0.16	-0.04
3. My coworkers encourage each other to do the job in a way that we could be proud of.	0.82	0.12	0.37
4. My coworkers encourage each other to think of better ways of getting the work done.	0.77	0.09	0.41
Factor 2: Family Support			
5. Members of my family understand how tough my job can be.	0.07	0.84	0.09
6. When my job gets me down, I know that I can turn to my family and get the support I need.	-0.09	0.86	0.16
7. There is really no one in my family that I can talk to about my job.[a]	0.24	0.80	0.18
8. My spouse (or significant other) can't really help me much when I get tense about my job.[a]	0.26	0.76	0.17
Factor 3: Supervisory Support			
9. My supervisors encourage us to do the job in a way that we really would be proud of.	0.15	0.14	0.90
10. My supervisors encourage the people I work with if they do their job well.	0.22	0.15	0.82
11. My supervisors blame others when things go wrong, even when it's not their fault.[a]	0.28	0.23	0.65
12. If my supervisors have a dispute with someone they supervise, they handle it professionally.	0.16	0.20	0.72
Eigenvalue	5.11	2.11	1.48
% of variance	42.6%	17.6%	12.3%
Cronbach's α	0.87	0.84	0.84
Scale Cronbach's α		0.87	

[a] Denotes reverse coded item.

Personal victimization exposure. Participants' victimization as a child was measured according to two dichotomous items: (1) "Before your 18th birthday, did a parent or other adult in the household often (a) push, grab, slap, or throw something at

you?, or (b) ever hit you so hard that you had marks or were injured?" and (2) "Before your 18th birthday, did an adult person at least 5 years older than you ever (a) touch or fondle you or have you touch their body in a sexual way?, or (b) try to or actually have oral, anal, or vaginal sex with you?" (1 = *yes*, 0 = *no*). Both items originated from the Adverse Childhood Experience (ACE) questionnaire (Felitti et al., 1998). Participants' adult victimization was measured according to four items adapted from the Posttraumatic Diagnostic Scale (PTDS) (Foa, Cashman, Jaycox, & Perry, 1997). Participants were asked to indicate whether they had personally experienced any of the following events as an adult (18 or older): (1) "Non-sexual assault by someone you know (physically attacked/injured); (2) "Non-sexual assault by a stranger"; (3) "Sexual assault by a family member or someone you know"; and (4) "Sexual assault by a stranger" (1 = *yes*, 0 = *no*). Participants who answered *yes* to at least one of the child or adult victimization items were coded as having experienced personal victimization (1 = *personal victimization*, 0 = *no personal victimization*).

Victimization of a loved one. Victimization of a participants' loved one was measured according to three items: (1) "Has a loved one (relative, friend, etc.) ever been a victim of a criminal offense that involved force or the threat of force?"; (2) "Has a loved one (relative, friend, etc.) ever been a victim of a violent crime?"; (3) "Has a loved one (relative, friend, etc.) ever been a victim of a non-violent crime?" (1 = *yes*, 0 = *no*). Participants who answered *yes* to at least one of these three items were coded as having a loved one who had experienced victimization (1 = *at least one loved one experienced victimization*, 0 = *no loved one experienced victimization*).

Childhood trauma. Participants' childhood trauma (excluding physical and sexual victimization) was measured according to items from the ACE questionnaire (Felitti et al., 1998): (1) "Before your 18th birthday, did a parent or other adult in the household often (a) swear at you, insult you, put you down, or humiliate you?, or (b) act in a way that made you afraid that you might be physically hurt?"; (2) "Before your 18th birthday, did you often feel that (a) no one in your family loved you or thought you were important or special?, or (b) your family didn't look out for each other, feel close to each other, or support each other?"; (3) "Before your 18th birthday, did you often feel that (a) you didn't have enough to eat, had to wear dirty clothes, or had no one to protect you?, or (b) your parents were too drunk or high to take care of you or take you to the doctor if you needed it?"; (4) "Before your 18th birthday, were your parents ever separated or divorced?"; (5) "Before your 18th birthday, was your mother or stepmother (a) often pushed, grabbed, slapped, or had something thrown at her?, or (b) sometimes or often kicked, bitten, hit with a fist, or hit with something hard?"; (6) "Before your 18th birthday, did you live with anyone who was a problem drinker or alcoholic or who used street drugs?"; (7) "Before your 18th birthday, was a household member depressed or mentally ill or did a household member attempt suicide?"; and (8) "Before your 18th birthday, did a household member go to prison?" (1 = *yes,* 0 = *no*). A continuous total childhood trauma score was calculated by summing the number of items to which participants responded *yes*. Higher values indicated greater levels of childhood trauma ($\bar{x}$ = 1.38; SD = 1.70; range: 0-6).

General life outlook. Participants' general outlook on life was measured according to the revised version of the Life Orientation Test (LOT-R) (Scheier, Carver, &

Bridges, 1994). The LOT-R consists of 10 items, four of which serve as filler and are not part of the actual measure. Sample items include "In uncertain times, I usually expect the best," and "I hardly ever expect things to go my way" (1 = *I disagree a lot*, 2 = *I disagree a little*, 3 = *I neither agree nor disagree*, 4 = *I agree a little*, 5 = *I agree a lot*). These six items are generally summed to create an overall general life outlook score, with higher values indicating a more optimistic outlook on life. An exploratory factor analysis using the oblique direct oblimin rotation method, however, revealed that the six items loaded onto two factors with an eigenvalue greater than one: (1) negative life outlook ($\alpha = .74$); and (2) positive life outlook ($\alpha = .37$; see Table 5). The two factors that comprised the general life outlook scale cumulatively explained 57.4% of the variation in participants' general outlook on life. Due to the poor internal consistency of items that comprised factor two (positive life outlook), only factor one (negative life outlook) was retained. Factor one was then recoded so that higher values indicated a more pessimistic outlook on life ($\bar{x} = 11.28$; $SD = 2.81$; range: 5-15).

Table 5

Results for Exploratory Factor Analysis of General Life Outlook Items

Item	Rotated Factor Loadings	
	Factor 1	Factor 2
Factor 1: Negative Outlook		
1. If something can go wrong for me, it will.[a]	0.79	0.12
2. I hardly ever expect things to go my way.[a]	0.76	0.06
3. I rarely count on good things happening to me.[a]	0.83	-0.12
Factor 2: Positive Outlook		
4. In uncertain times, I usually expect the best.	0.36	0.61
5. I'm always optimistic about my future.	-0.04	0.86
6. Overall, I expect more good things to happen to me than bad.	0.41	0.29
Eigenvalue	2.31	1.13
% of variance	38.6%	18.8%
Cronbach's α	0.74	0.37
Scale Cronbach's α	0.66	

[a] Denotes reverse coded item.

Purpose in life. Participants' sense of purpose in life was measured according to the short form of Crumbaugh and Maholick's (1964) purpose in life test (PIL-SF) (Crumbaugh, 1968; Schulenberg, Schnetzer, & Buchanan, 2011). For each of the four items, participants were instructed to select the number next to each statement that was most true for them at that moment ("right now"). Items were scored based on item-specific sliding scales that ranged from one to seven: (1) "In life I have..." (1 = *no goals or aims*, 7 = *clear goals and aims*); (2) "My personal existence is..." (1 = *utterly meaningless, without purpose*, 7 = *purposeful and meaningful*); (3) "In achieving life goals I've..." (1 = *made no progress whatsoever*, 7 = *progressed to complete fulfillment*); and (4) "I have discovered..." (1 = *no mission or purpose in life*, 7 = *a satisfying life purpose*). An exploratory factor analysis using the oblique direct oblimin rotation method demonstrated that all four items loaded onto a single factor with an eigenvalue greater

than one (see Table 6). These four items were then summed to create a total life purpose score, with higher values indicating a greater sense of purpose in life ($\bar{x}$ = 25.11; SD = 3.00; range: 15-28). The resulting life purpose scale displayed adequate reliability with an internal consistency of .85, as measured by Cronbach's alpha. The four items explained 69.7% of the variation in participants' sense of purpose in life.

Table 6

Results for Exploratory Factor Analysis of Purpose in Life Items

Item	Rotated Factor Loadings
1. In life I have...(1 = *no goals or aims*, 7 = *clear goals and aims*).	0.77
2. My personal existence is...(1 = *utterly meaningless, without purpose*, 7 = *purposeful and meaningful*).	0.87
3. In achieving life goals I've...(1 = *made no progress whatsoever*, 7 = *progressed to complete fulfillment*).	0.81
4. I have discovered...(1 = *no mission or purpose in life*, 7 = *a satisfying life purpose*).	0.88
Eigenvalue	2.79
% of variance	69.7%
Cronbach's α	0.85

Control Variables

Ten (10) different control variables were included in the present study. These variables consisted of child care responsibility, recent loss of a loved one, lone VAC, committed relationship, level of experience, caseload, age, education, race/ethnicity, and religiosity. Participants' sex was not used as a control variable because 97.4% of VACs (N = 74) reported being female.

Child care responsibility. Responsibility caring for a child was measured by the item, "Are you responsible for taking care of any children on a regular basis?" (1 = *yes*, 0 = *no*).

Recent loss of a loved one. Recent loss of a loved one was measured by the item, "Have you experienced the death of someone close to you in the last 12 months?" (1= *yes*, 0 = *no*).

Lone VAC. Whether or not participants were the sole VAC employed in their jurisdiction was measured by the item, "Including yourself, how many Victim Assistance Coordinators work in your county?" Responses to this item were originally continuous, but recoded to create a dichotomous variable (1 = *lone VAC*, 0 = *not lone VAC*).

Committed relationship. Participants were asked, "What is your current marital status?" (1 = *married*, 2 = *not married, but in an exclusive relationship*, 3 = *single*, 4 = *divorced*, 5 = *widowed*). *Married* and *not married, but in an exclusive relationship* responses were recoded as 1 (*committed relationship*), while s*ingle*, *divorced*, and *widowed* responses were recoded as 0 *(no committed relationship*).

Level of experience. Victim assistance coordinators' (VACs) level of experience was measured continuously according to the following item: "How long have you been a Victim Assistance Coordinator in Texas?" Higher values indicated more experience as a VAC in Texas ($\bar{x}$ = 7.30; SD = 7.32; range: 0-33). Responses were coded in years.

Caseload. VACs' weekly caseload was measured continuously according to the item: "In an average week, how many victims do you assist?" Higher values indicated a larger weekly caseload ($\bar{x}$ = 19.88; SD = 17.74; range: 1-70).

Age. Participants' age was originally constrained to ages 18 through older than 65. Although the present study did not anticipate VACs reporting being older than 65, five participants selected this option. These responses were coded as age 66 in order to create

a continuous measure of age. Higher values indicated older participants ($\bar{x}$ = 47.66; SD = 11.85; range: 21-66).

Education. Participants' level of education was assessed according to the following item: "What is the highest level of education you completed?" (1 = *did not graduate high school*, 2 = *high school graduate*, 3 = *some college, but did not graduate*, 4 = *Associate's degree (2 yr.)*, 5 = *Bachelor's degree (4 yr.)*, 6 = *advanced degree (Master's or Ph.D.)*). Higher values indicated greater levels of education ($\bar{x}$ = 4.01; SD = 1.25; range: 2-6).

Race/Ethnicity. A full 94.7% of participants reported being White (N = 72). The remaining four participants self-identified as Black (N = 1), American Indian or Alaskan native (N = 1), or of another race (N = 2). Both participants who indicated they were of another race self-identified as Latinx. As a result, participants' race and ethnicity was coded dichotomously (1 = *Latinx*, 0 = *non-Latinx White*). Race data for the participant who identified as Black and the participant who identified as American Indian or Alaskan native was treated as missing. New values were then imputed for their race/ethnicity in keeping with the dichotomous (1 = *Latinx*, 0 = *non-Latinx White*) coding scheme.

Religiosity. Participants' religiosity was measured according to two items: (1) "I consider religion to be an important part of my life" (1 = *strongly disagree*, 2 = *somewhat disagree*, 3 = *neither agree nor disagree*, 4 = *somewhat agree*, 5 = *strongly agree*) (Unnever & Cullen, 2010), and (2) "How often do you attend religious services?" (1 = *never*, 2 = *only on special occasions*, 3 = *once or twice a month*, 4 = *once a week*, 5 = *more than once a week*). Responses from both items were summed to create a total

religiosity score (α = .78), where higher values indicated greater religiosity ($\bar{x}$ = 7.39; SD = 2.17; range: 2-10).

Missing Data Treatment

Multiple imputation is one of the more sophisticated approaches for addressing missing data (Rubin, 1978; 1987; 2004). Multiple imputation involves generating several "plausible values" for each missing data value across a series of newly created datasets (Yuan, 2010, p. 1). A plausible value is one that falls within the variable's minimum and maximum values according to how it was coded (Rubin, 1996). For example, if participants' total score for the family social support scale could range from 4 to 20, then plausible values for this variable consist of 4 through 20. In order to generate values for variables with missing data, multiple imputation relies on variables in the dataset *without* any missing values (Rubin, 1996). The Markov Chain Monte Carlo (MCMC) method of multiple imputation involves creating five new datasets with a different value generated for the same missing value across each dataset (Schafer, 1997). For example, MCMC might generate values 17, 11, 6, 5, and 14, respectively, for the same missing value on the total family social support score variable across the five datasets.

Multiple imputation is only appropriate if certain conditions are met. Specifically, data must be missing completely at random, and no single variable can be missing 15% or more of its values (Hertel, 1976). SPSS 22 was used to identify and describe missing data in the present study. Variables included in the present study were collectively missing 1.49% of the total possible values in a non-monotone pattern. Little's Missing Completely at Random (MCAR) test was calculated in order to determine whether these data were missing completely at random. Little's MCAR test estimates a chi-square test

statistic that, if significant, demonstrates data were *not* missing completely at random. In contrast, a nonsignificant chi-square value represents a failure to reject the null hypothesis that data were missing completely at random (Little, 1988). Data in the present study were found to be missing completely at random ($\chi^2(130) = 141.48$; $p > .10$). Thirteen of the 23 variables (56.52%) included in the study were missing data on at least one observation. Additionally, 14 (18.42%) participants were missing data on at least one variable. Only six values (7.9%), however, were missing for religiosity, the variable with the single greatest amount of missing data. Because 7.9% falls well under the recommended cutoff of 15% (Hertel, 1976), both conditions were satisfied for multiple imputation.

The Markov Chain Monte Carlo (MCMC) method of multiple imputation was used to create five different datasets, each with a unique set of values generated for observations missing data in the original dataset (Schafer, 1997). Following this, the unique values generated across the five datasets for a single missing observation of a continuous variable were summed and divided by five. For example, if a value of 17 was generated for a missing observation in the first dataset, a value of 11 was generated for that same observation in the second dataset, and values of 6, 5, and 14 were generated for that same observation in datasets three, four, and five, respectively, then (17 + 11 + 6 + 5 + 14)/5 = 10.6. After rounding to the nearest whole number, a value of 11 would have been imputed for that missing observation in the original dataset. This approach was used to impute missing data for all continuous variables. For categorical variables, the mode of the unique values generated across the five datasets for a single missing observation was selected. For example, if values 1, 0, 1, 1, and 0 were generated for datasets one, two,

three, four, and five, respectively, then a value of 1 would have been imputed for that missing observation in the original dataset. In this manner, values for all observations within every variable were obtained for the original dataset, producing a complete dataset without any missing values.

Analytic Strategy

Sample descriptives were reported for all variables included in the present study. Following this, bivariate analyses were conducted separately for each combination of dependent and independent variables. Bivariate analyses involved correlations and t-tests. A correlation matrix was calculated for all variables in preparation for multivariate analyses. Based on Tabachnick and Fidell's (1996) recommendation, any predictor that displayed a correlation of .70 or greater with another predictor would be excluded from multivariate analyses due to multicollinearity concerns.

Scholars have proposed different rules for determining how many observations (events) are required per variable in multiple regression analyses. Harrell Jr. and colleagues (1984) recommended a minimum of 10 events per variable (EPV) for linear, logistic, and Cox regressions. Other scholars have provided higher (20 EPV) (Austin & Steyerberg, 2017) or lower (5-9 EPV) (Vittinghoff & McCulloch, 2006) estimates of the minimum EPV rate required for logistic and Cox regressions. While ordinary least squares (OLS) regression has generally required at least 10 EPV (Harrell Jr., 2001), some scholars now suggest that EPV rates as low as two are acceptable (Austin & Steyerberg, 2015). Nevertheless, it is important to keep the purpose of the multiple regression analyses in mind when determining an appropriate EPV rate. Low EPV rates are acceptable for estimating multiple regression analyses for predictive purposes—

specifically, when predicting the value of the dependent variable given known values of the predictors. Higher EPV rates are required, however, in order to accurately assess the statistical significance of predictors associated with specific hypotheses (Austin & Steyerberg, 2015). Green (1991) recommended relying on an EPV rate of 15 to 25 for hypothesis testing purposes.

Backwards stepwise ordinary least squares (OLS) regression was conducted in Stata 14.2 to establish a proper EPV rate via the exclusion of nonsignificant predictors (Stata, n.d.). Backwards stepwise regression involves running OLS on all predictors and removing variables in a stepwise fashion, starting with variables that possess the highest p-values. Variable removal stops when no more variables can be eliminated without affecting the model fit (Hastie, Tibshirani, & Friedman, 2016). In the present study, variables with a *p*-value of .05 or higher were removed from the model according to backwards stepwise OLS regression.

CHAPTER IV

ANALYSES & RESULTS

This chapter presents results for the four research questions generated by the current study. First, descriptive statistics are provided to characterize the sample of Texas victim assistance coordinators (VACs). Second, prevalence rates are calculated to determine the percentage of Texas VACs who display high levels of burnout and secondary traumatic stress and low levels of compassion satisfaction. Third, bivariate results report the relationship of each dependent variable to the independent and control variables. Fourth, backwards stepwise ordinary least squares (OLS) regression results are reported for burnout-negative personal identity, burnout-exhaustion, secondary traumatic stress, compassion satisfaction-fulfilled helper, and compassion satisfaction-enthusiastic helper. This chapter concludes by discussing model fit statistics for each of the OLS regression analyses.

Sample Demographics

Table 7 presents descriptive statistics for the sample. The average VAC scored 6.71 (SD =2.59) on burnout-negative personal identity, 11.79 (SD = 3.47) on burnout-exhaustion, 13.36 (SD = 4.12) on secondary traumatic stress, 30.51 (SD = 4.00) on compassion satisfaction-fulfilled helper, and 12.63 (SD = 2.05) on compassion satisfaction-enthusiastic helper. The average level of coworker social support was 15.41 (SD = 3.93), and ranged from four to 20. The average level of family social support was 16.42 (SD = 4.09), ranging from four to 20. The average level of supervisor social support was 14.57 (SD = 2.22) and ranged from eight to 20. One in two VACs reported having been personally victimized either as a child or an adult (50.00%). More than two-

thirds of VACs reported that a loved one had experienced some form of victimization (69.74%). On average, VACs had experienced one childhood trauma out of eight ($\bar{x}$ = 1.38, SD = 1.70). The average negative life outlook score was 11.28 (SD = 2.81), while the average purpose in life score was 25.11 (SD = 3.00).

Almost one in two VACs was responsible for caring for a child (48.68%). Slightly more than one in four VACs had experienced the death of a loved one within the past 12 months (28.95%). One in two VACs reported being the only VAC in their jurisdiction (50.00%). Four out of every five VACs was in a committed interpersonal relationship (80.26%). The average VAC had served seven years as a VAC in Texas ($\bar{x}$ = 7.30, SD = 7.32) and assisted 20 clients per week ($\bar{x}$ = 19.88, SD = 17.74). The average VAC was also 48 years-old ($\bar{x}$ = 47.66, SD = 11.85), had completed an associate's degree ($\bar{x}$ = 4.01, SD = 1.25), and scored 7.39 on religiosity out of 10 (SD = 2.17). Finally, just under three out of every four VACs were non-Latinx White (71.05%); the remaining VACs were Latinx (28.95%).

Table 7

Sample Descriptive Statistics (N = 76)

Variables	*M* (SD) or % (Freq.)	Min.	Max.	α	*n*
Dependent variables					
Burnout-negative personal identity	6.71 (2.59)	4	17	0.60	76
Burnout-exhaustion	11.79 (3.47)	6	22	0.74	76
Secondary traumatic stress	13.36 (4.12)	8	25	0.84	76
Compassion satisfaction-fulfilled helper	30.51 (4.00)	20	35	0.87	76
Compassion satisfaction-enthusiastic helper	12.63 (2.05)	3	15	0.66	76
Independent variables					
Coworker support	15.41 (3.93)	4	20	0.87	76
Family support	16.42 (4.09)	4	20	0.84	76
Supervisor support	14.57 (2.22)	8	20	0.84	76
Personal victimization					
Yes	50.00%				38
No	50.00%				38
Victimization of loved one					
Yes	69.74%				53
No	30.26%				23
Childhood trauma	1.38 (1.70)	0	6		76
Negative life outlook	11.28 (2.81)	5	15	0.74	76
Purpose in life	25.11 (3.00)	15	28	0.85	76
Control variables					
Child care responsibility					
Yes	48.68%				37
No	51.32%				39
Recent loss of loved one					
Yes	28.95%				22
No	71.05%				54
Lone VAC					
Yes	50.00%				38
No	50.00%				38
Committed relationship					
Yes	80.26%				61
No	19.74%				15
Level of experience	7.30 (7.32)	0	33		76
Caseload	19.88 (17.74)	1	70		76
Age	47.66 (11.85)	21	66		76
Education	4.01 (1.25)	2	6		76

(continued)

Race					
Latinx	28.95%				22
Non-Latinx White	71.05%				54
Religiosity	7.39 (2.17)	2	10	0.78	76

Research Question 1: Prevalence Rates

The first research question in the current study asked what the prevalence rate of burnout, secondary traumatic stress, and compassion satisfaction was among Texas VACs. According to Stamm (2010), a converted score of 57 or more on participants' overall level of burnout or secondary traumatic stress qualifies as a high score for that construct. In contrast, a value of 43 or lower on participants' total compassion satisfaction score qualifies as a low score. These cutoff points were used to calculate prevalence rates for burnout, secondary traumatic stress, and compassion satisfaction among VACs. Results demonstrated that one out of every four VACs scored high on burnout (25.00%, N = 19), one out of five VACs scored high on secondary traumatic stress (21.05%, N = 16), and one out of four VACs scored low on compassion satisfaction (27.63%, N = 21) (see Table 8).

Table 8

Prevalence Rates for Burnout, Secondary Traumatic Stress, and Compassion Satisfaction (N = 76)

Variable	% High score	N
Burnout	25.00%	19
Secondary traumatic stress	21.05%	16
Compassion satisfaction	27.63%	21

Bivariate Analyses

The relationship between each dependent variable and the independent and control variables was assessed using bivariate analyses. Table 9 presents the bivariate correlation matrix for every variable included in the multivariate analyses.

Table 9

Bivariate Correlations Matrix (N = 76)

	1	2	3	4	5	6	7	8
Burnout-negative personal identity	1							
2. Burnout-exhaustion	.05	1						
3. Secondary traumatic stress	.72***	.10	1					
Compassion satisfaction-fulfilled helper	-.45***	-.39***	-.31**	1				
Compassion satisfaction-enthusiastic helper	-.26*	-.56***	-.13	.58***	1			
6. Coworker support	-.45***	.02	-.35**	.34**	.08	1		
7. Family support	-.42***	-.38***	-.45***	.42***	.35**	.28*	1	
8. Supervisor support	-.41***	-.05	-.38***	.20†	.07	.39***	.30**	1
9. Personal victimization	.10	.07	.27*	-.10	.01	-.04	-.33**	-.03
10. Vict. of loved one	.04	.10	.12	.02	-.15	.00	-.02	.00
11. Childhood trauma	-.05	.28*	.04	-.13	-.18	.02	-.20†	-.14
12. Negative life outlook	-.25*	-.31**	-.26*	.33**	.27*	.15	.36**	.15
13. Purpose in life	-.46***	-.43***	-.37***	.47***	.37***	.22†	.59***	.18
14. Child care responsibility	-.16	.08	-.11	.05	-.13	.17	.15	.14
15. Recent loved one death	.03	-.13	-.02	.09	.06	.06	.14	-.15
16. Lone VAC	-.09	.06	.03	.07	-.03	.13	-.10	.24*
17. Committed relationship	-.12	-.15	-.04	.11	.17	.03	.12	.22†
18. Level of experience	.28*	.01	.22†	-.15	-.11	-.18	-.02	-.25*
19. Caseload	.16	-.17	.11	.25*	.18	-.03	-.00	-.29**
20. Age	.24*	-.09	.24*	-.13	-.11	-.26*	-.12	-.15
21. Education	.04	-.25*	-.15	.06	.21†	-.00	-.03	-.26*
22. Race	-.34**	.16	-.30**	.12	-.06	.16	.01	.03
23. Religiosity	-.31**	-.34**	-.30**	.37**	.23*	.07	.27*	.27*

†$p < .10$, *$p < .05$, **$p < .01$, ***$p < .001$.

(continued)

	9	10	11	12	13	14	15	16
1. Burnout-negative personal identity								
2. Burnout-exhaustion								
3. Secondary traumatic stress								
4. Compassion satisfaction-fulfilled helper								
5. Compassion satisfaction-enthusiastic helper								
6. Coworker support								
7. Family support								
8. Supervisor support								
9. Personal victimization	1							
10. Vict. of loved one	.14	1						
11. Childhood trauma	.32**	.23	1					
12. Negative life outlook	-.28*	-.21†	-.22†	1				
13. Purpose in life	-.02	.00	-.13	.33**	1			
14. Child care responsibility	.08	.30**	.28*	-.02	.13	1		
15. Recent loved one death	-.17	-.02	.11	.04	-.06	-.04	1	
16. Lone VAC	.00	-.09	.01	-.05	.11	.18	.00	1
17. Committed relationship	.03	.03	-.04	.03	-.04	.22†	-.05	.10
18. Level of experience	-.19†	-.06	-.21†	.00	-.10	-.19	-.01	-.21†
19. Caseload	.10	.10	.00	.15	.04	-.12	.00	-.34**
20. Age	-.07	.06	-.2-†	.02	-.05	-.46***	.02	-.14
21. Education	-.07	.15	-.04	.08	.10	-.01	-.08	-.33**
22. Race	-.06	.10	-.02	-.19	.10	.25*	.04	.12
23. Religiosity	-.12	.17	.06	.14	.20†	.13	.15	.10

†$p < .10$, *$p < .05$, **$p < .01$, ***$p < .001$.

(continued)

	17	18	19	20	21	22	23
1. Burnout-negative personal identity							
2. Burnout-exhaustion							
3. Secondary traumatic stress							
4. Compassion satisfaction-fulfilled helper							
5. Compassion satisfaction-enthusiastic helper							
6. Coworker support							
7. Family support							
8. Supervisor support							
9. Personal victimization							
10. Vict. of loved one							
11. Childhood trauma							
12. Negative life outlook							
13. Purpose in life							
14. Child care responsibility							
15. Recent loved one death							
16. Lone VAC							
17. Committed relationship	1						
18. Level of experience	-.10	1					
19. Caseload	-.07	.25*	1				
20. Age	-.03	.50***	.21†	1			
21. Education	-.15	-.04	.32**	-.07	1		
22. Race	.02	.04	-.02	-.11	-.01	1	
23. Religiosity	.11	.09	.06	.11	-.21†	.21†	1

$^{\dagger}p < .10$, $^{*}p < .05$, $^{**}p < .01$, $^{***}p < .001$.

Table 10 presents *t*-test results for burnout-negative personal identity and burnout-exhaustion, Table 11 presents *t*-test results for secondary traumatic stress, and Table 12 presents *t*-test results for compassion satisfaction-fulfilled helper and compassion satisfaction-enthusiastic helper.

Table 10

Group Difference Test (t-Test) Statistics for Burnout Variables (N = 76)

Variable	Burnout-negative personal identity	Burnout-exhaustion
Personal victimization	t(74) = -.62	t(74) = -.86
No personal vict. (N = 38)	6.53 (2.88)	11.45 (3.33)
Personal vict. (N = 38)	6.89 (2.29)	12.13 (3.62)
Loved one victimization	t(74) = -.90	t(74) = -.37
No loved one vict. (N = 25)	6.30 (2.14)	11.57 (3.32)
Loved one vict. (N = 51)	6.89 (2.76)	11.89 (3.56)
Child care responsibility	t(74) = -.68	t(74) = 1.41
No child responsibility (N = 39)	6.51 (2.19)	12.33 (3.41)
Child responsibility (N =37)	6.92 (2.98)	11.22 (3.49)
Recent loss of loved one	t(74) = 1.14	t(74) = -.26
No recent loss (N = 54)	6.93 (2.79)	11.72 (3.52)
Recent loss (N = 22)	6.18 (1.97)	11.95 (3.44)
Lone VAC	t(74) = -.53	t(74) = .79
Only VAC (N = 38)	6.55 (2.36)	12.11 (3.21)
Not only VAC (N = 38)	6.87 (2.83)	11.47 (3.73)
Committed relationship	t(74) = 1.27	t(74) = 1.09
No committed relationship (N = 15)	7.47 (2.10)	12.67 (3.20)
Committed relationship (N = 61)	6.52 (2.68)	11.57 (3.53)
Race	t(74) = -1.41	t(74) = 3.75***
Latinx (N = 22)	7.36 (3.27)	9.95 (2.26)
Non-Latinx White (N = 54)	6.44 (2.24)	12.54 (3.62)

$^{\dagger}p < .10$, $^{*}p < .05$, $^{**}p < .01$, $^{***}p < .001$.

Table 11

Group Difference Test (t-Test) Statistics for Secondary Traumatic Stress (N = 76)

Variable	Burnout-negative personal identity
Personal victimization	t(74) = -2.44*
No personal vict. (N = 38)	12.24 (3.62)
Personal vict. (N = 38)	14.47 (4.33)
Loved one victimization	t(74) = -1.26
No loved one vict. (N = 25)	12.61 (2.76)
Loved one vict. (N = 51)	13.68 (4.57)
Child care responsibility	t(74) = .95
No child responsibility (N = 39)	13.79 (3.79)
Child responsibility (N =37)	12.89 (4.45)
Recent loss of loved one	t(74) = .17
No recent loss (N = 54)	13.41 (3.95)
Recent loss (N = 22)	13.23 (4.62)
Lone VAC	t(74) = -.30
Only VAC (N = 38)	13.21 (4.02)
Not only VAC (N = 38)	13.50 (4.27)
Committed relationship	t(74) = .32
No committed relationship (N = 15)	13.67 (3.98)
Committed relationship (N = 61)	13.28 (4.18)
Race	t(74) = 3.25**
Latinx (N = 22)	11.41 (2.84)
Non-Latinx White (N = 54)	14.15 (4.32)

†$p < .10$, *$p < .05$, **$p < .01$, ***$p < .001$.

Table 12

Group Difference Test (t-Test) Statistics for Compassion Satisfaction Variables (N = 76)

Variable	Compassion satisfaction-fulfilled helper	Compassion satisfaction-enthusiastic helper
Personal victimization	t(74) = .89	t(74) = -.11
No personal vict. (N = 38)	30.92 (4.32)	12.61 (2.41)
Personal vict. (N = 38)	30.11 (3.67)	12.66 (1.63)
Loved one victimization	t(74) = -.17	t(74) = 1.28
No loved one vict. (N = 25)	30.39 (4.05)	13.09 (1.70)
Loved one vict. (N = 51)	30.57 (4.02)	12.43 (2.16)
Child care responsibility	t(74) = -.46	t(74) = 1.17
No child responsibility (N = 39)	30.31 (3.89)	12.90 (1.80)
Child responsibility (N =37)	30.73 (4.15)	12.35 (2.26)
Recent loss of loved one	t(74) = -.80	t(74) = -.51
No recent loss (N = 54)	30.28 (4.04)	12.56 (2.20)
Recent loss (N = 22)	31.09 (3.93)	12.82 (1.65)
Lone VAC	t(74) = -.60	t(74) = .22
Only VAC (N = 38)	30.24 (3.82)	12.68 (1.71)
Not only VAC (N = 38)	30.79 (4.21)	12.58 (2.36)
Committed relationship	t(74) = -.99	t(74) = -1.49
No committed relationship (N = 15)	29.60 (3.46)	11.93 (1.71)
Committed relationship (N = 61)	30.74 (4.12)	12.80 (2.10)
Race	t(74) = -1.06	t(74) = .48
Latinx (N = 22)	31.27 (3.83)	12.45 (2.61)
Non-Latinx White (N = 54)	30.20 (4.06)	12.70 (1.79)

$^{\dagger}p < .10$, $^{*}p < .05$, $^{**}p < .01$, $^{***}p < .001$.

Burnout-negative personal identity. Several of the independent and control variables were significantly related to burnout-negative personal identity at the bivariate level. Among independent variables, coworker social support ($r = -.45$, $p < .001$), family social support ($r = -.42$, $p < .001$), supervisor social support ($r = -.41$, $p < .001$), negative life outlook ($r = -.25$, $p < .05$), and purpose in life ($r = -.46$, $p < .001$) were all negatively correlated with burnout-negative personal identity. Personal victimization, victimization of a loved one, and childhood trauma were not significantly related to burnout-negative personal identity. Among control variables, level of experience ($r = .28$, $p < .05$) and age ($r = .24$, $p < .05$) were positively correlated with burnout-negative personal identity, while religiosity ($r = -.31$, $p < .01$) was negatively correlated with burnout-negative personal identity. Child care responsibility, having experienced the death of a loved one within the past 12 months, being the lone VAC in their jurisdiction, being in a committed interpersonal relationship, caseload, education, and being Latinx were not significantly related to burnout-negative personal identity at the bivariate level.

Burnout-exhaustion. Several of the independent and control variables were significantly related to burnout-exhaustion at the bivariate level. Among independent variables, family social support ($r = -.38$, $p < .001$), negative life outlook ($r = -.25$, $p < .01$), and purpose in life ($r = -.43$, $p < .001$) were all negatively correlated with burnout-exhaustion, while childhood trauma ($r = .28$, $p < .05$) was positively associated with burnout-exhaustion. Coworker social support, supervisor social support, personal victimization, and victimization of a loved one were all unrelated to burnout-exhaustion. Among control variables, education ($r = -.25$, $p < .05$) and religiosity ($r = -.34$, $p < .01$) were both negatively related to burnout-exhaustion. T-test results ($t[74] = 3.75$, $p < .001$)

demonstrated that Latinx VACs scored significantly lower on burnout-exhaustion ($\bar{x}$ = 9.95, SD = 2.26), on average, compared to non-Latinx White VACs ($\bar{x}$ = 12.54, SD = 3.62). Child care responsibility, having experienced the death of a loved one in the last 12 months, being the lone VAC in their jurisdiction, being in a committed interpersonal relationship, level of experience, caseload, and age were all unrelated to burnout-exhaustion at the bivariate level.

Secondary traumatic stress. Several of the independent and control variables were significantly related to secondary traumatic stress at the bivariate level. Among independent variables, coworker social support (r = -.35, $p < .01$), family social support (r = -.45, $p < .001$), supervisor social support (r = -.38, $p < .001$), negative life outlook (r = -.26, $p < .05$), and purpose in life (r = -.37, $p < .001$) were all negatively related to secondary traumatic stress. Personal victimization, victimization of a loved one, and childhood trauma were all unrelated to secondary traumatic stress. Among control variables, level of experience (r = .22, $p < .10$) and age (r = .24, $p < .05$) were positively related to secondary traumatic stress, while religiosity (r = -.30, $p < .01$) was negatively related to secondary traumatic stress. T-test results (t[74] = 3.25, $p < .01$) demonstrated that Latinx VACs scored significantly lower on secondary traumatic stress ($\bar{x}$ = 11.41, SD = 2.84), on average, compared to non-Latinx White VACs ($\bar{x}$ = 14.15, SD = 4.32). Child care responsibility, having experienced the death of a loved one in the last 12 months, being the lone VAC in their jurisdiction, being in a committed interpersonal relationship, caseload, and education were all unrelated to secondary traumatic stress at the bivariate level.

Compassion satisfaction-fulfilled helper. Several of the independent and control variables were significantly related to compassion satisfaction-fulfilled helper at the bivariate level. Among independent variables, coworker social support (r = .34, $p < .01$), family social support (r = .42, $p < .001$), supervisor social support (r = .20, $p < .10$), negative life outlook (r = .33, $p < .01$), and purpose in life (r = .47, $p < .001$) were all positively associated with compassion satisfaction-fulfilled helper. Personal victimization, victimization of a loved one, and childhood trauma were unrelated to compassion satisfaction-fulfilled helper. Among control variables, caseload (r = .25, $p < .05$) and religiosity (r = .37, $p < .01$) were both positively associated with compassion satisfaction-fulfilled helper. Child care responsibility, having experienced the death of a loved one in the last 12 months, being the lone VAC in their jurisdiction, being in a committed interpersonal relationship, level of experience, age, education, and being Latinx were all unrelated to compassion satisfaction-fulfilled helper at the bivariate level.

Compassion satisfaction-enthusiastic helper. Several of the independent and control variables were significantly related to compassion satisfaction-enthusiastic helper at the bivariate level. Among independent variables, family social support (r = .35, $p < .01$), negative life outlook (r = .27, $p < .05$), and purpose in life (r = .37, $p < .001$) were all positively related to compassion satisfaction-enthusiastic helper. Coworker social support, supervisor social support, personal victimization, victimization of a loved one, and childhood trauma were all unrelated to compassion satisfaction-enthusiastic helper. Among control variables, level of education (r = .21, $p < .10$) and religiosity (r = .23, $p < .05$) were both positively associated with compassion satisfaction-enthusiastic helper. Child care responsibility, having experienced the death of a loved one in the last 12

months, being the lone VAC in their jurisdiction, being in a committed interpersonal relationship, level of experience, caseload, age, and being Latinx were not significantly related to compassion satisfaction-enthusiastic helper at the bivariate level.

Research Question 2: Burnout

The second research question in the current study asked what factors predict burnout among Texas VACs. Backwards stepwise OLS regression analyses were run separately for burnout-negative personal identity and burnout-exhaustion, since the burnout items loaded onto two distinct factors.

Burnout-negative personal identity. Table 13 presents the OLS regression results for burnout-negative personal identity. This model explained 41% of the variance in VACs' burnout-negative personal identity score. VACs who reported possessing greater religiosity scored lower on burnout-negative personal identity (b = -.47, p < .001). VACs who reported having a greater purpose in life (b = -.20, p < .01) also scored lower on burnout-negative personal identity, as did VACs with more education (b = -.58, p < .01). The completion of an additional level of education was associated with a .58 decrease in VACs' burnout-negative personal identity score, all else held constant. In other words, VACs with more education experienced less burnout. VACs who reported being in a committed interpersonal relationship scored 1.08 lower on burnout-negative personal identity than VACs who were not in a committed interpersonal relationship. Childhood trauma was positively associated with burnout (b = .29, p < .05). Specifically, each additional adverse childhood experience corresponded with a .29 increase in VACs' burnout-negative personal identity score, all else held constant. Thus, VACs who had experienced a greater number of childhood traumas experienced more burnout. Being

Latinx rather than non-Latinx White was associated with a 1.30 higher score on burnout-negative personal identity, all else held constant. In other words, Latinx VACs experienced greater burnout-negative personal identity than non-Latinx White VACs.

The most influential predictor of burnout-negative personal identity was religiosity (β = -.45) followed by education (β = -.31), being Latinx (β = .25), purpose in life (β = -.24), childhood trauma (β = .21), and being in a committed interpersonal relationship (β = -.19). Despite being related to burnout-negative personal identity at the bivariate level, coworker social support, family social support, supervisor social support, negative life outlook, level of experience, and age did not reach statistical significance in the OLS regression model ($p > .05$). Personal victimization, victimization of a loved one, child care responsibility, being the lone VAC in their jurisdiction, having experienced the recent death of a loved one, and caseload also failed to reach statistical significance at $p < .05$. All variables that failed to reach statistical significance at $p < .05$ were removed from the analysis according to backwards stepwise OLS regression procedures.

Table 13

OLS Regression Results: Burnout-Negative Personal Identity (N = 75)

Variable	Coefficient	RSE	β
Constant	17.62***	1.99	
Religiosity	-.47***	.12	-.45
Education	-.58**	.17	-.31
Latinx	1.30*	.49	.25
Life purpose	-.20**	.07	-.24
Childhood trauma	.29*	.13	.21
Committed relationship	-1.08*	.54	-.19
F(68) = 12.35, $p = .000$.	Adj. $R^2 = .41$		

*p < .05, **p < .01, ***p < .001.

Burnout-exhaustion. Table 14 presents the OLS regression results for burnout-exhaustion. This model explained 38% of the variance in VACs' burnout-exhaustion score. VACs who reported having a greater purpose in life scored lower on burnout-exhaustion (b = -.42, p < .01). VACs who reported possessing greater coworker social support (b = -.30, p < .01) also scored lower on burnout-exhaustion. Being Latinx rather than non-Latinx White was associated with a 1.90 lower score on burnout-exhaustion, all else held constant. Thus, Latinx VACs experienced less burnout-exhaustion than non-Latinx White VACs.

The most influential predictor of burnout-exhaustion was purpose in life (β = -.36) followed by coworker social support (β = -.30) and being Latinx (β = -.25). Despite being related to burnout-exhaustion at the bivariate level, family social support, negative life outlook, childhood trauma, education, and religiosity did not reach statistical significance in the OLS regression model (p > .05). Supervisor social support, child care responsibility, having experienced the death of a loved one in the last 12 months, being the lone VAC in their jurisdiction, being in a committed interpersonal relationship, caseload, level of experience, and age also failed to reach statistical significance at p < .05. All variables that failed to reach statistical significance at p < .05 were removed from the analysis according to backwards stepwise OLS regression procedures.

Table 14

OLS Regression Results: Burnout-Exhaustion (N = 76)

Variable	Coefficient	RSE	β
Constant	27.47***	2.89	
Life purpose	-.42**	.12	-.36
Coworker support	-.30**	.09	-.33
Latinx	-1.90**	.55	-.25
F(72) = 16.48, p = .000.	Adj. R^2 = .38		

*p < .05, **p < .01, ***p < .001.

Research Question 3: Secondary Traumatic Stress

The third research question in the current study asked what factors predict secondary traumatic stress among Texas VACs. A backwards stepwise OLS regression analysis was run with secondary traumatic stress as the dependent variable. Table 15 presents the OLS regression results for secondary traumatic stress. This model explained 41% of the variation in VACs' secondary traumatic stress score. VACs with greater family social support (b = -.35, p < .01), supervisor social support (b = -.64, p < .01), and education (b = -.93, p < .01) reported lower levels of secondary traumatic stress. Specifically, all else held constant, each additional level of education completed was associated with a .93 decrease in VACs' secondary traumatic stress score. In other words, VACs who obtained more education experienced less secondary traumatic stress. All else held constant, being Latinx rather than non-Latinx White was associated with a 2.79 lower score on secondary traumatic stress. Thus, Latinx VACs experienced less secondary traumatic stress than non-Latinx White VACs. VACs who reported victimization of a loved one scored 1.68 higher on secondary traumatic stress relative to VACs who reported no victimization of a loved one. Consequently, VACs with a loved

one who had been victimized experienced more secondary traumatic stress than VACs whose loved ones had not been victimized.

The most influential predictor of secondary traumatic stress was family social support (β = -.35), followed by supervisor social support (β = -.34), being Latinx (β = -.31), education (β = -.28), and victimization of a loved one (β = .19). Despite being related to secondary traumatic stress at the bivariate level, coworker social support, negative life outlook, purpose in life, age, and religiosity did not reach statistical significance in the OLS regression model ($p > .05$). Personal victimization, childhood trauma, child care responsibility, having experienced the death of a loved one in the last 12 months, being the lone VAC in their jurisdiction, being in a committed interpersonal relationship, caseload, and level of experience all failed to reach statistical significance at $p < .05$. All variables that failed to reach statistical significance at $p < .05$ were removed from the analysis according to backwards stepwise OLS regression procedures.

Table 15

OLS Regression Results: Secondary Traumatic Stress (N = 76)

Variable	Coefficient	RSE	β
Constant	31.77***	3.30	
Family support	-.35**	.10	-.35
Supervisor support	-.64**	.22	-.34
Latinx	-2.79**	.77	-.31
Education	-.93**	.34	-.28
Vict. of loved one	1.68*	.72	.19
F(70) = 14.32, $p = .000$.	Adj. $R^2 = .41$		

*$p < .05$, **$p < .01$, ***$p < .001$.

Research Question 4: Compassion Satisfaction

The fourth and final research question in the current study asked what factors predict compassion satisfaction among Texas VACs. Backwards stepwise OLS

regression analyses were run separately for compassion satisfaction-fulfilled helper and compassion satisfaction-enthusiastic helper, since the compassion satisfaction items loaded onto two distinct factors.

Compassion satisfaction-fulfilled helper. Table 16 presents the OLS regression results for compassion satisfaction-fulfilled helper. This model explained 37% of the variation in VACs' compassion satisfaction-fulfilled helper score. VACs with greater purpose in life ($b = .47$, $p < .001$), religiosity ($b = .48$, $p < .01$), coworker social support ($b = .25$, $p < .05$), and caseload ($b = .05$, $p < .05$) reported higher levels of compassion satisfaction-fulfilled helper. VACs' compassion satisfaction-fulfilled helper score increased by .05 for each additional client a VAC was responsible for helping during their average week, all else held constant. Thus, VACs who helped more clients during the average week experienced greater compassion satisfaction-fulfilled helper than VACs who helped fewer clients.

The most influential predictor of compassion satisfaction-fulfilled helper was purpose in life ($\beta = .35$), followed by religiosity ($\beta = .26$), coworker social support ($\beta = .25$), and caseload ($\beta = .22$). Despite being related to compassion satisfaction-fulfilled helper at the bivariate level, family social support, supervisor social support, and negative life outlook did not reach statistical significance in the OLS regression model ($p > .05$). Personal victimization, victimization of a loved one, childhood trauma, child care responsibility, having experienced the death of a loved one in the past 12 months, being the lone VAC in their jurisdiction, being in a committed interpersonal relationship, level of experience, age, education, and being Latinx also failed to reach statistical significance

at $p < .05$. All variables that failed to reach statistical significance at $p < .05$ were removed from the analysis according to backwards stepwise OLS regression procedures.

Table 16

OLS Regression Results: Compassion Satisfaction-Fulfilled Helper (N = 76)

Variable	Coefficient	RSE	β
Constant	10.20**	3.51	
Life purpose	.47***	.12	.35
Religiosity	.48**	.18	.26
Coworker support	.25*	.10	.25
Caseload	.05*	.02	.22
$F(71) = 10.99$, $p = .000$.	Adj. $R^2 = .37$		

*$p < .05$, **$p < .01$, ***$p < .001$.

Compassion satisfaction-enthusiastic helper. Table 17 presents the OLS regression results for compassion satisfaction-enthusiastic helper. This model explained 30% of the variation in VACs' compassion satisfaction-enthusiastic helper score. VACs with greater purpose in life ($b = .12$, $p < .05$), religiosity ($b = .22$, $p < .01$), and caseload ($b = .02$, $p < .05$) reported higher levels of compassion satisfaction-enthusiastic helper. VACs' compassion satisfaction-enthusiastic helper score increased by .02 for each additional client a VAC was responsible for helping during their average week, all else held constant. Thus, VACs who helped more clients during the average week experienced greater compassion satisfaction-enthusiastic helper than VACs who helped fewer clients. Age was negatively associated with compassion satisfaction-enthusiastic helper ($b = -.05$, $p < .01$). Specifically, each additional year of age was associated with a .05 decrease in VACs' compassion satisfaction-enthusiastic helper score, all else held constant. In other words, younger VACs experienced greater compassion satisfaction-enthusiastic helper. VACs who were responsible for taking care of a child scored 1.22 lower on compassion satisfaction-enthusiastic helper relative to VACs who were not responsible for taking care

of a child. Thus, VACs who cared for children experienced less compassion satisfaction-enthusiastic helper. VACs who were in a committed interpersonal relationship scored 1.27 higher on compassion satisfaction-enthusiastic helper relative to VACs who were not a in a committed interpersonal relationship. In other words, VACs who were in a committed interpersonal relationship experienced greater compassion satisfaction-enthusiastic helper.

The most influential predictor of compassion satisfaction-enthusiastic helper was child care responsibility (β = -.36), followed by age (β = -.34), being in a committed interpersonal relationship (β = .30), religiosity (β = .28), caseload (β = .21), and purpose in life (β = .19). Despite being related to compassion satisfaction-enthusiastic helper at the bivariate level, family social support, negative life outlook, and education did not reach statistical significance in the OLS regression model ($p < .05$). Coworker social support, supervisor social support, personal victimization, victimization of a loved one, childhood trauma, having experienced the death of a loved one in the past 12 months, being the lone VAC in their jurisdiction, level of experience, and being Latinx also failed to reach statistical significance at $p < .05$. All variables that failed to reach statistical significance at $p < .05$ were removed from the analysis according to backwards stepwise OLS regression procedures.

Table 17

OLS Regression Results: Compassion Satisfaction-Enthusiastic Helper (N = 75)

Variable	Coefficient	RSE	β
Constant	9.61***	1.57	
Child care responsibility	-1.22**	.36	-.36
Age	-.05**	.02	-.34
Committed relationship	1.27**	.43	.30
Religiosity	.22**	.08	.28
Caseload	.02*	.01	.21
Life purpose	.12*	.05	.19
F(68) = 8.30, *p* = .000.	Adj. R^2 = .30		

*p < .05, **p < .01, ***p < .001.

OLS Regression Model Fit Statistics

Each of the dependent variables (burnout-negative personal identity, burnout-exhaustion, secondary traumatic stress, compassion satisfaction-fulfilled helper, and compassion satisfaction-enthusiastic helper) were assessed for skew and kurtosis. Skewness values between negative two and two are generally considered acceptable (West, Finch, & Curran, 1995), while kurtosis values between negative seven and seven are generally considered acceptable (Kim, 2013). All skewness values for the dependent variables fell between negative two (-1.52) and two (1.28). Similarly, all kurtosis values for the dependent variables fell between negative seven (-.46) and seven (5.11). After omitting observation number 76 for burnout-negative personal identity and compassion satisfaction-enthusiastic helper (discussed in greater detail below), all skewness values for the dependent variables fell between -.72 and .91, and all kurtosis values fell between -.77 and .43. This indicates that the dependent variables were normally distributed. Following this, a correlation matrix was run for all variables included in the multivariate analyses in order to asses for multicollinearity. Tabachnick and Fidell (2007) suggest that

bivariate correlations between any two regression predictors should not exceed .70 (Baird & Bieber, 2016). The strongest correlations between predictors existed among family social support and purpose in life (r = .59), and age and level of experience (r = .50).

Field (2013) recommends that variance inflation factor (VIF) values should be below 10, and tolerance values should be greater than .02. Backwards stepwise OLS regression analyses with burnout-negative personal identity, burnout-exhaustion, secondary traumatic stress, compassion satisfaction-fulfilled helper, and compassion satisfaction-enthusiastic helper as respective dependent variables contained VIF values under two and tolerance values above .68. Thus, multicollinearity was found not to be an issue.

A Breusch-Pagan test was conducted for each OLS regression analysis in order to assess for heteroskedasticity. Heteroskedasticity refers to error terms from an OLS regression model that are unequal or inconsistent. A significant Breusch-Pagan test statistic indicates that heteroskedasticity is present in the model (Breausch & Pagan, 1979). A non-significant Breusch-Pagan test statistic, on the other hand, indicates that heteroskedasticity is not an issue. The Breusch-Pagan statistic was significant for the original backwards stepwise OLS regression analyses with burnout-negative personal identity (p = .03), burnout-exhaustion (p = .00), compassion satisfaction-fulfilled helper (p = .05), and compassion satisfaction-enthusiastic helper (p = .00) as separate dependent variables. Thus, heteroskedasticity was present in these models. The Breusch-Pagan statistic was non-significant for the OLS regression analysis with secondary traumatic stress (p = .20) as a dependent variable, indicating heteroskedasticity was not present in that model.

White's test for heteroskedasticity was also conducted for each original backwards stepwise OLS regression model. As with the Breausch-Pagan statistic, a significant White test statistic indicates that heteroskedasticity is present in the model (White, 1980). The White test statistic was non-significant for the OLS regression analyses with burnout-negative personal identity (p = .36), burnout-exhaustion (p = .35) secondary traumatic stress (p = .40), and compassion satisfaction-fulfilled helper (p = .42) as separate dependent variables, indicating that heteroskedasticity was not present in these OLS regression models. The White test statistic was significant for the OLS regression analysis with compassion satisfaction-enthusiastic helper (p = .01) as the dependent variable, however, indicating that heteroskedasticity was present in that model.

In order to explore this issue further, the normality of each dependent variable was assessed via normal quantile plots (qnorm in Stata). Postestimation diagnostic plots were also generated after each backwards stepwise OLS regression. Specifically, the residuals were plotted by fitted values (residual-versus-fitted plot, or rvfplot in Stata). Qnorm and rvfplots were acceptable for burnout-exhaustion, secondary traumatic stress, and compassion satisfaction-fulfilled helper. Qnorm and rvfplots for burnout-negative personal identity and compassion satisfaction-enthusiastic helper, however, indicated that observation number 76 was problematic for both dependent variables. As a result, backwards stepwise OLS regression analyses were rerun for burnout-negative personal identity and compassion satisfaction-enthusiastic helper with observation number 76 excluded (N = 75). Backwards stepwise OLS regression analyses were also rerun for every dependent variable using the vce(robust) option, which reports robust standard errors. Findings from the backwards stepwise OLS regression analyses reported

throughout this study refer to the corrected regression analyses rather than the original models ran. All White test statistics were nonsignificant at this point, indicating that heteroskedasticity was not an issue.

Cook's distance (Cook's D) measures whether any observation within OLS regression predictors qualify as influential outliers that disproportionately affect the dependent variable (Cook, 1977; 1979). Cook and Weisberg (1982) suggest that observations with a Cook's D value greater than one may pose a problem. Cook's D did not exceed .66 for any observation in OLS regression analyses with burnout-negative personal identity, burnout-exhaustion, secondary traumatic stress, compassion satisfaction-fulfilled helper, and compassion satisfaction-enthusiastic helper as respective dependent variables. Thus, the data do not appear to contain any influential outliers that could possibly bias the OLS regression analysis results.

CHAPTER V

DISCUSSION

This chapter begins by revisiting the need for the current study. Following this, the existing trauma literature is summarized, and an overview of the current study is provided. Findings from the current study are then presented, with special attention given to how they compare and contrast with findings from previous studies. This chapter also explores the policy implications of findings from the current study. Finally, the limitations of the current study are discussed, and future research directions are outlined.

Need for the Current Study

The Texas Legislature passed House Bill 235 in 1985 amid calls for the criminal justice system to display greater responsiveness toward crime victims (Smith et al., 1990). House Bill 235 listed all of the rights Texas crime victims are granted by the state (McDaniel, 2012). Among other things, these rights permitted: (1) magistrates to factor the risk a defendant poses to victims if released on bail into their bail calculations; (2) crime victims to receive notification of courtroom proceedings and attend if they wished; (3) crime victims to apply for financial reimbursement for expenses such as sexual assault exams; and (4) crime victims to deliver oral or written statements detailing the impact of the crime on them during presentencing investigations, the sentencing portion of trial, and parole hearings (Tex. H.B. 235, 69th Leg., R.S., 1985).

These rights have been substantially expanded since 1985, and now include crime victims' right to: (1) have their personal contact information (e.g. address and phone number) excluded from court records; (2) sit in a private waiting area that is separate from where the defendant and their family are waiting (for victims who are going to

deliver testimony or a victim impact statement in court); and (3) participate in victim-offender mediation facilitated by the Victim Services Division of the Texas Department of Criminal Justice (TDCJ), pending the defendant's cooperation (Tex. Code Crim. Proc. § 56.02). The Texas Legislature charged victim assistance coordinators (VACs) with the responsibility to inform crime victims of their rights and assist them in accessing those rights. VACs are housed within their local District Attorney's office (Tex. Code Crim. Proc. § 56.04; Yun et al., 2009). By law, Texas police officers are required to provide crime victims with written contact information for the VAC in their jurisdiction during the initial encounter, or as soon after as possible (Tex. Code Crim. Proc. § 56.07).

Research on victim service providers remains limited (Boesdorfer, 2011; Kolb, 2014), especially when considering the various forms victim service work can take (Globokar et al., 2016). Victim service work, for example, is generally divided into community-based service providers and system-based service providers (Lonsway & Archambault, 2013). Community-based service providers work for nonprofit organizations like rape crisis centers, while system-based service providers work for criminal justice agencies such as law enforcement, the district attorney's office, and the department of corrections (Rich & Seffrin, 2013). Although a few studies have examined aspects of victim service work within a courtroom setting (Camacho & Alarid, 2008; Hendrickson, 2013; Globokar et al., 2016), only one prior study has examined VACs in Texas (Yun et al., 2009). Yun and colleagues (2009) surveyed VACs (N =75), crime victim liaisons (victim service providers stationed in police departments) (N = 233), and community-based victim service providers (N = 71) in Texas. Their study took a mixed methods approach, with the quantitative portion primarily focusing on: (1) basic

demographics like gender, level of education, and level of experience; and (2) the types of services each agency offered.

The victim services profession suffers from an abnormally high turnover rate among agency staff (Bangs, 2010; Bemiller & Williams, 2011; Westbrook et al., 2006). High turnover rates are problematic because new service providers require an initial investment of time, money, and training that diverts vital resources away from helping victims (Berger & Quiros, 2016; Meyers & Cornille, 2002). New hires are ill-equipped to meet clients' needs at the outset (Bahner & Berkel, 2007), requiring mentorship. This mentorship increases the workload of more experienced service providers. Resignations decrease staff morale (Pearlman & Saakvitne, 1995), and demoralized service providers may transmit their negative attitudes to clients (Dutton & Rubinstein, 1995). Turnover also disrupts client-provider rapport, which is a necessary prerequisite to helping victims (Clawson & Dutch, 2008).

Scholars have identified two primary causes of turnover within the victim services profession: burnout and secondary traumatic stress (Bonach & Heckert, 2012; Bride, Hatcher, & Humble, 2009; Bride & Kintzle, 2011; Maslach, 1978; Stamm, 1999a). Burnout is characterized by an unfavorable work environment that unnecessarily complicates (or actively hinders) employees' ability to carry out their job duties effectively (Baird, 1999; Valent, 2002). Secondary traumatic stress, in turn, consists of symptoms that are almost identical to PTSD, with the exception that these symptoms result from regular contact with a traumatized individual rather than firsthand exposure to a traumatic event (Figley, 1995; Fischman, 2008). The nursing and social work literature

have also identified a third construct, compassion satisfaction, thought to protect individuals from turnover (Fahey, 2016; Saco et al., 2015; Wagaman et al., 2015).

Young (2015) suggested that system-based victim service providers are especially likely to experience tension as a result of conflicting roles. This is because criminal justice agencies expect victim service providers to prioritize the agency's objectives over everything else. As a result, service providers are expected to help victims, but only to the extent that victims' needs coincide with the agency's objectives. Because they work in the district attorney's office, VACs may be particularly vulnerable to burnout due to competing priorities between the agency (building a strong case for prosecution) and victims (healing from their traumatic victimization experience). Research shows, for example, that sexual assault nurse examiners (SANE nurses) who worked at agencies that prioritized the prosecution of perpetrators experienced greater burnout than SANE nurses who worked at agencies where prosecution was less of a priority (Townsend & Campbell, 2008).

To date, only one study has examined VACs in Texas, and that study focused on basic demographic information and services provided rather than stress and burnout (Yun et al., 2009). The current study addressed this gap in the literature by examining the prevalence rates of burnout, secondary traumatic stress, and compassion satisfaction among VACs, and by identifying predictors of each using multivariate models. Several notable findings emerged from the analyses.

Summary of the Current Study

The current study consisted of survey responses from 76 VACs who represented 69 Texas counties. The average VAC was 48 years old, had completed an associate's

degree, reported a single type of childhood trauma, and assisted 20 victims during the average week. On average, participants reported seven years of experience as a VAC in Texas. This finding mirrors research by Yun and colleagues (2009) that showed Texas VACs had spent an average of 7.8 years in the victim services profession. Approximately three out of every four Texas VACs were non-Latinx White, with the other quarter self-identifying as Latinx. One in two VACs reported experiencing victimization as a child or adult. Two in three VACs reported victimization of a loved one.

Prevalence rates. The first research question sought to establish the prevalence rate of burnout, secondary traumatic stress, and compassion satisfaction among Texas VACs. The current study is the first research effort to undertake this task. Results demonstrated that one out of four VACs scored high on burnout (25.0%), one out of five VACs scored high on secondary traumatic stress (21.1%), and one out of four VACs scored low on compassion satisfaction (27.6%). Table 14 presents prevalence rates from other populations for comparison. Prevalence rates for burnout in these studies ranged from 0% to 32.0%, prevalence rates for secondary traumatic stress ranged from 0% to 71.0%, and prevalence rates for compassion satisfaction ranged from 0% to 28.5%. VAC prevalence rates for burnout, secondary traumatic stress, and compassion satisfaction from the current study were comparable to those found in student conduct professionals, pediatric nurses, and Israeli burn clinicians (with the exception of compassion satisfaction), among others.

Table 18

Comparison of ProQOL-5 Prevalence Rates for Burnout, Secondary Traumatic Stress, and Compassion Satisfaction

Sample	High burnout	High secondary traumatic stress	Low compassion satisfaction
ICU nurses (Young et al., 2011)	0%	0%	0%
IMU nurses (Young et al., 2011)	0%	0%	0%
ICU trauma nurses (Mason et al., 2014)	0%	0%	0%
Hospital nurses (Mooney et al., 2017)	0%	-	1.2%
Mental health workers (Somoray et al., 2017)	0%	0%	2%
Israeli burn clinicians (Haik et al., 2017)	27.3%	23.6%	3.7%
Hospice social workers (Pelon, 2017)	-	-	20.0%
Residential child care staff (Audin et al., 2018)	32.0%	26.0%	25.0%
Student conduct professionals (Bernstein Chernoff, 2016)	24.9%	23.9%	23.9%
Pediatric nurses (Berger et al., 2015)	29.3%	27.2%	28.5%
Interpreters (Mehus & Becher, 2016)	14.0%	71.0%	5.0%
VACs[1]	25.0%	21.1%	27.6%

[1]The current study.

Burnout predictors. The second research question sought to identify predictors of burnout among VACs while controlling for the influence of other variables. Factor analysis showed that the 10 burnout items loaded onto two factors: (1) burnout-negative personal identity; and (2) burnout-exhaustion. Each burnout factor was treated as a separate dependent variable in backwards stepwise OLS regression analyses. Table 19 presents the direction of relationships between all significant independent and control variables and burnout-negative personal identity, burnout-exhaustion, secondary

traumatic stress, compassion satisfaction-fulfilled helper, and compassion satisfaction-enthusiastic helper.

Consistent with the prior research (Boesdorfer, 2011; Moreno-Jimenez & Hidalgo Villodres, 2010; Chiarelli-Helminiak, 2014), coworker social support, family social support, and supervisor social support were all negatively related to burnout-negative personal identity at the bivariate level. Family social support was also negatively related to burnout-exhaustion at the bivariate level, but unrelated to coworker or supervisor social support. The majority of social support variables, however, were unrelated to either burnout factor in multivariate analyses after controlling for other variables. The exception was coworker social support, which was negatively related to burnout-exhaustion in OLS regression analysis results. Thus, greater social support from coworkers was associated with decreased burnout. The negative relationship observed between social support and burnout is in keeping with the prior literature (e.g., Boesdorfer, 2011; Chiarelli-Helminiak, 2014). Social support from coworkers is important because it provides VACs with an outlet to discuss their challenges and frustrations within an understanding environment (Hendrickson, 2013). Supportive coworkers may also mitigate the harshest aspects of the job.

Consistent with prior research (Baird, 1999; Boesdorfer, 2011), personal victimization was not significantly related to either burnout factor among VACs in the current study. Future research should explore why personal victimization appears unrelated to general work stressors. Alternatively, it is possible that these findings are the product of a small sample size, since small sample sizes increase the risk of failing to find

a significant relationship where one in-fact exists (Columb & Atkinson, 2016).

Victimization of a loved one was also unrelated to either burnout factor.

Table 19

Summary of Significant Relationships Between Predictors and Dependent Variables

Variable	Burnout-negative personal identity	Burnout-exhaustion	Secondary traumatic stress	Compassion satisfaction-fulfilled helper	Compassion satisfaction-enthusiastic helper
Coworker support		-		+	
Family support			-*		
Supervisor support			-		
Personal victimization					
Vict. of loved one			+		
Childhood trauma	+				
Negative life outlook					
Purpose in life	-	-*		+*	+
Child care responsibility					-*
Recent loved one death					
Lone VAC					
Committed relationship	-				+
Level of experience					
Caseload				+	+
Age					-
Education	-		-		
Latinx	+	-	-		
Religiosity	-*			+	+

*Strongest predictor of dependent variable.

Consistent with prior research (Giacomo, Pescatore, Colmegna, Di Carlo, & Clerici, 2017), childhood trauma was significantly related to burnout among VACs in the current study. Specifically, greater childhood trauma predicted greater burnout-negative

personal identity, although it was unrelated to burnout-exhaustion. This finding is interesting given that personal victimization was not related to either burnout factor. The mixed findings in the present study may be explained by prior research that focuses more broadly on trauma experienced across the lifetime. Previous literature is more mixed, with some studies showing trauma history to be positively related to burnout (Whealin et al., 2007), and others reporting no association between the two (Baird, 1999; Boesdorfer, 2011). One explanation may be that burnout-exhaustion is largely comprised of work-related variables (e.g., "I feel overwhelmed because my casework load seems endless"), whereas burnout-negative personal identity is comprised of items that measure VACs' general psychological well-being (e.g., "I have beliefs that sustain me"). Thus, childhood trauma may not specifically affect how VACs feel about their work or work environment, but rather affect their overall sense of well-being.

Prior research has shown positive life outlook, also known as dispositional optimism, to be negatively related to burnout (Alarcon, Eschleman, & Bowling, 2009; Chang & Chan, 2015; Hayes & Weathington, 2007). In the present study, negative life outlook (dispositional pessimism) was negatively related to both burnout factors at the bivariate level. In other words, VACs with a more negative life outlook experienced less burnout at the bivariate level. Although this finding appears counterintuitive at first, it makes sense when considering that VACs who expect negative life experiences are unlikely to be surprised when they find themselves working in an unsupportive environment. As a result, they may not experience the full effect of that environment. Optimistic VACs, however, may experience greater burnout because they hold higher expectations of how supportive their work environment should be. When optimistic

VACs realize that their work environment is less supportive than anticipated, they may experience more severe burnout symptoms than VACs who never expected to find themselves in a supportive environment to begin with. Regardless, this bivariate relationship was rendered nonsignificant once other factors were controlled for in multivariate regression analyses.

Consistent with previous research (Loonstra, Brouwers, & Tomic, 2009; Yiu-kee & Tang, 1995), purpose in life was negatively related to both burnout factors in the current study. Thus, VACs who reported a greater purpose in life experienced less burnout-negative personal identity and burnout-exhaustion. Out of all the independent and control variables included in multivariate analyses, possessing a greater purpose in life had the strongest influence on the level of burnout-exhaustion VACs experienced (but not burnout-negative personal identity).

Regularly caring for a child was unrelated to both burnout factors. VACs who had experienced the death of a loved one within the past 12 months did not differ on either burnout factor compared to VACs who had not experienced the recent death of a loved one. Similarly, participants who were the only VAC in their jurisdiction did not significantly differ on either burnout factor compared to participants who had other VACs in their jurisdiction. VACs who reported being in a committed interpersonal relationship, however, experienced less burnout-negative personal identity than VACs who were not in a committed interpersonal relationship. This finding is likely explained by the fact that burnout-negative personal identity consists of items that measure general psychological well-being rather than work-specific factors. In other words, being in a committed interpersonal relationship may improve general psychological well-being.

Additionally, being in a committed interpersonal relationship may increase VACs' level of social support from family and friends outside of work (Ang et al., 2018; Waite, 1995). Being in a committed relationship, however, was unrelated to burnout-exhaustion.

Level of experience was positively related to burnout-negatively personal identity (but not burnout-exhaustion) at the bivariate level in the present study. This finding runs contrary to previous research that showed a negative relationship between level of experience and burnout (Moore, 2014). The finding that individuals who have spent more time as a VAC experience greater burnout suggests that there may be a cumulative effect to the stressors of victim service work. VACs who work long hours and take little, if any, time off over the years may inadvertently increase the level of burnout they experience. It is worth noting, too, that in the immediate aftermath of turnover within an agency, the remaining VACs must take on additional responsibilities (Meyers & Cornille, 2002). VACs who have served in the position longer are, by definition, more likely to experience turnover-related increases in their workload. These VACs may also be tasked with training new hires. VACs faced with an increased workload are likely to work longer hours and less likely to be able to take time off. As a result, they likely face a greater risk for burnout. Regardless, this relationship was rendered nonsignificant once other factors were controlled for in multivariate regression analyses.

Prior research has shown service providers' caseload to be positively associated with burnout. Domestic violence service providers who reported being responsible for an unrealistic amount of work, for example, scored higher on burnout (Kulkarni et al., 2013). Kulkarni and colleagues (2013) found that an unmanageable caseload was the strongest predictor of burnout in their study. Similarly, Rai (2010) reported a positive

association between perceived work demands (work responsibilities) and burnout at both the bivariate and multivariate levels among nursing home caretakers. Qualitative work has also revealed that sexual assault nurse examiners (SANE nurses) perceive longer work hours to increase their risk for burnout (Maier, 2011). Contrary to these studies, VACs' caseload was unrelated to their level of burnout (either factor) in the current study. This finding is not unprecedented, however, as Moore (2014) failed to find a significant relationship between sex offender therapists' caseloads and their burnout levels.

Measurement differences may partially explain the current study's findings. Both Kulkarni and colleagues (2013) and Rai (2010) measured service providers' perceptions of their workload, whereas the current study and Moore (2014) used objective measures of service providers' workload (the number of clients assisted during a given timeframe). This suggests that service providers' perceptions of their workload may not accurately reflect their actual caseload. One possible explanation is that greater burnout may actually influence service providers' perceptions of their workload, rather than the other way around. In other words, service providers who are more burnt out may perceive their workload to be greater as a result of feeling overwhelmed and exhausted. Service providers' caseload, however, is unlikely to be influenced by their level of burnout, but may influence how burned out they feel.

Some scholars have suggested that age may serve as a proxy measure for level of experience (Craig & Sprang, 2010; Maslach et al., 2001; Moore, 2014). If true, age should be significantly related to burnout at the bivariate level, but the addition of level of experience to a multivariate model should render the relationship between age and burnout nonsignificant. Findings from the current study lend some support to this notion,

as age was positively associated with burnout-negative personal identity at the bivariate level, but failed to reach statistical significance in multivariate models. Age was unrelated to burnout-exhaustion in both bivariate and multivariate analyses, however. This raises questions about whether age truly serves as a proxy measure for level of experience. This finding is also puzzling because younger VACs may be less educated than older VACs about the dangers of burnout and their vulnerability to developing burnout symptomatology. Similarly, younger VACs may be less knowledgeable about strategies for coping with burnout compared to older VACs. Future research should seek to clarify the relationship between age and burnout among victim service providers.

Several studies have found a negative relationship between level of education and burnout (Demir, Ulusoy, & Ulusoy, 2003; Llorent & Ruiz-Calzado, 2016). Consistent with these findings, VACs who had completed a higher level of education experienced less burnout-negative personal identity in the current study. This finding is likely explained by better educated service providers being more informed about their risk for burnout, as well as being more aware of coping strategies that can help protect against the onset of burnout. In contrast, education was negatively related to burnout-exhaustion at the bivariate level, but failed to reach statistical significance in multivariate models.

According to the U.S. Census Bureau, 39.4% of Texas' population was Latinx in 2010. By 2022, the Latinx population is projected to represent the largest racial and ethnic demographic in the state (Ura & Ahmed, 2018). Non-Latinx victim service providers may experience greater burnout if they regularly encounter language barriers while assisting Spanish-only-speaking victims, assuming that the service provider is not fluent in Spanish. As a result, Latinx service providers may experience less burnout than

non-Latinx White service providers—again, assuming that Latinx service providers are more likely to speak Spanish than non-Latinx White service providers. The current study provides mixed support for this line of reasoning. Latinx VACs experienced greater burnout-negative personal identity than non-Latinx White VACs, but less burnout-exhaustion.

Finally, research has shown religiosity to be negatively related to burnout in a variety of different samples, including working professionals (Kutcher, Bragger, Rodriguez-Srednicki, & Masco, 2010), high school principals (Somech & Miassy-Maljak, 2003), medical students (Estupinan & Kibble, 2018; Wachholtz & Rogoff, 2013), and intensive care unit nurses (Kim & Yeom, 2018), although not in physicians (Salmoirago-Blotcher et al., 2016). In keeping with the prior research, religiosity was negatively related to burnout-negative personal identity among VACs in the current study. Indeed, it was the strongest predictor in the model. Thus, VACs with greater religiosity experienced less burnout-negative personal identity. This is not surprising, as prior research demonstrated that religiosity produced greater posttraumatic growth in medical rescue workers (Oginska-Bulik & Zadworna-Cieslak, 2018). Bell (2003) suggested that the specifics of individuals' religious beliefs did not matter as much as how those beliefs operated. One domestic violence counselor in Bell's (2003) study, for example, reported a strong religious conviction that nothing happens unless it was meant to happen. This counselor also believed that individuals should focus on appreciating the blessings in their lives rather than the suffering. Together, these religious beliefs helped her cope with the traumatic experiences of her clients. In contrast, religiosity was

negatively related to burnout-exhaustion at the bivariate level, but this relationship disappeared once other variables were added to the multivariate model.

Secondary traumatic stress predictors. The third research question sought to identify predictors of secondary traumatic stress among VACs while controlling for the influence of other variables. Consistent with much of the prior literature (Bourke & Craun, 2014; Choi, 2011a; Galek, Flannelly, Greene, & Kudler, 2011; Hensel, Ruiz, Finney, & Dewa, 2015; Manning-Jones, de Terte, & Stephens, 2016), although not all (Hyman, 2004), family and supervisor social support were both negatively related to secondary traumatic stress in the current study. Thus, greater social support from family and supervisors was associated with a decrease in VACs' secondary traumatic stress levels. Out of all the independent and control variables included in multivariate analyses, family social support was the strongest predictor of secondary traumatic stress among VACs. In contrast, coworker social support was negatively correlated to secondary traumatic stress at the bivariate level, but failed to reach statistical significance in the multivariate model.

Many prior studies have linked histories of personal trauma or victimization to an increased risk for experiencing secondary traumatic stress (Baird, 1999; Dworkin, Sorell, & Allen, 2016; Hensel et al., 2015; Nelson, 2015; Pearlman & Mac Ian, 1995; Siebert, 2005; Slattery & Goodman, 2009; Vermilyea, 2014). This makes sense, as service providers who encounter clients with victimization experiences similar to their own may become triggered. Nevertheless, personal victimization was unrelated to secondary traumatic stress among VACs in the current study. VACs with a loved one who had experienced victimization, however, reported significantly higher levels of secondary

traumatic stress. This suggests that VACs who witness the impact of victimization (DeLisi et al., 2014; Hanson et al., 2010; Janoff-Bulman, 1985) on clients at work may worry about how the long-term consequences of victimization will affect their loved ones. As a result, these VACs experience greater secondary traumatic stress. Alternatively, VACs with a loved one who has experienced victimization may sustain greater secondhand exposure to traumatized individuals via work *and* their personal lives. As a result, they may develop greater secondary traumatic stress. Similar to personal victimization, childhood trauma was unrelated to secondary traumatic stress among VACs in the current study. The lack of a significant relationship may be explained by VACs reporting generally low levels of childhood trauma. The average VAC, for example, reported a single type of childhood abuse. Thus, it is possible that a certain minimum threshold exists for the number of childhood abuse types an individual must experience before it affects their levels of secondary traumatic stress. If true, the existence of such a relationship would be concealed in samples characterized by low levels of childhood trauma.

At least one study has reported a negative relationship between dispositional optimism and secondary traumatic stress (Lucero, 2002). A second study, however, found that caregivers who were optimistic about their ability to improve clients' lives actually experienced greater secondary traumatic stress (Shalvi, Shenkman, Handgraaf, & de Dreu, 2011). Negative life outlook (dispositional pessimism) was negatively related to secondary traumatic stress at the bivariate level in the current study. This relationship disappeared, however, once other variables were controlled for in the multivariate analysis. This finding is surprising given that both the current study and Lucero's (2002)

study used the revised version of the Life Orientation Test (LOT-R) (Scheier et al., 1994) to assess dispositional optimism. One possible explanation is that the six LOT-R items loaded onto two separate factors in the current study, only one of which demonstrated satisfactory reliability (negative life outlook).

Prior research has demonstrated a negative relationship between purpose in life and secondary traumatic stress (Perstling, 2012). In the current study, purpose in life was negatively related to secondary traumatic stress at the bivariate level, but failed to reach statistical significance in the multivariate model. This finding was unexpected. One possible explanation is that because trauma is contagious (Coddington, 2017; Knox, 2014; Mcclelland, 2013; Reuben, 2015), VACs' level of exposure to trauma—for example, via the victimization of a loved one—simply matters more than internal factors such as purpose in life.

VACs who regularly cared for a child did not significantly differ from VACs who did not regularly care for a child on secondary traumatic stress. Similarly, VACs who had experienced the death of a loved one within the past 12 months did not significantly differ from VACs who had not experienced the recent death of a loved one on secondary traumatic stress. VACs who were the only VAC in their jurisdiction did not significantly differ from VACs who had other VACs in their jurisdiction on their level of secondary traumatic stress. VACs who reported being in a committed interpersonal relationship did not differ from VACs who were not in a committed interpersonal relationship on secondary traumatic stress.

Prior research has shown level of experience to be negatively related to secondary traumatic stress (Hensel et al., 2015; Shalvi et al., 2011). Nevertheless, level of

experience was *positively* associated with secondary traumatic stress among VACs at the bivariate level in the current study. This finding is likely explained by staff turnover disproportionately affecting VACs with more experience. VACs who remain with the agency longer, for example, may assume responsibility for departed coworkers' caseloads. VACs with more experience are also expected to train new hires after the agency fills open positions. VACs in this situation must work longer hours than usual, and are unlikely to take time off from work. As a result, they may experience greater secondary traumatic stress due to greater exposure to traumatized crime victims. Level of experience failed to reach statistical significance in the current study, however, after other variables were controlled for in the multivariate analysis.

Several aspects of service providers' caseloads have been found to be positively associated with secondary traumatic stress (Galek et al., 2011; Hensel et al., 2015). One study even reported that the perception of an unrealistic workload was the strongest predictor of secondary traumatic stress among service providers (Kulkarni et al., 2013). Contrary to these findings, VACs' caseload was unrelated to their level of secondary traumatic stress in the current study. This finding may be explained by prior research that suggests it is the number of *traumatized* clients rather than the *overall total* number of clients in a service provider's caseload that determines their level of secondary traumatic stress (Hensel et al., 2015; Shalvi et al., 2011). Additionally, at least one other study has failed to find a significant relationship between the total number of clients in a service provider's caseload and their level of secondary traumatic stress (Lucero, 2002).

Age is generally negatively related to secondary traumatic stress (Bonach & Heckert, 2012; Hensel et al., 2015; Lucero, 2002). Contrary to prior studies, however, age

was *positively* associated with secondary traumatic stress among VACs at the bivariate level. Age failed to reach statistical significance, however, in the multivariate model.

A couple of studies have linked higher levels of education to lower levels of secondary traumatic stress (Galek et al., 2011; Lucero, 2002). Consistent with these studies, level of education was negatively related to secondary traumatic stress among VACs in the current study. Similar to burnout-negative personal identity, better educated VACs may be more informed about their risk for secondary traumatic stress. Better educated VACs may also be more aware of coping strategies that protect against the onset of secondary traumatic stress.

Latinx VACs in the current study reported lower levels of secondary traumatic stress than non-Latinx White VACs. Future research should explore reasons why this is the case. One possibility is that Latinxs may differ from non-Latinx Whites on other measures that are significantly associated with secondary traumatic stress (e.g. family social support, supervisor social support, victimization of a loved one, or education). Follow-up bivariate analyses were conducted to explore this possibility. Findings revealed, however, that Latinx VACs did not differ from non-Latinx White VACs on any of the other variables significantly associated with secondary traumatic stress in the current study.

Finally, spirituality, religious sentiments, and religiosity are generally found to be unrelated to secondary traumatic stress (Gillespie, 2014; Hyman, 2005). One study, however, used social adjustment as a proxy measure for the inverse of secondary trauma due to the lack of secondary traumatic stress measures available in the Farsi language, and found that religiosity was positively associated with social adjustment

(Khodayarifard & McClenon, 2010). This study concluded that religiosity was likely negatively related to secondary traumatic stress. Religiosity in the current study was negatively related to secondary traumatic stress at the bivariate level, but failed to reach statistical significance in the multivariate model.

Compassion satisfaction predictors. The fourth research question sought to identify predictors of compassion satisfaction among VACs while controlling for the influence of other variables. Factor analysis showed that the 10 compassion satisfaction items loaded onto two factors: (1) compassion satisfaction-fulfilled helper; and (2) compassion satisfaction-enthusiastic helper. Each compassion satisfaction factor was treated as a separate dependent variable in backwards stepwise OLS regression analyses.

Evidence suggests that social support and compassion satisfaction are positively related (Barr, 2017; Miller, Unruh, Wharton, Liu, & Zhang, 2017; Mohsin, Shahed, & Sohail, 2017; Sodeke-Gregson, Holtturn, & Billings, 2013). Coworker, family, and supervisor social support were positively associated with compassion satisfaction-fulfilled helper at the bivariate level in the current study. Family social support was also positively associated with compassion satisfaction-enthusiastic helper at the bivariate level. After controlling for other variables in multivariate analyses, however, the only association that remained statistically significant was the positive relationship between coworker support and compassion satisfaction-fulfilled helper.

Few studies have examined how service providers' victimization experiences may influence their level of compassion satisfaction. One of the only studies on this subject reported that interpreters' trauma history was unrelated to their level of compassion satisfaction (Mehus & Becher, 2016). Consistent with this finding, personal

victimization, victimization of a loved one, and childhood trauma were all unrelated to compassion satisfaction-fulfilled helper and compassion satisfaction-enthusiastic helper in the current study. This makes sense, as there is no reason to assume that a history of trauma diminishes the sense of personal accomplishment service providers experience when they help victims in need (Stamm, 2002).

Dispositional optimism and positive emotionality are thought to be positively associated with compassion satisfaction (Injeyan et al., 2011; Samios, Abel, & Rodzik, 2013). Contrary to this expectation, negative life outlook (dispositional pessimism) was positively related to both compassion satisfaction-fulfilled helper and compassion satisfaction-enthusiastic helper at the bivariate level in the current study. Thus, VACs who had a more negative outlook on life experienced *greater* compassion satisfaction. These findings were unexpected, as VACs with greater dispositional optimism would be expected to also have stronger beliefs about their ability to improve victims' lives (Sacco & Copel, 2018). One possible explanation for this finding is that pessimistic VACs who doubt their ability to improve clients' lives may experience greater compassion satisfaction after witnessing their clients' lives actually improve. Optimistic VACs, however, may be disproportionately affected by witnessing clients struggle in the aftermath of victimization. This may lead to lower levels of compassion satisfaction. Regardless of the explanation for the bivariate relationship, negative life outlook failed to reach statistical significance once other variables were controlled for in multivariate analyses.

Prior research has demonstrated a positive association between life purpose and compassion satisfaction (Itzick, Kagan, & Ben-Ezra, 2018; Mason, 2013). Consistent

with other studies, purpose in life was positively associated with both compassion satisfaction-fulfilled helper and compassion satisfaction-enthusiastic helper among VACs in the current study. Out of all the independent and control variables included in multivariate analyses, purpose in life was the strongest predictor of compassion satisfaction-fulfilled helper (but not compassion satisfaction-enthusiastic helper).

VACs who regularly care for a child reported lower levels of compassion satisfaction-enthusiastic helper (but not compassion satisfaction-fulfilled helper) compared to VACs who did not regularly take care of a child. This finding may be explained by the items that comprise this factor: (1) "I get satisfaction from being able to help people"; (2) "I feel invigorated after working with those I help"; and (3) "I am pleased with how I am able to keep up with helping techniques and protocols." Child care responsibilities may prevent VACs from attending trainings or workshops on the latest helping techniques, especially if these activities require travel and are not available online. Additionally, VACs who are responsible for young children may not report feeling invigorating after working with those they help because they are overwhelmed by their child care responsibilities at home. Out of all the independent and control variables included in multivariate analyses, regularly taking care of a child was the strongest predictor of compassion satisfaction-enthusiastic helper (but not compassion satisfaction-fulfilled helper) among VACs. Future research should seek to better understand why this is the case.

VACs who had experienced the death of a loved one within the past 12 months did not differ from VACs who had not experienced the recent death of a loved one on either compassion satisfaction factor. The same was true for VACs who were the only

VAC in their jurisdiction compared to VACs who had other VACs in their jurisdiction. VACs who were in a committed interpersonal relationship reported greater compassion satisfaction-enthusiastic helper (but not compassion satisfaction-fulfilled helper) than VACs who were not in a committed interpersonal relationship. Future research should seek to better understand why this is the case.

Research has yet to identify any clear pattern of how age and level of experience relate to compassion satisfaction. Age is generally found to be unrelated to compassion satisfaction (Miller et al., 2017; Mohsin et al., 2017; Pelon, 2017; Zaidi, Yaqoob, & Saeed, 2017), although at least one study has reported a positive association between the two (Sodeke-Gregson et al., 2013). Another study initially found age to be positively associated with compassion satisfaction, but this relationship disappeared after controlling for level of experience, which was positively related to compassion satisfaction (Craig & Sprang, 2010). At least one other study has reported a positive relationship between level of experience and compassion satisfaction (Teffo, Levin, & Rispel, 2018), with several additional studies finding no significant relationship between the two (Audin, Burke, & Ivtzan, 2018; Miller et al., 2017; Mohsin et al., 2017; Pelon, 2017; Sodeke-Gregson et al., 2013). In the current study, age was negatively related to compassion satisfaction-enthusiastic helper, and unrelated to compassion satisfaction-fulfilled helper. Level of experience was unrelated to both compassion satisfaction-fulfilled helper and compassion satisfaction-enthusiastic helper.

Evidence suggests that individuals' workload is positively associated with their level of compassion satisfaction (Fredette-Carragher, 2016; Wentzel & Brysiewicz, 2018). The proportion of traumatized clients present in a service provider's caseload,

however, was found to be unrelated to their level of compassion satisfaction (Craig & Sprang, 2010). Consistent with prior research, caseload was positively associated with compassion satisfaction-fulfilled helper and compassion satisfaction-enthusiastic helper among VACs in the current study. One possible explanation is that VACs who help a greater number of clients may be more likely to witness the positive impact their efforts have on at least one of those clients' lives. As a result, they experience greater compassion satisfaction. A couple of studies lend support to this explanation. Cohen and Collens (2013) argued that service providers experience posttraumatic growth when they observe traumatized clients' lives improve over time. This prompted Frey and colleagues (2017, p. 50) to suggest that service providers require "sufficient contact" with clients in order to experience the positive benefits that stem from their victim service work.

Prior research has demonstrated level of education to be unrelated to compassion satisfaction (Miller et al., 2017). Level of education was positively associated with compassion satisfaction-enthusiastic helper at the bivariate level in the current study, but not compassion satisfaction-fulfilled helper. The addition of other independent and control variables, however, rendered this relationship nonsignificant in multivariate analyses. This finding may suggest that college curricula in their current form fail to adequately develop victim service providers' level of compassion satisfaction.

Being Latinx was unrelated to compassion satisfaction among VACs in the current study. This finding differs from Miller and colleagues' (2017) work, which reported that Latinxs had greater compassion satisfaction than non-Latinxs. Finally, findings on spirituality and religiosity are mixed in regards to compassion satisfaction. Gillespie (2014) found spirituality to be positively associated with compassion

satisfaction, but religious sentiments to be unrelated to compassion satisfaction. Alkema, Linton, and Davies (2008) reported a positive association between individuals' level of spiritual care and their compassion satisfaction. Abortion clinic staff who self-identified as religious, however, reported similar levels of compassion satisfaction compared to staff who did not self-identify as religious (Teffo et al., 2018). Religiosity was positively associated with both compassion satisfaction-fulfilled helper and compassion satisfaction-enthusiastic helper among VACs in the current study.

Policy Implications

Scholars are increasingly exploring resiliency as a means for reducing burnout and secondary traumatic stress (Kinman & Grant, 2017). Resiliency refers to an individual's ability to maintain or reestablish their psychological well-being after encountering substantial stress or adverse experiences, even though these negative influences may persist in their life (Craigie et al., 2016; Gup et al., 2018; Harker, Pidgeon, Klaasen, & King, 2016; Waite & Richardson, 2004). Several studies have demonstrated a negative relationship between resiliency and burnout and secondary traumatic stress (Ahola, Toppinen-Tanner, & Seppanen, 2017; Ang et al., 2018; Harker et al., 2016). Similarly, prior research has revealed a positive relationship between resiliency and compassion satisfaction (Ahola et al., 2017).

Earvolino-Ramirez (2007) conducted a concept analysis to identify the subcomponents of resiliency. Two important factors identified included "sense of purpose," and social support (Earvolino-Ramirez, 2007, p. 77)—both factors that significantly predicted outcomes in the current study. A meta-analysis of 33 studies also linked social support to resiliency (Lee et al., 2013). Additional studies have either

implicitly or explicitly recognized social support (Ludick & Figley, 2017), purpose in life (Schaefer et al., 2013), and religiosity/spirituality (Bell, 2003; Cohen & Collens, 2013; Oginska-Bulik & Zadworna-Cieslak, 2018) as important contributors to resiliency. Interestingly, social support, purpose in life, and religiosity were the strongest predictor in four out of the five backwards stepwise OLS regression models conducted in the current study. Specifically, religiosity was the strongest predictor of burnout-negative personal identity, purpose in life was the strongest predictor of burnout-exhaustion and compassion satisfaction-fulfilled helper, and family social support was the strongest predictor of secondary traumatic stress. These findings suggest that VACs would benefit from strategies that increase personal resiliency (Shew, 2010).

Scholars have historically conceptualized resiliency as a stable personality trait that some individuals possess and others do not (Lee et al., 2013). More recently, however, scholars have recognized that resiliency is malleable within individuals. As a result, resiliency is now considered a "dynamic process" whereby individuals' level of resiliency may fluctuate based on other factors (Gup et al., 2018, p. 446; Luthar, Cicchetti, & Becker, 2000, p. 543). This suggests that targeted interventions may be able to increase individuals' level of resiliency (Lee et al., 2013). Harker and colleagues (2016, p. 631), for example, promote "cultivating and sustaining resilience" as an effective method for reducing burnout and secondary traumatic stress symptoms. Jackson and colleagues (2018, p. 29) similarly contend that "anyone can develop their resilience" under the right circumstances (p. 29).

Implementation-ready strategies to increase resiliency are severely limited, however, despite some scholars' claims that "there is evidence that resilience can be

developed in workplace settings" (Kinman & Grant, 2017, p. 1981). Resiliency interventions, where they do exist, have rarely been subjected to rigorous empirical evaluation. Additionally, most existing interventions were not developed with burnout and secondary traumatic stress symptomatology in mind. Ahola and colleagues (2017), for example, reviewed 4,430 abstracts related to decreasing burnout symptomatology, but were only able to identify 14 relevant studies. A similar systematic review sought to identify interventions to reduce secondary traumatic stress in mental health workers, but failed to obtain a single relevant study despite reviewing more than 4,000 studies (Bercier & Maynard, 2015).

Several scholars have conducted pilot studies of interventions, but these evaluations frequently suffer from methodological concerns, including miniscule sample sizes and the lack of a control group. Burton, Pakenham, and Brown (2010), for example, administered weekly training designed to increase resiliency among adults dealing with stress. Each training session consisted of a traditional learning seminar supplemented with group activities and exercises to practice the skills discussed. The authors reported encouraging results, but drew these conclusions from 16 individuals, all of whom received the intervention. In a separate pilot study, 21 nurses received training on burnout, secondary traumatic stress, and mindfulness (Craigie et al., 2016). Results again appeared promising, but were limited by the sample size and lack of control group in the study design. Other pilot studies have involved samples consisting of 13 nurses (Delaney, 2018; Potter et al., 2013), 25 employees from agencies that regularly serve traumatized individuals (Shew, 2010), and 150 employees from a single government agency (Waite & Richardson, 2004).

Given the current status of the literature, it is premature to recommend evidence-based policy implications for increasing resiliency and reducing burnout and secondary traumatic stress among VACs. Before this can occur, scholars must first develop resiliency curriculum that can be tested on victim service providers who display burnout and secondary traumatic stress symptomatology. This curriculum must then be empirically evaluated according to methodologically rigorous practices, including sufficiently large sample sizes and a control group that does not receive the intervention. Although evidence-based practices have largely yet to be developed, scholars have identified many other strategies that may reduce burnout and secondary traumatic stress among victim service providers. These strategies are typically divided into individual-level and organizational-level interventions (Ahola et al., 2017; Bercier & Maynard, 2015; Westerman, Kozak, Harling, & Nienhaus, 2014).

Individual-level interventions. Gentry and colleagues (2002, p. 124) posed the question, "When the professionals themselves are overwhelmed by their work who is left to care for them?" The answer to this question lies in Terry's (1999) conceptualization of trauma. According to Terry (1999), trauma is a destructive agent that separates service providers from people, activities, and events that hold meaning. The pathway to healing from trauma, therefore, begins with deliberately engaging in behaviors that provide meaning in life. In this manner, service providers are empowered to help themselves. Because individuals find value in different activities, there is no definitive list of strategies to alleviate burnout and secondary traumatic symptoms (Stamm, 1999a). Instead, the effectiveness of any given strategy depends on whether the service provider engaging in that behavior finds it meaningful.

Although the list of possible antidotes to trauma symptomatology are endless, the most popular are predicated on a few underlying assumptions. The first assumption is that service providers should engage in "proactive strategies" that bolster their hope, emotional health, and sense of purpose (Wasco & Campbell, 2002, p. 734). These self-care strategies serve to neutralize the damaging effects of secondary trauma exposure. The second assumption is that every single victim service provider, regardless of their demographics or seniority, is vulnerable to the effects of trauma. Indeed, trauma is "inevitable" (Campbell, 2008, p. 110; Dutton & Rubinstein, 1995, p. 96; Srdanovic, 2009, p. 45). This leads to a third assumption: it is better to increase service providers' ability to cope with trauma symptoms than try to reduce the degree of trauma they experience, which is a difficult task (Figley, 2002).

Fourth, the misconception that victim service providers should selflessly help others at their own expense is toxic because it teaches them to ignore their own psychological well-being (Stamm, 1999b). This stoic approach increases service providers' risk for burnout and secondary trauma, thereby decreasing their ability to help clients. From this comes a fifth assumption: victim service providers should routinely monitor their feelings and experiences to detect the early warning signs of trauma. Sixth, many service providers may recognize the need for self-care without ever actually engaging in self-care behaviors. This may be especially true for women who manage housework and take care of children after work (Alani & Stroink, 2015). Finally, service providers require a Trinitarian support system comprised of: (1) compassionate and empathetic supervisors, (2) concerned coworkers, and (3) nonjudgmental loved ones outside of work (Stamm, 1999a, p. xxxv).

Social support is by far the most studied coping strategy and is generally found to ameliorate the effects of trauma symptomatology (Babin et al., 2012; Boesdorfer, 2011; Bourke & Craun, 2014; Chiarelli-Helminiak, 2014; Choi, 2011a)—although, at least one study failed to find a relationship between social support and burnout among crisis shelter workers (Baker, O'Brien, & Salahuddin, 2007). At the individual-level, social support can be divided up into peer support from coworkers (Bourke & Craun, 2014; Slattery & Goodman, 2009) and support from non-work sources (Bonach & Heckert, 2012). Coworkers are valuable because they provide opportunities to vent in an understanding environment (Hendrickson, 2013), can help identify additional resources, and can serve as a sounding board for service providers who are unsure how to proceed with a client (Merchant & Whiting, 2015). Not surprisingly, service providers who have held their current position longer consider their coworkers more supportive than do newer service providers (Dekel & Peled, 2000). This makes sense, since veteran service providers have had more time to develop relationships and benefit from their coworkers' help.

Coworkers can also be a double-edged sword, however, because they contribute to the overall mood of the office. If the majority of coworkers are exhausted and cynical, they will feed off each others' misery, increasing the overall sense of hopelessness. Thus, service providers attuned to their coworkers' trauma symptoms exhibited more symptoms themselves (Bemiller & Williams, 2011). Conversely, positively-oriented coworkers can buoy the spirits of service providers who are struggling with trauma symptomatology (Crain & Koehn, 2012). Some evidence suggests that support from loved ones outside of work may matter more than helpful coworkers (Bonach & Heckert, 2012). This is because they function "as a social distraction" from job-related secondary trauma

(Srdanovic, 2009, p. 66). Several scholars consider friendship to be one of the best strategies for addressing trauma symptoms (Ganz, 2015; Rosenbloom et al., 1999; Stamm, 1999c).

Confidentiality limitations may prevent service providers from seeking support from their loved ones outside of work because they cannot discuss the details of their job. An additional concern is that service providers who understand the contagious nature of trauma do not want to pass their clients' trauma on to their loved ones. As a result, they may shut others out from this aspect of their lives (Kolb, 2008). When it comes to strangers, service providers make new friends cautiously because the dominant U.S. culture is heavily influenced by patriarchy, and many Americans (particularly men) devalue the labor of those who have dedicated their professional lives to combating the effects of gendered violence (Kolb, 2014). Ganz (2015, p. 12) attributed this phenomenon to the "occupational stigma" associated with assisting victims of gendered violence. Service providers' increased awareness of gendered violence may also interfere with their ability to occupy public spaces, where men typically dominate and hold power. Finally, service providers may have little mental energy left after a draining day of secondary trauma exposure, and therefore stay home instead of going out (Srdanovic, 2009). All of these factors threaten to limit service providers' social support networks outside of work.

Another popular self-care strategy involves educating service providers about burnout and secondary traumatic stress so that they can identify the warning signs associated with trauma (Bangs, 2010; Brady et al., 1999; Pearlman & Saakvitne, 1995; Powell-Williams, White, & Powell-Williams, 2013). Trainings typically take the form of workshops hosted around the state or country, which can prove expensive for agencies

with limited resources. One solution is to sponsor a single service provider to attend the training who can then take notes and share the material with everyone back at the office (Bell et al., 2003). Beyond the knowledge gained, training provides staff with a welcome break from routines and secondary trauma exposure. Training also places them in an environment where they are celebrated and valued for the work they do (Kolb, 2008).

Knowledge by itself, however, is insufficient to prevent trauma symptomatology (Campbell, 2008; Vermilyea, 2014). Other issues may arise when the same training is mandated each year, the material is irrelevant, or the training takes place outside of the normal work week and at the service provider's personal expense (Grant, 2012; Hendrickson, 2013). One area of training frequently overlooked is how victim advocates can navigate the social stigma of their victim service work outside of the workplace (Ganz, 2015). Ganz (2015) noted that many advocates perceived their work to impede their ability to make new friends, thereby limiting their social support system.

Humor is considered an important self-care strategy (Moran, 2002). Figley (2002, p. 214) labeled humor "the universal cure-all" because it increases bonding between coworkers and loved ones, facilitates healthy expressions of emotions, and provides a framework for discussing traumatic events without the risk of traumatizing or alienating listeners. Humor can also restore a sense of hope and optimism in the workplace (Bangs, 2010). Additionally, laughing at "gallows humor" (making light of serious situations) creates a barrier that differentiates *them* (the traumatized client) from *us* (the psychologically healthy service provider) (Yassen, 1995). As a result, "gallows humor" allows service providers to continue delivering vital services in moments of crisis without becoming paralyzed from exposure to traumatized individuals. In these scenarios, humor

prevents the brain from dwelling on negative information by actively ignoring negative stimuli and enhancing the brain's concentration on positive stimuli (Moran, 2002).

Bemiller and Williams (2011) introduced the concept of *good soldiering*, and found that it reduced burnout among advocates who provided domestic violence and sexual assault services. Good soldiering is a personal identity that many victim service providers assume. At the heart of this identity is the recognition that victim service providers play an important role in a worthy cause that is disparaged by the larger patriarchal society. The dominant U.S. culture is antagonistic toward victim service work and provides inadequate funding and salary. Despite this, the public expects the same results that adequate funding would bring (Bemiller & Williams, 2011). The public also largely refuses to join service providers in addressing the consequences of patriarchy because the work appears difficult and endless (Kolb, 2014). Thus, good soldiering imparts motivation and pride to employees who continue providing the same quality of services to clients even when others would give up (Bemiller & Williams, 2011).

Boone and Castillo (2008) tested a unique method for addressing secondary traumatic stress. Domestic violence workers who practiced poetry therapy for a trial period experienced a significant decrease in secondary traumatic stress symptoms beyond that of the control group. For this project, experimental participants chronicled their thoughts and feelings about several poems with trauma as a central theme over the assigned time period. This activity facilitated the processing of emotions associated with secondary traumatic experiences. Victim assistance coordinators, therefore, may find poetry therapy beneficial in processing the complex emotions associated with trauma symptomatology.

Several factors are usually grouped together under the *healthy lifestyle* umbrella, including adequate sleep, relaxation, time to pursue hobbies, proper nutrition, exploring nature, and spirituality (Alani & Stroink, 2015; Cerney, 1995; Edmund & Bland, 2011; Figley, 2002; Fischman, 2008; Pearlman, 1999; Srdanovic, 2009; Wee & Myers, 2002; Yassen, 1995). Several scholars have discussed the need for service providers to clearly delineate their work from their home lives (Chiarelli-Helminiak, 2014; Crain & Koehn, 2012). This can be accomplished by simple acts like dressing differently at work and changing into recreational clothes upon arriving home (Hendrickson, 2013). Another strategy is to listen to music on the way home to signal the end of work and the beginning of relaxation and personal leisure time. Service providers looking to create symbolic closure for a traumatic experience can conclude the day by praying, laying "a rock in a garden," burning a scented candle, showering/bathing/going for a swim, or walking (Edmund & Bland, 2011, p. 10). Vacations and days off can also help service providers properly separate their work lives from their personal lives if the two begin to blend together (Chiarelli-Helminiak, 2014).

All exercise styles offer benefits, but the type of exercise that is most useful is the one that best fits service providers' lifestyles (Yassen, 1995). Exercise behaviors may include working out at the gym, lifting weights, walking, jogging, practicing yoga, riding a bike, taking hikes, or engaging in competitive sports (Hendrickson, 2013). Similarly, exploring nature can consist of brief excursions to the local park, kayaking or canoeing, camping, stargazing, fishing, or time at the beach (Yassen, 1995). Several scholars have noted that pets are great stress relievers and shower their owners with much needed affection (Hendrickson, 2013; Yassen, 1995). Additional coping strategies include

avoiding potentially traumatizing media content like violent television shows, graphically violent novels, and newspaper articles that report vivid crime details (Pearlman & Saakvitne, 1995). Yassen (1995, p. 120) recommended "writing, drama photography, cooking, drawing, painting, dancing, handicrafts...or playing a musical instrument" as intellectual hobbies. Pearlman and Saakvitne (1995, p. 166) generated a longer list that involved:

> creating art; enjoying music; spending time with family, friends, and children; keeping a journal; enjoying nature; traveling; taking time off; pursuing hobbies; going to the movies...simply resting and relaxing...exercising, dancing, and getting a massage.

Several strategies for managing trauma symptoms pertain exclusively to the workplace. Martin (2005), for example, described how service providers interrupt negative emotional processes by briefly excusing themselves from client meetings to use the water fountain or restroom. Likewise, filling office space with personal reminders of life outside the office anchors the service provider to an identity beyond work (Pearlman & Saakvitne, 1995). These personal displays also remind the service provider of happier times, and why they are working. Bemiller and Williams (2011) advocated for pairing new employees with mentors who can guide them through the challenges they encounter. Regardless of how many years of experience service providers have, they benefit from debriefing opportunities with coworkers immediately following secondary trauma exposure (Edmund & Bland, 2011). Finally, several scholars have highlighted the importance of drawing boundaries between the client and the service provider. This is accomplished by emphasizing the professional nature of the relationship, setting rigid

time limits on the length of individual sessions, being unavailable when away from the office, ending toxic or unproductive service relationships, and anticipating how to respond to challenges that might arise before they occur (Martin, 2005; Srdanovic, 2009).

Organizational-level interventions. While the literature has traditionally focused on how victim service providers can prevent their own burnout or secondary traumatic stress, organizational strategies may be more effective at reducing symptomatology among employees (Maslach et al., 2001). This makes intuitive sense, since organizations have the power to enact policies that affect the daily operations of all service providers rather than a single individual (Campbell, 2008; Kulkarni & Bell, 2011). Consequently, organizations can be classified as either "health promoting" or health "diminishing," depending on whether their policies protect staff from symptomatology or prevent them from prioritizing their psychological health (Stamm, 1999a, p. xxvi). Although no organizational policy can entirely mitigate the risk for symptomatology, organizations can foster environments that minimize the damage and provide a healing atmosphere (Rudolph & Stamm, 1999).

In addition to organizational policies, organizational culture consists of shared goals and values (Kulkarni & Bell, 2011). Organizational culture dictates which individual-level strategies service providers can take advantage of to combat symptomatology and shapes the nature of their secondary trauma exposure (Wasco & Campbell, 2002). As Heffernan and Viggiani (2015) recognized, organizations have a responsibility to equip staff with the skills required to detect, protect against, and heal from secondary trauma exposure. This process should begin at the point of hire by educating new service providers about the risk for experiencing burnout and secondary

traumatic stress (Munroe, 1999). The agency should also express its commitment to stand with new service providers and provide whatever help they require to recover from the effects of secondary trauma.

Organizations must be mindful of the factors that increase the risk for developing symptomatology and protect their staff as far as possible (Bonach & Heckert, 2012; Rudolph & Stamm, 1999). Agencies have a moral obligation to proactively guard against the possibility of secondary trauma by creating an environment that encourages coworkers to look after each other, permits days off and vacations to recuperate, and discourages working after hours or taking on too many clients (Bell et al., 2003; Bride & Kintzle, 2011). At all times, organizations must own the responsibility for their staff's well-being by nurturing service providers to engage in self-care (Chiarelli-Helminiak, 2014).

Until scholars can identify evidence-based practices for reducing burnout and secondary traumatic stress (and increasing compassion satisfaction), agencies may wish to use the individual-level predictors of burnout, secondary traumatic stress, and compassion satisfaction identified in the current study to screen potential VACs during the hiring process (Ludick & Figley, 2017). Based on the current study's findings, agencies should consider screening out applicants who: (1) are aware that a loved one has been victimized; (2) report high levels of childhood trauma; (3) report low levels of social support from their family or peers; (4) report low levels of purpose in life; (5) have a low level of educational attainment; and (6) report low levels of religiosity or spirituality. Factoring applicants' religiosity or spirituality into the hiring decision would appear controversial and may very well violate equal employment opportunity laws. A more

favorable interpretation of this finding is that religiosity is one of many factors associated with resiliency, and agencies should hire applicants based on their overall likelihood of displaying resiliency as a VAC.

Hiring resilient applicants, however, can only do so much for an agency. Many workplace challenges cannot be solved by individuals' resiliency (Card, 2018), nor should they have to be. Organizations also have a responsibility to create an atmosphere that promotes the psychological well-being of their employees (Kinman & Grant, 2017). There is a temptation when examining individual-level strategies for addressing burnout and secondary traumatic stress symptomatology to attribute these experiences to some defect in individual employees (Frey et al., 2017). Any such attributions are misguided, however, as organizational-level factors also play a role in managing burnout and secondary traumatic stress symptoms. Additionally, secondary traumatic stress is "often unavoidable" (Ludick & Figley, 2017, p. 113). As a result, the challenge is not to prevent secondary traumatic stress (which is impossible), but rather to teach service providers and agencies how to detect these symptoms as early as possible so that they can respond with effective self-care.

If peer support is necessary to process trauma symptomatology, supervisory support is that much more crucial (Maslach et al., 2001). Many studies have found that frequent and positive supervision is negatively related to work stress (Armstrong et al., 2015) and negative symptomatology (Bonach & Heckert, 2012; Bourke & Craun, 2014; Choi, 2011a; Dworkin et al., 2016; Rittschof & Fortunato, 2016; Slattery & Goodman, 2009; Yurur & Sarikaya, 2012), but positively related to organizational commitment (Lambert et al., 2008). Interestingly, at least one study reported that quality of

supervision had no influence on secondary traumatic stress (Choi, 2011a). Another study reported that greater organizational support actually led to an increase in burnout among SANE nurses (Townsend & Campbell, 2008).

Good supervisors offer staff help through a variety of means. To begin with, they maintain an open communication channel at all times, and are always available "just to talk" (Bemiller & Williams, 2011; Hendrickson, 2013; Merchant & Whiting, 2015; Srdanovic, 2009). Good supervisors also listen to service providers' struggles and offer feedback and insight (Bangs, 2010). This reframing process is important because supervisors provide staff with alternative interpretations of events—ones where the service provider is not a failure, but rather shares in a common experience that everyone at the agency has dealt with at one time or another. Additionally, supervisors can model self-care behaviors for their staff. In doing so, supervisors create an informal workplace culture that gives staff permission to take care of themselves. If a staff member shows signs of being overwhelmed, the agency supervisor can require them to take time off or step back from the situation (Berger & Quiros, 2016; Chiarelli-Helminiak, 2014; Merchant & Whiting, 2015). Supervisors should also avoid micromanaging, which increases employees' stress (Hendrickson, 2013).

Ultimately, supervisors are charged with creating an environment where staff can reveal their true selves without fear of judgment or ridicule (Berger & Quiros, 2016). Supervisors willing to express their own vulnerability, growth over time, fallibility, and periodic uncertainty foster staff members' confidence in their own abilities (Slattery & Goodman, 2009). As a result, staff are emboldened to admit their own struggles knowing full well that their experiences are commonplace and part of the job. By signaling that

staff matter, supervisors open the door for service providers to share their success stories and receive affirmation that they are doing a good job (Pearlman & Saakvitne, 1995). Above all else, supervisors must seek to blunt the effects of trauma symptomatology on their staff as far as possible (Berger & Quiros, 2016). Finally, the individuals who conduct supervision should not be the same individuals who evaluate staff performances, as this sends mixed signals about the role of supervisors (Bell et al., 2003).

Because burnout and secondary traumatic stress cannot be prevented, agencies have an obligation to educate victim service providers about the inevitability of trauma symptoms and their negative effects. Service providers need to know that everyone encounters symptoms and they are not something to be ignored, but rather confronted head-on. In other words, trauma symptoms are a normal "by-product" of helping victims (Craig & Sprang, 2010, p. 319). The benefit of normalizing secondary trauma exposure is that service providers come to understand they are not failures for experiencing symptoms, and can seek help freely without condemnation (Bell et al., 2003; Brady et al., 1999; Bride & Kintzle, 2011; Dutton & Rubinstein, 1995; Newell & MacNeil, 2010). Organizations that normalize trauma symptoms through awareness training and formal policies reduce the potential for staff burnout (Campbell, 2008; Siebert, 2005). One strategy for normalizing secondary traumatic stress is to allocate time each week for staff to discuss their emotions (Pearlman, 1999).

Organizations can implement many policies designed to protect staff from secondary trauma exposure. For example, organizations can limit staff to 40-hour work weeks (Meyers & Cornille, 2002), and they can structure the day so that staff have unscheduled time periods to freely mingle with coworkers (Hendrickson, 2013). Service

providers have also indicated that they appreciate flexible work hours to accommodate busy home lives and self-care routines (Craig & Koehn, 2012). Other strategies include paid vacations or days off (Bell et al., 2003; Chiarelli-Helminiak, 2014; Meyers & Cornille, 2002), requiring staff to take a paid day off once a month (Merchant & Whiting, 2015), or shortening the work day on Friday while still paying employees for a full day's worth of work (Hendrickson, 2013). Meyers and Cornille (2002) suggested giving coworkers access to a gym and time to use it each day. Organizations can also encourage coworkers to spend time together by hosting office parties or social events in the community for birthdays and holidays (Chiarelli-Helminiak, 2014).

Best practices would allow staff access to counselors if they need to talk (Bangs, 2010), with all counseling-related expenses covered by the agency's health insurance plan (Bell et al., 2003; Bonach & Heckert, 2012; Osofsky et al., 2008). VACs may benefit from access to counselors given that childhood trauma was positively associated with burnout-negative personal identity in the current study. Babin and colleagues (2012) recommend pairing senior and newly hired staff members together in a mentorship program. This may take the place of formal counseling if agencies cannot afford the insurance necessary to cover counseling. Mentors can also help new staff members properly understand their role as someone who informs victims of their options rather than someone personally responsible for removing every victim from dangerous situations (Powell-Williams et al., 2013, p. 258). Finally, Ganz (2015) discovered that victim service providers want training on how to handle people from the outside world who feel threatened by those who have dedicated their lives to addressing the consequences of gendered violence (Ganz, 2015). This training should also include tips

on how to interact with well-meaning people who become uncomfortable whenever the subject of gendered violence is raised, as well as strategies for talking about work in a non-threatening manner.

Limitations

As with any study, the current study has several limitations. First, despite numerous follow-up contacts, only 76 of the 345 VACs employed in Texas completed the measures of interest in this study. This resulted in a response rate of 22%, with 27% of Texas' 254 counties represented (N = 69). An examination of the broader victim service work literature revealed that several other studies have obtained response rates ranging from 15-27%, albeit via surveys distributed through the mail rather than online (Bride & Kintzle, 2011; Bride, Hatcher, & Humble, 2009; Choi, 2011a; Choi, 2011b; Craig & Sprang, 2010). For her dissertation, Moore (2014) mailed a letter containing a link to an online survey to sex offender treatment providers. Of the 2,800 providers contacted, 76 (2.7%) responded. Esaki and Holloway (2013) invited employees of a single child welfare agency to take an online survey pertaining to adverse childhood experiences. The agency employed 360 individuals, 94 (26%) of whom responded. Thus, some precedent exists for obtaining low response rates from victim service providers via online surveys. Low response rates increase the risk that the sample is not truly representative of the overall population surveyed. Additionally, small sample sizes increase the risk of failing to reject the null hypothesis, or Type II error (Columb & Atkinson, 2016).

One reason for the small sample size is that participants suffered survey fatigue due to the large number of measures included in the survey. Items for the current study were built into a larger project that focused on understanding victim impact statement

handling procedures across Texas counties. An additional 26 VACs (beyond the 76 included in the sample) answered approximately half of the survey before experiencing survey fatigue. As a result, they did not answer any measures used in the current study. Another reason for the small sample size is that the survey was distributed over the summer, when VACs are more likely to be on vacation. Additionally, all follow-up contacts were made through email. In the future, the measures included in this study should be distributed by themselves rather than as part of a larger project, VACs should receive an incentive like a $10 Starbucks card for completing the survey, the survey should be sent out during the fall or spring semester rather than the summer, and follow-up contacts should include both email reminders *and* a postcard mailed to agencies' physical address.

A second limitation is that small sample sizes raise questions about the generalizability of the results. For this reason, findings from the current stay may not generalize well to the entire population of Texas VACs. Texas VACs are also a unique population of victim service providers because they are housed in the county district attorney's office, and the findings reported in the current study may reflect that reality. As a result, findings may not generalize well to prosecutor-employed victim service providers from other states, other types of system-based victim advocates (e.g. crime-victim liaisons employed by law enforcement agencies), or community-based victim advocates.

A third limitation is the lack of conceptual clarity concerning burnout and secondary traumatic stress in the literature (Bercier & Maynard, 2015). Strong disagreement exists over the best way to conceptualize burnout, secondary traumatic

stress, and their associated symptoms (Johnson, 2016). The four most common terms used to describe the negative symptoms experienced by victim service providers are burnout, secondary traumatic stress, vicarious traumatization, and compassion fatigue (Choi, 2011; Vermilyea, 2014). Although some scholars consider these terms indistinguishable from each other, most scholars agree each term describes a distinct causal pathway that ultimately produces similar symptomatology, and these nuances should be preserved rather than erased through oversimplification (Anderson, 2004; Newell & MacNeil, 2010; Srdanovic, 2009; Vermilyea, 2014). Despite their unique emphases, however, each term describes the stressors victim service providers face on the job and the impact those stressors can have on service providers' internal functioning, home lives, work performances, and tenures at the agency (Cieslak et al., 2014; Craig & Sprang, 2010; Hensel, Ruiz, Finney, & Dewa, 2015).

The current study examined burnout because it has generated the largest amount of empirical research of the four constructs (Jenkins & Baird, 2002), and it is a well-accepted construct within the psychology literature (Maslach & Jackson, 1981; Maslach, Shaufeli, & Leiter, 2001). Similarly, secondary traumatic stress is practically indistinguishable from PTSD, with the exception that symptoms are typically less severe because the individual has only been secondarily exposed to the traumatic event (Baird, 1999; Bonach & Heckert, 2012; Bride & Kintzle, 2011; Figley, 1995; Fischman, 2008). Although the APA has yet to recognize vicarious traumatization or compassion fatigue as psychological disorders, it has provided a DSM diagnosis for PTSD since 1980 (American Psychiatric Association, 1980). Additionally, while the *DSM-5* never mentions secondary traumatic stress by name, it does recognize that individuals who

experience "repeated or extreme indirect exposure to aversive details of the [traumatic] event(s), usually in the course of professional duties" may be diagnosed with PTSD (APA, 2013). Thus, the *DSM-5* provides some precedent for using the lens of secondary traumatic stress to examine the symptoms service providers take on from their traumatized clients. As a result, secondary traumatic stress is better grounded in the empirical literature than either vicarious trauma or compassion fatigue.

A fourth limitation is that the data lacked a control measure for the type of victims VACs encountered most often. For example, VACs who primarily assist victims of burglary may be less likely to develop secondary traumatic stress symptoms than VACs who primarily assist child sexual assault victims or domestic violence victims. The type of crime victim most frequently encountered may also depend on whether the county is urban or rural, as certain crimes occur more often in one location or the other.

Finally, similar research conducted on law enforcement and correctional officers has demonstrated that work-family conflict is an important variable for which to account. Studies on job stress and satisfaction among correctional officers popularized the concept of work-family conflict within the criminal justice literature (Lambert, Hogan, & Allen, 2006; Lambert, Hogan, Barton, Jiang, & Baker, 2008; Lambert, Hogan, & Barton, 2002; 2004; Lambert, Hogan, Camp, & Ventura, 2006; Lambert, Hogan, Dial, Altheimer, & Barton-Bellessa, 2012; Lambert, Hogan, Paoline III, & Clarke, 2005; Lambert, Kelley, & Hogan, 2013). Since then, at least one study has examined the relationship between work-family conflict and burnout in a sample of police chiefs (Brady, 2017). Scholars contend that employees who perceive tension between their work lives and home lives (greater work-family conflict) are more likely to develop secondary traumatic stress or burnout

symptomatology (Lambert, Altheimer, & Hogan, 2010; Lambert, Hogan, & Altheimer, 2010).

Work-family conflict consists of four different dimensions: (1) time-based work-family conflict; (2) strain-based work-family conflict; (3) behavior-based work-family conflict; and (4) family-work conflict (Armstrong et al., 2015). Time-based work-family conflict refers to employees who feel like their work prevents them from spending enough time with their family. Strain-based work-family conflict occurs when the stress of employees' work affects their ability to enjoy time with family or meaningfully contribute to family activities. Behavior-based work-family conflict exists when employees feel like their work requires them to form habits that are detrimental to their relationships outside of work. Lastly, family-work conflict occurs when family responsibilities negatively impact employees' work performance. Thus, future research on burnout, secondary traumatic stress, and compassion satisfaction among VACs should include measures of work-family conflict.

Conclusion

The field of traumatology has come a long way since examining PTSD symptoms in returning Vietnam soldiers (Schlenger et al., 1992). Since Figley (1995, p. 1) first recognized "there is a cost to caring," and Stamm (1999b, p. xix) defined this cost as "soul weariness," scholars have identified many predictors of the symptoms associated with burnout and secondary trauma exposure. More recently, scholars have called for highlighting the positive aspects of social work (Anderson, 2004; Bemiller & Williams, 2011; Stamm, 2002; Tsai et al., 2015). Burnout and trauma symptomatology contribute to high employee turnover, thereby increasing workloads for the remaining staff members

and decreasing the quality of services delivered as new hires are trained. As a result, many agencies are seeking ways to reduce symptomatology among victim service providers. The first step in this process is to identify predictors of burnout and secondary traumatic stress.

Despite being legislatively mandated since 1985, only one prior study has examined victim assistance coordinators in Texas (Yun et al., 2009). That study reported basic demographic information on gender, level of education, and years of experience among Texas VACs. The current study had four primary goals: (1) identify the prevalence of burnout, secondary traumatic stress, and compassion satisfaction among Texas VACs; (2) identify factors that predict burnout among Texas VACs; (3) identify factors that predict secondary traumatic stress among Texas VACs; and (4) identify factors that predict compassion satisfaction among Texas VACs.

Results demonstrated that one in four Texas VACs reported high levels of burnout, one in five Texas VACs reported high levels of secondary traumatic stress, and one in four Texas VACs reported low levels of compassion satisfaction. Multivariate analyses revealed that either purpose in life, social support from family, or religiosity served as the strongest predictor in four out of five backwards stepwise OLS regression models. This finding is notable because prior research has identified purpose in life (Earvolino-Ramirez, 2007; Schaefer et al., 2013), social support (Earvolino-Ramirez, 2007; Lee et al., 2013; Ludick & Figley, 2017), and religiosity/spirituality (Bell, 2003; Cohen & Collens, 2013; Oginska-Bulik & Zadworna-Cieslak, 2018) as central components of resiliency.

Collectively, findings from the current study suggest that Texas VACs would benefit from strategies designed to increase personal resiliency (Shew, 2010). Unfortunately, rigorous empirical evaluations of resiliency interventions are largely nonexistent—at least within the context of reducing burnout and secondary traumatic stress and increasing compassion satisfaction. Future research should prioritize remedying this shortage of program evaluations. Specifically, these evaluations should contain large samples sizes and include a control group for comparison.

In closing, victim service work is an important but often thankless job that may be accompanied by unseen costs. These costs include experiencing frustration stemming from the workplace, as well as inadvertently taking on some of traumatized clients' symptomatology. If left unaddressed, burnout and secondary traumatic stress often lead to agency turnover. Agency turnover, in turn, negatively impacts the quality of services that victims receive. The current study contributes to the growing body of literature that addresses quality of life issues among victim service providers by identifying predictors of burnout, secondary traumatic stress, and compassion satisfaction among Texas victim assistance coordinators. Findings should encourage agencies to redouble their efforts to protect their staff from the negative effects of victim service work and to celebrate their successes.

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VITA

ALEXANDER H. UPDEGROVE

EDUCATION

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Dissertation Working Title: *The "cost of caring": Identifying correlates of burnout, secondary traumatic stress, and compassion satisfaction among Texas victim assistance coordinators*.
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2012 - 2014M.A., *Forensic Psychology*, Marymount University

2010 - 2012B.S., *Psychology*, Kutztown University

2008 - 2010A.S., *Psychology*, Lehigh Carbon Community College

ACADEMIC POSITIONS

2014-Present Graduate Research Assistant
Department of Criminal Justice and Criminology, Sam Houston State University

RESEARCH INTERESTS

- Race and crime
- Immigration and acculturation
- Victimology and victim services

PUBLICATIONS

Articles in Peer-Reviewed Journals

Forthcoming **Updegrove, A. H.**, Muftic, L. R., & Orrick, E. A. Changes in arrest patterns of buyers and sellers of commercial sex: An interrupted time-series analysis. *American Journal of Criminal Justice*.

2019 **Updegrove, A. H.,** Shadwick, J., O'Neal, E. N., & Piquero, A. R. "If they notice I'm Mexican": Narratives of perceived discrimination from individuals whocrossed the U.S.-Mexico border at ports of entry. *Deviant Behavior*, 1-25. https://doi.org/10.1080/01639625.2019.1572068 [article link]

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Cepeda, E. J. (2019, February 13). Cepeda: Latino travelers report feeling discriminated against by border agents. *Chicago Tribune*. [news article]

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2018 **Updegrove, A. H.**, Muftic, L. R., & Niebuhr, N. Criminal justice system outcomes for buyers, sellers, and facilitators of commercial sex in Houston, Texas. *Crime & Delinquency*, 1-23. https://doi.org/10.1177/0011128718787473 [article link]

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2018 **Updegrove, A. H.** Acculturation and capital punishment: The effect of Mexico versus United States cultural orientations on public support for the death penalty. *International Journal of Offender Therapy and Comparative Criminology*, 1-22. https://doi.org/10.1177/0306624X18815993 [article link]

2018 **Updegrove, A. H.**, & Muftic, L. R. The relationships between childhood polyvictimization, adult violent victimization, and trauma symptomatology among a sample of individuals arrested for prostitution. *Journal of Family Violence*, 1-11. https://doi.org/10.1007/s10896-018-0015-z [article link]

2018 Muftic, L. R., & **Updegrove, A. H.** Estimating the influence of parenting on the relationship between self-control and delinquency with a multinational sample: A gendered approach. *International Journal of Offender Therapy and Comparative Criminology, 62*(10), 3058-3076. https://doi.org/10.1177/0306624X17725732 [article link]

2018 Cooper, M. N., **Updegrove, A. H.**, & Bouffard, J. A. Predictors of criminal justice undergraduates' intentions to pursue graduate education in criminology or criminal justice. *Journal of Criminal Justice Education*. https://doi.org/10.1080/10511253.2018.1448096 [article link]

2018 **Updegrove, A. H.**, Cooper, M. N., & Greene, H. T. Room for all? An examination of criminal justice undergraduate and graduate program

completions by race, ethnicity, and gender. *Journal of Criminal Justice Education, 29*(2), 267-289. https://doi.org/10.1080/10511253.2017.1395058 [article link]

2017 **Updegrove, A. H.**, & Longmire, D. R. Systems thinking, system justification, and the death penalty: Thirty-eight years of capital punishment legislation in Texas. *Corrections: Policy, Practice and Research*. https://doi.org/10.1080/23774657.2017.1382401 [article link]

2016 **Updegrove, A. H.**, & del Carmen, R. V. An analysis of state statutes on capital juror disqualification and a proposal for an exploratory statute. *The Journal of Criminal Justice and Law, 1*(1), 1-22. [article link]

Articles in Law Reviews

2018 **Updegrove, A. H.**, Vaughn, M. S., & del Carmen, R. V. State statutes on intellectual disability in capital defendants: The current dilemma facing the Supreme Court in Moore v. Texas. *Notre Dame Journal of Law, Ethics, and Public Policy, 32*(2), 527-562.

Chapters in Edited Volumes

2017 Longmire, D. R., & **Updegrove, A. H.** Reflections on the abbitoir. In R. Bohm & G. Lee (Eds.), *Handbook on Capital Punishment*. London, England: Routledge. [book link]

Technical Reports

2018 Fleming, J, & **Updegrove, A. H.** Child maltreatment: An overview. Crime Victims' Institute, College of Criminal Justice, SHSU.

2018 Muftić, L. R., & **Updegrove, A. H.** Law enforcement breadth metric pilot project. Report prepared for the Children's Justice Act and the Children's Advocacy Centers of Texas.

2018 Muftić, L. R., & **Updegrove, A. H.** SAFE Court: Results From a 2-year Evaluation of a Problem-Solving Court for Prostituted Offenders in Harris County, TX. Human Trafficking Series, Crime Victims' Institute, College of Criminal Justice, SHSU. [article link]

2017 Muftić, L. R., & **Updegrove, A. H.** A process and outcome evaluation of Survivors Acquiring Freedom and Empowerment (SAFE) Court: Final report. Final Report prepared for the Bureau of Justice Assistance (BJA# 2014-YX-BX-0001).

Opinion Pieces

Forthcoming Cooper, M. N., & **Updegrove, A. H.** "Double consciousness" and the need for same-race mentorship. *ACJS Today*.

WORK UNDER REVIEW

Updegrove, A. H., Vaughn, M.S. *Madison v. Alabama*: Extending eighth amendment protections against cruel and unusual punishment to defendants with severe dementia. Manuscript submitted to *The Journal of the American Academy of Psychiatry and the Law*, March 2019.

Updegrove, A. H., Vaughn, M.S. *Moore v. Texas* Redux: The conflict between the U.S. Supreme Court and the Texas Court of Criminal Appeals on defining intellectual disability. Manuscript submitted to *The Journal of the American Academy of Psychiatry and the Law*, March 2019.

CURRENT PROJECTS

Orrick, E. A., **Updegrove, A. H.,** & Piquero, A. R. *Are undocumented immigrants more likely to be incarcerated for homicide? A comparison of Texas incarceration rates by immigration status*.

Updegrove, A. H., Cooper, M. N., Orrick, E. A., & Guerra, C. *Predictors of public attitudes toward immigrants' perceived criminality.*

Updegrove, A. H., & Cano, M. *Undocumented migrants' attitudes toward the death penalty.*

Updegrove, A. H., Vaughn, M. S., & del Carmen, R. V. *Capital punishment and insanity: A legal analysis of severely mentally ill persons on death row*.

Updegrove, A. H., Vaughn, M. S., & del Carmen, R. V. *Victim impact evidence in capital cases: Regulating the admissibility of photographs and videos in the* Payne *era.*

Updegrove, A. H., & Muftic, L. R. *Predicting county victim impact statement form completion rates based on victim assistance coordinator practices.*

Updegrove, A. H., & Muftic, L. R. *Stress and burnout among children's advocacy center staff*.

GRANTS AND SPONSORED RESEARCH

2018 *Research and evaluation of Houston Police Department's response to sexual assault and domestic violence survivors*. PI: Dr. Cortney Franklin; **Role: Research Assistant**. Funded by U.S Department of Justice Office on Violence Against Women (OVW). **$393,049**.

2017-2018 *Law Enforcement Breadth Metric: Capturing crimes against children referrals that meet CAC case acceptance criteria*. PI: Dr. Lisa Muftic; **Role: Research Associate.** Funded by Texas Center for the Judiciary and Children's Advocacy Centers of Texas. **$249,881**.

2017 *Smart prosecution initiative: Harris County misdemeanor prostitution court*. PI: Dr. Lisa Muftic; **Role: Research Associate**. Funded by Bureau of Justice Assistance, U.S. Department of Justice. **$75,000**.

RESEARCH EXPERIENCE

Research Internships

2013 Advanced Research Intern for the National Consortium for the Study of Terrorism and Responses to Terrorism (START) at the University of Maryland.

2013 Research Intern for the National Center for Border Security and Immigration (NCBSI) at the University of Texas at El Paso (UTEP).

2013 Research Intern for the American Association of Suicidology (AAS).

2012-2013 Weapons Coding Specialist for the Global Terrorism Database at the National Consortium for the Study of Terrorism and Responses to Terrorism (START) at the University of Maryland.

Statistical Program Proficiencies

- STATA
- SPSS
- HLM

PROFESSIONAL CONFERENCE PARTICIPATION

Paper Presentations

2018 **Updegrove, A. H.** *The "cost of caring": Predicting secondary traumatic stress in victim assistance coordinators*. Presented at the American Society of Criminology conference, Atlanta, GA.

2018 **Updegrove, A. H.**, Vaughn, M. S., & del Carmen, R. V. *Death penalty jurisprudence and mental illness/disability: Directions after* Madison v. Alabama. Presented at the American Society of Criminology conference, Atlanta, GA.

2018 **Updegrove, A. H.**, & Muftic, L. R. *The relationships between childhood polyvictimization, adult violence exposure, and trauma symptomatology among a sample of individuals arrested for prostitution*. Presented at the Academy of Criminal Justice Sciences conference, New Orleans, LA.

2017 **Updegrove, A. H.**, Vaughn, M. S., & del Carmen, R. V. *State statutes on intellectual disability for capital defendants: Moore v. Texas*. Presented at the American Society of Criminology conference, Philadelphia, PA.

2017 **Updegrove, A. H**., & Longmire, D. R. *Death's assembly line: Examining 38 years of capital punishment legislation in Texas*. Presented at the Academy of Criminal Justice Sciences conference, Kansas City, MO.

2016 **Updegrove, A. H.**, & Muftic, L. R. *Estimating the influence of culture, sex, and parenting on the relationship between self-control and delinquency*. Presented at the Academy of Criminal Justice Sciences conference, Denver, CO.

Poster Presentations

2018 **Updegrove, A. H.,** & Vaughn, M. S. *Capital punishment & insanity: A legal analysis of severely mentally ill persons on death row*. Presented at the Academic & Health Policy Conference on Correctional Health Care, Houston, TX.

2016 **Updegrove, A. H.**, & Del Carmen, R. V. *An exploratory statute on juror death-qualification*. Presented at the American Society of Criminology conference, New Orleans, LA.

HONORS, AWARDS, AND SCHOLARSHIPS

2017 Sam Houston State University: Summer Research Fellowship ($6,000)

TEACHING

Courses Taught/Prepped

CRIJ 2361 Introduction to the Criminal Justice System
CRIJ 3350 Victimology
CRIJ 3363 Violent Offenders
CRIJ 3378 Introduction to Methods of Research (Online)
CRIJ 4385 Criminal Justice & Social Diversity

Areas of Teaching Interest

- Criminology and Public Policy
- Social Inequality
- Race and Crime
- Contemporary issues in CJ
- Victimology

SERVICE

2018 Manuscript Reviewer, *Journal of Crime and Justice*.

2018 Session Chair, "Policy and Prevention of Victimization," American Society of Criminology conference, Atlanta, GA.

2018 Session Chair, "Victimology: Trends Among Childhood Victims," Academy of Criminal Justice Sciences conference, New Orleans, LA.

2018 Manuscript Reviewer, *Justice Quarterly*.

2017 Manuscript Reviewer, *Asian Journal of Criminology*.

2016 Speaker, "How to Conduct a Meta-Analysis," Sam Houston State University brown bag event.

PROFESSIONAL DEVELOPMENT

2018 Sam Houston State University: Three Minute Thesis
2017 Sam Houston State University: Three Minute Thesis
2017 Crimes Against Children Conference, Dallax, TX
2017 Texas Victim Assistance Training (TVAT) Academy, Austin, TX
2016 Sam Houston State University: Teaching Assistant Certification Series (TACS)
2016 Sam Houston State University: Academic Teaching Conference
2016 Sam Houston State University: Blackboard Certification Series

PROFESSIONAL AFFILIATIONS

The American Society of Criminology (ASC).
The Academy of Criminal Justice Sciences (ACJS).