Walden University
ScholarWorks

Walden Dissertations and Doctoral Studies

Walden Dissertations and Doctoral Studies Collection

2020

Impact of Adverse Childhood Experiences on Direct Care Workers Working with Juveniles

Brittany Anne Shaughnessy
Walden University

Follow this and additional works at: https://scholarworks.waldenu.edu/dissertations

Part of the Clinical Psychology Commons

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact ScholarWorks@waldenu.edu.

Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

Brittany A. Shaughnessy

has been found to be complete and satisfactory in all respects,

and that any and all revisions required by

the review committee have been made.

Review Committee

Dr. Brian Cesario, Committee Chairperson, Psychology Faculty

Dr. Hannah Lerman, Committee Member, Psychology Faculty

Dr. Carolyn Davis, University Reviewer, Psychology Faculty

Chief Academic Officer and Provost

Sue Subocz, Ph.D.

Walden University

2020

Abstract

Impact of Adverse Childhood Experiences on Direct Care Workers Working with Juveniles

by

Brittany A. Shaughnessy

MA, Azusa Pacific University, 2010

BA, University of Redlands, 2008

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Clinical Psychology

Walden University

February 2020

Abstract

This study investigated the impact of adverse childhood experiences (ACEs) on the development of vicarious traumatization (VT) and burnout among direct care staff working in juvenile justice residential facilities. Measures used included the ACE module of the 2012 Behavioral Risk Factor Surveillance System historical to assess for ACEs, the Trauma and Attachment Belief Scale (TABS) to measure VT, and Maslach Burnout Inventory Human Services Survey (MBI-HSS) to measure burnout. Workplace organization was also included in data collection and analysis as a covariate as past research has indicated a relationship between workplace organization and burnout and VT. A covariate of workplace organization was measured using the Workplace Organization Indices; 163 individuals completed online surveys. Data analysis included a series of independent sample t-tests to analyze group differences in scores on the MBI-HSS and TABS between those participants with ACEs and those with none. A univariate analysis of covariance (ANCOVA) was used to analyze the impact of the type of ACEs on scores for VT and burnout. Findings indicated a significant relationship between the existence of ACEs and higher scores for depersonalization and emotional exhaustion in burnout as well as VT. The ACE categories of sexual abuse and workplace organization were the only variables found to have a significant impact on depersonalization and emotional exhaustion in terms of burnout and VT. Implications indicate those with sexual abuse histories may be at higher risk of burnout and VT. Workplace organization was also a significant factor to consider in terms of the prevention of burnout and VT. Findings point to the importance of facilities to offer resources for those with past trauma and create a workplace culture which can help prevent burnout and VT.

Impact of Adverse Childhood Experiences on Direct Care Workers Working with Juveniles

by

Brittany A. Shaughnessy

MA, Azusa Pacific University, 2010

BA, University of Redlands, 2008

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Clinical Psychology

Walden University

February 2020

Table of Contents

Chapter 1: Introduction to the Study 1
Background of the Study 2
VT 2
Burnout 2
Juvenile Justice Residential Treatment 3
ACEs 3
The Need for the Study 4
Problem Statement 5
Purpose of the Study 5
Research Questions and Hypotheses 6
Theoretical Framework 7
Nature of Study 8
Definitions 8
Assumptions 10
Scope and Delimitations 11
Limitations 12
Significance of the Study 13
Implications for Theory 13
Implications for Practice 13
Implications for Positive Social Change 14

Summary 14

Chapter 2: Literature Review 16

Literary Search Strategy 16

CSDT 17

VT 20

Prevalence in the Helping Professions 20

VT Risk Factors 21

Protective Factors Against VT 23

Consequences of VT in Helping Professions 26

Burnout 29

Prevalence of Burnout in Helping Professions 30

Risk Factors for Burnout 30

Vicarious trauma as a risk factor in burnout 30

Risk factors in the workplace 31

Individual level risk factors associated with burnout 32

Protective Factors Against Burnout 33

Consequences of Burnout 34

ACEs 35

Physical Health Risks Associated with ACEs 36

Impact of ACEs on Mental Health 36

ACEs and their relationship with VT and Burnout 37

Juvenile Justice Residential Settings 38
Prevalence of Trauma in Juveniles 39
Direct Care Staff and Work with a Traumatized Population 40
Trauma-Informed Care 41
Summary and Conclusion 41
Chapter 3: Research Methodology 43
Research Design and Rationale 44
Methodology 44
Population 44
Sampling and Sampling Procedures 45
Procedures for Recruitment, Participation, and Data Collection 45
Instrumentation and Operationalization of Constructs 46
Administration of Instruments 49
Research Questions 50
Data Analysis 51
Threats to Validity 52
Ethical Procedures 52
Summary 53
Chapter 4: Results 55
Data Collection 55
Data Cleaning Procedures 55

Demographic Information of the Sample 56

Descriptive Statistics for Dependent Variables 57

Results 58

RQ1 58

RQ2 58

RQ3 59

RQ4 60

Summary 60

Chapter 5: Interpretation of Results 62

Interpretation of Findings 62

Theoretical Interpretation 63

Limitations of the Findings 64

Recommendations 65

Implications 66

Summary and Conclusion 67

Appendix A: Demographic Questionnaire 84

Appendix B: Mental Health Resources 85

List of Tables

Table 1……………………………………………..………………………….……56

Table 2…………………………………………...……………………...…………57

Chapter 1: Introduction to the Study

The present study investigated the impact of adverse childhood experiences (ACEs) on the development of vicarious traumatization (VT) and burnout in direct care staff working in juvenile justice residential facilities. The social change implications of this study involve the impact VT and burnout can have on the lives of staff and the treatment progress of the youth with whom they work . The role of past trauma in the development of VT and burnout in direct care staff working in juvenile justice facilities has not been as well-researched as other populations. In general, information regarding this population is limited. This study sought to assess the impact past trauma has on VT and burnout in this population. This study will be quantitative in nature and use established measures to assess for VT, burnout, and past trauma using the constructivist self development theory (CSDT).

This chapter includes a brief background of the research topic and variables being investigated. The purpose and problem statements relating to this study are also provided along with research questions and hypotheses regarding the impact of ACEs in terms of burnout and VT of care staff who work directly with youth in juvenile justice residential settings. ACEs can be defined as negative and traumatic experienced one experiences in childhood (Felitti et al., 1998). Important definitions and the main theoretical framework are provided. Finally, the nature and significance of the study are provided along with the overarching scope and potential limitations.

Background of the Study

This study focused on ACEs as they impact VT and burnout in direct care staff in juvenile justice residential facilities. Although there seems to have been little examination of ACEs with this population, VT, burnout, and ACEs have been a particular research interest with other populations. In addition, there has been some limited research into direct care staff in correctional settings that can provide insight into the current study.

VT

VT is one possible consequence of working with individuals who have experienced trauma. The term VT refers to the phenomenon when a professional who is working with an individual with trauma experiences begins to experience the symptoms of their traumatized individual (McCann & Pearlman, 1990). Such an experience can begin to impact the helping professional's work with clients and can extend beyond the work setting, contributing to lingering negative affective experiences and increased difficulty in relationships outside of the work environment (Cohen & Collens, 2013).

Burnout

Burnout is another possible consequence for individuals working in high stress environments. Burnout is the experience of emotional exhaustion, depersonalization, and a reduced sense of personal accomplishment which can impact professionals in various fields (Maslach, 1986). The experience of burnout has also been found to be linked to increased difficulties in relationships outside of the work environment (Lambert, Minor, Wells, & Hogan, 2015; Lizano & Mor Barak, 2015). Professionals experiencing burnout were found to be at greater risk of developing symptoms of VT than those in other

professions (Boudoukha, 2013; Cieslak et al., 2014; Kadambi & Truscott, 2003; Shoji et al., 2015). However, burnout and VT differ in that VT implies a more permanent cognitive shift for the helping professional, whereas burnout is more closely linked to the working environment (Kadambi & Truscott, 2003). Burnout has also been found to be a predictor of work longevity among direct care workers (Firmin, Steiner, Firmin, & Nonnemacher, 2013).

Juvenile Justice Residential Treatment

There is a high prevalence of trauma among youth placed in juvenile justice residential facilities. This can place staff in these settings at greater risk of experiencing VT as well as direct traumatization (Ford & Blaustein, 2013). There has been limited research into VT regarding direct care workers in correctional facilities and even less that focused on direct care workers in juvenile facilities. Burnout in this population is highly correlated with the level of perceived dangerousness in their job (Carrola, Olivarez, & Karcher, 2016; Lambert et al., 2015).

ACEs

ACEs refer to experiences involving past childhood trauma (i.e., sexual and physical abuse) and family dysfunction (Felitti et al., 1998; Ford et al., 2014). The presence of ACEs has been found to be linked to a variety of mental health and behavioral problems in adulthood such as a diminished quality of life (Salinas-Miranda, 2015), sleep disturbance, increased rated of unemployment (Liu et al., 2013), and poorer overall psychological wellbeing (Nurius, Green, Logan-Greene, & Borja, 2015). Past experiences of trauma have been correlated with the increased risk of experiencing VT

(Buchanan, Anderson, Uhlemann, & Horwitz, 2006; Williams, Helm, & Clemens, 2012) and burnout among mental health professionals working with traumatized clients (Ben-Porat & Itzhaky, 2015). The impact of past traumatic experiences on the development of VT and burnout has not been addressed for direct care workers, particularly those working with juvenile populations.

The Need for the Study

There is limited research focused specifically on the population of direct care workers in juvenile justice settings. Studies on VT have focused primarily on those in counseling roles and other professionals such as nurses within the correctional setting. This is in spite of the fact that 90% of youth in the juvenile justice system have experienced at least one traumatic event (Dierkhising et al., 2013). Such a high level of trauma among the youth in juvenile justice facilities presents a high likelihood that direct care staff working daily with those youths will be indirectly exposed to traumatic material.

In general, correctional employees are underrepresented in literature focusing on burnout, particularly those in juvenile settings. However, the relationships built between staff and youth is important for rehabilitation. This illustrates the importance of studying factors contributing to lack of longevity such as burnout in this population. High turnover rates are common within correctional settings, with burnout being one factor that has been shown to contribute to this (Firman et al., 2013).

Problem Statement

The presence of ACEs has been found to be related to a variety of physical and mental health issues and concerns. Such past traumatic experiences have also been found to be correlated with the development of VT as well as burnout among mental health professionals (Ben-Porat & Itzhaky, 2015; Buchanan et al., 2006; Williams et al., 2012). Occurrences of VT and burnout among mental health professionals can lead to a diminished level of care for those receiving treatment due to decreased work performance (Baird & Jenkins, 2003).

Although the relationship between ACEs and VT has been studied in mental health professionals in outpatient settings, it has not been investigated in terms of direct care workers working with youth in juvenile justice residential settings. Further research is needed to investigate issues such as burnout in direct care workers in these settings as there can be diminished work productivity and quality of life issues when professionals experience VT and burnout (Baird & Jenkins, 2003; Salinas-Miranda et al., 2015). Not addressing factors that can impact direct care workers in these settings can diminish the stability and level of care for youths receiving treatment.

Purpose of the Study

The relationship between ACEs and the occurrence of VT and burnout in direct care workers working with youth in juvenile justice settings has not been studied as it has with other mental health providers. The purpose of this study, therefore, was to examine the relationship between the existence of ACEs and experiences with VT and burnout with direct care staff working with the youth in juvenile justice residential settings. Data

were gathered from current employees at juvenile justice residential facilities using quantitative tools designed to measure ACEs, burnout, and VT.

Research Questions and Hypotheses

RQ1: Will ACEs have a significant effect on the development of burnout in direct care staff working in juvenile justice residential facilities?

$H_0 1$: The presence of ACEs in this population will have no significant effect on burnout.

$H_a 1$: The presence of ACEs in this population will have a significant effect on burnout.

RQ2: Do ACEs affect the onset of VT in direct care workers in juvenile justice residential facilities?

$H_0 2$: The presence of ACEs in this population will have no significant effect on level of VT.

$H_a 2$: The presence of ACEs will have a significant effect on level of VT in this population.

RQ3: Does the type of ACE reported (physical/emotional abuse, sexual abuse, and family dysfunction) have an effect of the development of VT for direct care staff in juvenile justice residential facilities?

$H_0 3$: The type of ACE will have no effect on VT in this population.

$H_a 3$: The type of ACE will have a significant effect on VT in this population.

RQ4: Does the type of ACE reported (physical abuse, sexual abuse, and family dysfunction) have an effect on the development of burnout in direct care staff working in juvenile justice residential facilities?

H_0*4:* The type of ACE will have no effect on burnout in this population.

H_a*4:* The type of ACE will have a significant effect on burnout in this population.

Theoretical Framework

This study used the CSDT. This theory conceptualizes trauma as an event or ongoing condition that impacts the individual's ability to integrate affective experiences that the individual experiences as a deadly threat or threat of physical harm. Trauma then results in psychological responses that alter frame of reference, impact the ability to manage affect and appropriately meet psychological needs, and hinder existing psychological needs as reflected through altering of cognitive schemas and memory. In the case of VT, experiences listening to the traumatic experiences of others can lead to a disruption in the helping professional's own schemas (Pearlman & Saavakvtine, 1995).

This framework has been commonly used in research as a framework for studying VT. Experiences involving the past, as indicated previously, can shift the cognitive schemas of direct care workers and sometimes result in maladaptive psychological responses to trauma. These cognitive schemas can be further disrupted by new trauma resulting from managing behaviors of the youth for whom they are caring for, as well as traumatic information from the youths' own experiences. In addition, this proposed framework defines trauma as a set of beliefs that can be measured. This will be further addressed and explained in Chapter 2.

The CSDT can also be used to better understand the construct of burnout. A strong association exists between VT and burnout among mental health professionals (Cieslak et al., 2014; Kadambi & Truscott, 2003). Burnout and VT are interrelated but do have distinct differences. For example, burnout is seen as a more temporary state only impacted in the work setting whereas VT can be seen to be more permanent and impacts the individual outside of the workplace (Kadambi & Truscott, 2003). Therefore, it may be expected that onset of VT also contributes to higher prevalence of burnout. In the present study, the two constructs will be measured separately. However, distorted schemas found in the onset of VT also influence the onset of burnout.

Nature of Study

The present study used a quantitative survey design to explore the impact that past history of ACEs has on the development of VT and burnout among direct care staff in juvenile justice residential facilities. Data was collected from direct care workers in juvenile justice facilities. The data was collected using a previously-developed questionnaire addressing the existence of ACEs, and previously-established and psychometrically-sound measures were used to measure VT and burnout in this population.

Definitions

Adverse Childhood Experiences (ACEs): Exposure to childhood abuse and family dysfunction prior to the age of 18 (Felitti et al., 1998).

Burnout: Burnout is a syndrome that is common in helping professions. It involves experiences of emotional exhaustion, depersonalization, and a reduced sense of personal accomplishment (Maslach, 1986). Emotional exhaustion can be best described as the depletion of an individual's emotional resources (Jaworska-Burzyńska, Kanaffa-Kilijańska, Przysiężna, & Szczepańska-Gieracha, 2016). Depersonalization refers to a professional's changed attitudes towards individuals receiving services; this can include increased cynicism and dehumanization of others (Jaworska-Burzyńska et al., 2016). Reduced sense of personal accomplishment involves the reduction of an individual's overall self-esteem and sense of professional achievement (Jaworska-Burzyńska et al., 2016).

Depersonalization: Depersonalization is an experience in which an affected individual begins to act unfeeling towards others in his or her life that can result in a negative and callous presentation towards others (Maslach, 1986).

Direct Care Staff: Those workers who are charged with the daily care and discipline of clients within the residential settings of interest. In order to be considered direct care staff, an individual will need to spend a majority of his or her working hours in direct contact with clients daily in the therapeutic milieu (Byrne & Sias, 2010; Ford & Blaustein, 2013; Kendrick, 2013).

Emotional Exhaustion: Emotional exhaustion refers to the helping professional feeling emotionally overextended (Maslach, 1986)

Juvenile Justice Residential Facility: For the purpose of this study, the term juvenile justice residential facility describes those residential settings out of home that

provide services for court-involved youth. This includes a variety of secure settings including open residential settings and higher security residential settings for court-involved youth (Griller & Mathur, 2015).

Personal Accomplishment: Personal accomplishment is the meaning one places on his or her work (Maslach, 1986).

Vicarious Traumatization (VT): VT is defined as the experiencing of symptoms of traumatization related to indirect exposure to another individual's trauma (McCann & Pearlman, 1990).

Assumptions

There were several assumptions made during the process of completing the present study. One assumption was that direct care staff in juvenile justice facilities were exposed to the indirect traumatic experiences of the client. It was assumed that youth with whom these staff interact on a daily basis had trauma as a part of their history. A majority of youth in the juvenile justice system have experienced at least one traumatic event in their lifetimes (Ford & Blaustein, 2013). However, it was beyond the scope of this particular study to confirm that youths in juvenile justice facilities used in the sample had trauma in their pasts. Therefore, due to the inability to confirm the trauma history of all youth in the juvenile justice residential facilities in the study, it was assumed for the purpose of the study that a majority of the youth direct care workers worked with had experiences of trauma.

Other assumptions relate to the measures and reliability of the self-reporting of participants. First, it was assumed that the measures used accurately measured the

constructs of interest. For this reason, previously-developed and psychometrically-sound measurements were used to measure burnout, VT, and ACEs. It was also assumed that participants answered questions in a truthful and complete manner. Individuals may not be fully aware of the impact of traumatic symptoms such as intrusive trauma-related thoughts (Takarangi, Strange, & Lindsay, 2014). This particular assumption and resulting potential limitations are discussed further in the limitations section of this chapter along with strategies used to minimize potential limitations caused by the nature of self-reporting.

Scope and Delimitations

Although there may be other factors contributing to the development of VT and burnout, the focus of this study was on ACEs. This is due to the existence of past trauma having been shown to be a contributor to both burnout and VT in other helping professions. Therefore, it is of interest of the present study to assess whether a similar effect of past ACEs with VT and burnout exists in the population of direct care workers in juvenile justice facilities.

The study population only included professionals who work in a direct care capacity in juvenile justice facilities. Data was not collected from professionals such as therapists, psychologists, case managers, supervisors, managerial staff, and administrators in the program. Generalizability can be considered a potential issue in terms of conclusions that can be drawn from the results of this study. Although care was taken to collect data from a variety of facilities in different regions of the United States, it is not possible to obtain data from all facilities in every region. Therefore, results cannot

be generalized to all direct care workers in juvenile justice residential settings. The results will only pertain to populations with similar demographic and geographic information. Although generalizability cannot be assumed for the population in its entirety, results found with the present sample can be used to inform and guide further research in this area with different geographic and demographic samples.

Limitations

Limitations exist in the present study. One potential limitation is the self-report format of data collection. Self-reporting relies on the participant to provide a complete and truthful account of current symptoms and past trauma. However, individuals may not be fully aware of symptoms such as trauma-related thoughts. In addition, self-report surveys pertaining to more sensitive topics such as trauma can lead to triggering of negative emotions for those who have had trauma in their past (Langhinrichsen-Rohling, Arata, O'Brien, Bowers, & Klibert, 2006). Care was taken to reduce the potential harm caused to participants if negative emotions were triggered by research questions and increase the confidence of participants that data collected was anonymous and private. This was accomplished through asking participants to complete the assessments in an online format, allowing for complete anonymity. In addition, sources to locate mental health resources in the participants’ communities were provided with the survey if participants experienced negative emotions triggered by questions on the survey.

Potential researcher biases were also present as limitations in the present research. The past experiences of the researcher working within juvenile justice settings and past regular interactions with individuals within the population of interest could have

presented an opportunity for bias in the interpretation of data. The research design and use of predesigned and validated measures used to collect data allowed for a more objective collection of data. In addition, the quantitative data analysis chosen for this particular study also reduced potential biased interpretation of results.

Significance of the Study

There are several ways this study can be of significance to the field in terms of risk factors impacting the population and risk reduction for direct care staff in juvenile justice facilities. In addition, this study has potential to be significant in terms of rehabilitation of youth receiving treatment and informing practices to ensure more adequate staff performance for the treatment of youth in these residential care settings.

Implications for Theory

Considering the increased risk of burnout and VT already involved with direct care staff working with youth in residential settings, identifying factors presenting even greater risks is important. The present study can increase knowledge of the possible role of ACEs in increasing this risk further among direct care workers in juvenile justice residential facilities. Understanding the risks involved in the development of VT and burnout can inform organizations regarding risk factors that may contribute to poorer mental health of staff.

Implications for Practice

Considering the impact VT and burnout can have on work performance overall, the present study may help gain further insight to help organizations minimize risks for direct care workers and promote a higher level of care for youth in these settings.

Additional knowledge of the risk factors of VT and burnout can further inform workplace policies and programs available for workers to further minimize risk. This may lead to reduced incidents of burnout and VT with direct care workers in these settings.

Implications for Positive Social Change

This study will promote positive social change that could improve the quality of life for those working with juvenile populations and likewise improve the rehabilitation and treatment of juvenile offenders. The relationship between direct care staff and the youth is very important for providing effective care. VT and burnout can impact the way in which individuals interact with others and the world around them, and thus can impact these very important therapeutic relationships among youth.

Summary

Through the theoretical lens of the CSDT, the current study assessed the impact ACEs have on VT and burnout among direct care staff working in juvenile facilities. The significance of this study can be seen in how organizations can use information to reduce risks for staff and thus prepare them to provide more adequate treatment and care for the youth in these facilities.

This chapter provided a brief background of the research topic and variables of interest. This chapter also provided purpose and problem statements and also research questions and hypotheses regarding the impact of ACEs on burnout and VT among direct care staff working with youth in juvenile justice residential settings. Important definitions and the main theoretical framework related to the present study were also described. The

nature and significance of the study were also explained along with the overarching scope and potential limitations.

In Chapter 2, more detail is provided regarding the constructs of ACEs, VT, and burnout. In addition, a more detailed explanation of the CSDT theoretical framework will be given as it relates to the present study. Available research on juvenile justice and direct care work in the corrections field will be reviewed to provide further insight into the significance and purpose of the present study.

Chapter 2: Literature Review

As indicated in Chapter 1, the occurrence of VT and burnout not only impacts professionals working with traumatized individuals but also the treatment of the traumatized individuals receiving care. The purpose of this study was to investigate the relationship between number of ACEs, symptoms of VT, and burnout among direct care staff working with youth in juvenile justice residential settings. Literature relevant to VT, burnout, ACEs, and the environment of juvenile justice residential settings was reviewed. Information regarding the CSDT and how this theory applies to experiences of VT and burnout is described in this chapter. Also discussed is literature related to the risk factors, protective factors, and consequences of VT and burnout. The literature related to the impact of ACEs was also addressed. Finally, relevant literature regarding the nature of trauma and exposure to VT in juvenile justice residential settings is reviewed.

Literary Search Strategy

Databases used for the literature review were ProQuest Criminal Justice, Academic Search Complete, PsycINFO, Business Source Complete, Science Direct, and PsycARTICLES. Key search terms were *sanctuary model*, *vicarious traumatization*, *adverse childhood experiences*, *staff and juvenile facility*, *staff and residential*, *burnout*, *constructivist self-development theory*, *direct care staff and trauma*, *burnout and vicarious trauma*, *correctional staff*, *juvenile justice*, *vicarious trauma*, and *youth justice or juvenile justice and staff or workers*. The literature search was limited primarily to sources published after 2009. However, seminal earlier works have also been discussed in

order to explain the theoretical framework and include landmark studies related to concepts such as ACES.

CSDT

The CSDT is a theoretical framework that provides a way to understand the psychological, interpersonal, and transpersonal impact of trauma on both survivors of trauma as well as professionals working with these traumatized individuals. This theory conceptualizes trauma as an experience related to an event or persistent conditions which creates a situation where the individual experiences difficulties integrating affective experience or experiences a perceived threat to his or her life or physical threat (Pearlman & Saakvitne, 1995). Adverse symptoms resulting from trauma are in fact the individual's way of coping with the trauma (Pearlman & Saakvitne, 1995).

Pearlman and Saakvitne (1995) said that individuals construct their own reality. This means that the meaning of the trauma is unique to each particular survivor's experiences. Individual differences in terms of the ways one adapts to a trauma are also based on an individual's personal history, personality, and the adaptive meaning that he or she placed on the events experienced. Another assumption is that the individual's early development influences how he or she experiences trauma and interacts with others. Furthermore, an individual's way of interacting with others and personality continue to change across their lifespan. This means that the individual's experience of the meaning of trauma can also change. Lastly, a key assumption of this theory is the adaptive nature of the individual's reaction to trauma. An individual's reaction is his or her way of

managing thoughts and feelings which threaten the self's safety and integrity (Pearlman & Saakvitne, 1995).

Within the framework of this theory, trauma impacts the frame of reference, ego resources, psychological needs, cognitive schemas, and self-capacities of the individual. The frame of reference includes the individual's own worldview, identity, and spirituality. Self-capacities are abilities which assist the individual in being able to manage strong affect, integrate affective experiences, maintain a positive sense of self, and maintain a connection with others. Ego resources refer to the inner workings of the individual which allow them to navigate interpersonal relationships in order to satisfy psychological needs. Psychological needs are impacted as the individual is behaviorally motivated to satisfy these needs. Cognitive schemas are those beliefs and expectations an individual has developed about his or herself and the world around them. According to the CDST, these inner workings are disrupted as the traumatic experience forces the individual to reinterpret this traumatic experience (Pearlman & Saakvitne, 1995). This reinterpretation serves to fit into his or her previously set inner world for which the individual views the self and others, and also how the individual continues to satisfy psychological needs (Pearlman & Saakvitne, 1995).

The CDST conceptualizes VT as the phenomenon where a helping professional's inner experience is negatively transformed in a way similar to that of the individual he or she is working with. Much like with an individual's reaction to direct trauma, a professional's VT is unique to each helping professional. This transformation occurs over the course of work with traumatized individuals. As with the traumatized individual, VT

represents the helping professional's own attempts to fit the traumatic material from the client into their own preestablished schemas, and also represents self-preservation (Howlett & Collins, 2014; Pearlman & Saakvitne, 1995; Trippany, Kress, & Wilcoxon, 2004). Due to many years of exposure to VT, these schemas may become less disrupted over time (Howlett & Collins, 2014). These negative impacts of VT, however, can affect the helping professional beyond the therapy room and influence his or her own personal life (Pearlman & Saakvitne, 1995).

Williams, Helm, and Clemens (2012) found that history of childhood trauma and personal wellness symptoms were consistent with CSDT. However, the theory's views involving supervisory alliance was not a fit with the behavior of an actual population of mental health professionals. The model accounted for 46% variance in VT among mental health professionals. Although the theory does not fit all constructs associated with VT, it does fit constructs closely related to the present study such as history of childhood trauma. Intrusive memories were the most highly endorsed symptom and impacted areas in the individual's life such as sexual functioning (Branson, Weigand, & Keller, 2014), This supports the CSDT model in terms of symptomology of intrusive memories in those impacted by the experience of VT.

CSDT is commonly used in studies focusing on VT. However, this theoretical framework can also be used to conceptualize burnout. The CSDT recognizes a relationship between burnout and VT (Pearlman & Saakvitne, 1995). These two concepts have been found to coexist among many professionals who deal with the trauma of clients (Cieslak et al., 2014; Kadambi & Truscott, 2003; Pearlman & Saakvitne, 1995).

This supports the CSDT's application to not only VT but also the concept of burnout. These two concepts will be discussed in further detail in subsequent sections.

VT

As mentioned in Chapter 1, experiences involving VT are a potential consequence of working with individuals who have experienced trauma (Baird & Jenkins, 2003; Buchanan et al., 2006; Michalopoulos & Aparicio, 2012; Williams et al., 2012). VVT refers to experiences of professionals working with traumatized individuals in which they also begin to experience the symptoms of trauma (McCann & Pearlman, 1990). The prevalence of this phenomenon varies across settings and professions (Molnar et al., 2017). Various risk factors and protective factors play a role in the development of this experience. In addition, there are various consequences and ways in which VT can impact individuals within the workplace and in his or her personal life.

Prevalence in the Helping Professions

There are challenges in terms of finding prevalence rates for helping professionals due to differing conceptualizations of VT, methodology, and the varying difference in prevalence rates that are dependent on the various specific work settings (Molnar, Sprang, Killian, Gottfried, Emery, & Bride, 2017). Studies show that between 15.2% of social workers (Bride, 2007) and 19.2% of mental health professionals working with military personnel experience symptoms of VT (Cieslak, Anderson, Bock, Moore, Peterson, & Benight, 2013). Likewise, approximately one of five of mental health practitioners specializing in trauma therapy demonstrate signs of vicarious trauma (Ivicic & Motta, 2016).

As described above, the majority of studies have focused on vicarious trauma in mental health professionals who are providing therapeutic services. This limitation is evidenced by the absence of studies seeking to identify the prevalence of vicarious trauma in direct care staff in juvenile justice settings (Shoji et al., 2015). Yet, 39% of educators in care staff in juvenile justice field were also found to have VT (Smith Hatcher, Bride, Oh, Moultrie King, & Franklin Catrett, 2011). Not only is VT's prevalence substantiated, but potential issues with other disorders as well have been found. For instance, Smith Hatcher et al. (2011) found that 81% of juvenile justice educators in the sample met at least one criteria for posttraumatic stress disorder (PTSD). In this particular sample, the most common symptom was intrusive thoughts which impacted 61% of the sample (Smith Hatcher et al., 2011).

VT Risk Factors

There are several factors that have been found to increase the risk of the development of vicarious trauma. In a sample of correctional nurses a factor found to be linked to vicarious trauma is the presence of workplace violence (acts of violence perpetrated by coworkers or clients) (Munger, Savage, & Panosky, 2015). Another significant workplace factor is organizational climate and structure (Anne Dombo & Whiting Blome, 2016; Pross & Schweitzer, 2010). Organizational climate includes factors such as leadership, communication, agency mission, goals of the agency, policies, and norms which impact the environment and sense of well-being of an individual (Anne Dombo & Whiting Blome, 2016). Pross and Schweitzer (2010) found that persons that have more perceived dysfunction and less control within their work environment reported

symptoms commonly associated with vicarious trauma. A perceived negative workplace culture can be cultivated among administration and among staff leading to an environment of limited support which increases risk of vicarious traumatization in staff (Anne Dombo, & Whiting Blome, 2016). A large workload was also found to foster an environment likely to contribute to vicarious trauma in social workers working with families in crisis (Dagan, Itzhaky, & Ben-Porat, 2015).

There are some contradictory findings regarding the relationship between workplace environment and reported symptoms of VT. Williams, Helm, and Clemens (2012) studied the relationship between potential risk factors such as organizational climate in VT in mental health counselors in community mental health settings and found no significant relationship between organizational climate and VT. More research may need to be done in order to clearly determine a relationship between workplace environment and the development of VT.

Măirean and Turliuc (2013) found that, in a sample of medical staff, personality factors can play a role in VT. The researchers found that higher levels of extraversion and conscientiousness were found to be correlated with fewer trauma beliefs (Măirean & Turliuc, 2013). Trauma beliefs refer to those negative beliefs related to safety, trust, control, and intimacy which arise when an individual is experiencing VT (Măirean & Turliuc, 2013). Conversely, higher levels of neuroticism were found to be correlated with a greater number of trauma beliefs (Măirean & Turliuc, 2013). Lastly, neuroticism was also found to be the personality factor with the strongest positive

correlation to VT (Măirean & Turliuc, 2013). These findings indicate that an individual's own personality can increase risk of development of VT.

Another potential factor increasing risk of VT is the professional's own history of trauma. In mental health professionals in clinical roles, personal history of trauma has been correlated with symptoms related to VT (Ivicic & Motta, 2016; Ray, Wong, White, & Heaslip, 2013; Williams et al., 2012). On the other hand, there have been mixed findings. For instance, Michalopoulos and Aparicio (2012) found contradictory results of no such relationship between personal history and VT in a sample of social workers. Frey et al. (2016) even found a history of trauma history to be a protective factor. However, Michalopoulos and Aparicio (2012) also recognized that a majority of those in the sample who reported personal history of trauma also received treatment for past trauma. This possibly can explain this contradictory finding in this particular study.

Protective Factors Against VT

Although there are several factors which can increase someone's risk of developing VT, there are also factors which can serve as protection against this phenomenon. Some of these protective factors have been found to be present at a group level and pertain to more organizational influences. In a sample of sexual violence advocates, organizational support was found to be a potential group level protective factor (Frey et al., 2016). In addition, the continued exposure to trauma stories was also found to be a protective factor in therapists who had experience working with trauma (Brockhouse, Msetfi, Cohen, & Joseph,2011). However, an individual's own personality traits and experiences can also serve as protective factors. Factors found to be protective

against development of VT include engagement in personal wellness activities which was found in therapists working in community mental health settings (Williams, Helm, & Clemens, 2012) and also personal history of trauma in therapists working with traumatized individuals (Brockhouse et al., 2011).

Group-level protective factors. Certain workplace and lifestyle factors can assist in preventing VT from developing. For example, mental health professionals with more years of experience indicated that they possess fewer symptoms of VT than those newer in the profession (Finklestein, Stein, Greene, Bronstein, & Solomon, 2015; Knight, 2010; Măirean & Turliuc, 2013; Michalopoulos & Aparicio, 2012). Brockhouse and associates (2011) found that higher cumulative vicarious exposure to trauma was correlated with a therapist's level of growth in those who had experience working with trauma. This finding coincides with Constructivist Self Development Theory. The CSDT proposes that the traumatic stories of clients, over time, reinforce the therapist's changing schema (Brockhouse et al, 2011).

Another protective factor to consider is perceived organizational support. This type of support has been shown to promote growth in mental health professionals (Finklestein et al., 2015; Frey, Beesley, Abbott, & Kendrick, 2017) This preventive growth assists in better management of stressful situations such as vicarious exposure to trauma (Frey et al., 2016). Support can also be gained through obtaining adequate supervision and can be an important focus for organizations to prevent VT in clinicians (Harrison & Westwood, 2009).

The type of position held and training related to trauma experiences may also impact a worker's susceptibility to the development of VT. Maguire and Byrne (2017) investigated the experience of lawyers providing services to those who had committed or were the victim of a traumatic event and mental health professionals working with clients who have experienced trauma. It was found that the lawyers experienced more severe symptoms related to the experience of VT than the mental health professionals who participated in the study. Maguire and Byrne (2017) suggest this finding may be linked to the lawyers' lack of training related to trauma and also the limited access they may have to peer support from others who may be informed about trauma.

In addition, an individual's organizational commitment, more specifically affective commitment, has been shown to be associated with lover levels of VT in emergency service workers (Setti, Lourel, & Argentero, 2016). Affective commitment can be described as an individual's emotional identification with a particular organization (Setti, Lourel, & Argentero, 2016). Having a high empathetic connection with clients as well can serve as a protective factor against VT (Harrison & Westwood, 2009). An emotional connection and belonging in an organization have been shown to increase an individual's sense of stability and ability to cope with workplace stressors (Setti, Lourel, & Argentero, 2016).

Individual-level protective factors. Similar to workplace factors, personality attributes and personal life qualities can also serve as protective factors in the development of VT. Having a healthy work-life balance has been shown to reduce likelihood of the development of VT (Ray, Wong, White, & Heaslip, 2013). Mental

health professionals who also increase personal wellness activities can prevent negative effects of vicarious exposure to trauma (Williams, Helm, & Clemens, 2012). In a similar fashion, quality peer relationships can contribute to resilience in the face of vicarious exposure to trauma (Frey et al., 2016).

Self-efficacy, or an individual's confidence in his or her own abilities (Finklestein et al., 2015), is another potential protective factor against VT in mental health professionals. Finklestein et al. (2015) found that self-efficacy had a negative relationship to the experience of VT in mental health professionals working in active military war zones. A continued focus on development and support promoting a sense of professional confidence can positively impact an individual's reaction to traumatic material (Finklestein et al., 2015).

Frey et al. (2016) also suggested that a personal history of trauma can also promote resilience when exposed to vicarious trauma. This resilience is based on how these mental health professionals demonstrate flexible schemas to better accommodate a client's trauma story (Brockhouse et al., 2011). Mental health professionals with a history of trauma also report higher levels of empathy and may also be better able to cope with traumatic material of their clients (Brockhouse et al., 2011). This is a conflicting finding as other studies have found personal trauma history to be a risk factor for the experience of VT.

Consequences of VT in Helping Professions

VT can have profound negative consequences for the individual experiencing this. The negative impacts of VT in mental health professionals can fall into the categories of

psychological distress, cognitive shifts, and relational disturbances (Bercier & Maynard, 2015). Each of these categories can have a unique impact on the professional in regards to personal and professional life.

Psychological distress. Psychological distress can include distressing emotions, numbing, and impairment in day to day functioning (Bercier & Maynard, 2015). Exposure to vicarious trauma can result in increased suspiciousness, anxiety, and an increased sense of vulnerability (Culver, McKinney, & Paradise, 2011). Other signs of psychological distress in those experiencing VT include avoidant behaviors, hypervigilance, and intrusive thoughts regarding the vicarious trauma (Moulden & Firestone, 2007).

The psychological distress of vicarious trauma can mimic the symptoms of PTSD in the individual. Lerias and Byrne (2003), found through conducting a meta-analysis of literature pertaining to the predictors as well as consequences of VT that individuals experiencing VT can experience re-enactment of the trauma. It was found that individuals vicariously exposed to trauma can experience intrusive memories and imagery. Lerias and Byrne (2003) also found that individuals who have vicariously been exposed to trauma also experience increased arousal expressed through increased anger, irritability, and anxiety.

Cognitive shifts. Cognitive shifts in professionals exposed to vicarious or actual trauma in the workplace can lead the professional to feel trapped, on edge, overwhelmed (Munger, Savage, & Panosky, 2015), helpless, and incompetent (McElvaney & Tatlow-Golden, 2016). In those working with sexual offenders, increased suspicion of others and

concern for personal safety was found (Hatcher & Noakes, 2010). Jankoski (2010) conducted a qualitative study with child welfare workers that exemplified some of these cognitive shifts, particularly regarding safety. Some of the participants expressed an increased concern regarding his or her own children's safety when not in their presence. In addition, they expressed a decreased sense of support as there was an experienced belief that others outside of his or her workplace could be understanding of his or her own cognitive experience (Jankoski, 2010).

Relational disturbances. Professionals experiencing symptoms of VT can also suffer in regard to work performance via relational disturbances. Professionals with symptoms of VT are at a higher risk of making poor professional decisions (Bercier & Maynard, 2015). Professionals may begin to use defense mechanisms such as detachment and distancing with traumatized clients (Bercier & Maynard, 2015). This can negatively impact the professional's therapeutic work with the client (Bercier & Maynard, 2015). Relational disturbances which can result from VT can also impact relationships in an individual's personal life. The experience of VT also can diminish a professional's sexual drive (Branson, Weigand, & Keller, 2014).

Growth from exposure to VT. It should be noted that there is some evidence for growth related to exposure to VT. Along with the negative impacts of exposure to VT, some individuals report an increase open mindedness, increased flexibility, and increased tolerance as a result of exposure to client's traumatic material (Hyatt-Burkhart, 2014). These workers also shared a deeper appreciation for relationships and an increased tolerance to daily frustrations (Hyatt-Burkhart, 2014). Although there may be negative

impacts of exposure to vicarious trauma, the above findings indicate that, for some, exposure to vicarious trauma may lead to personal growth.

Burnout

As previously stated, burnout is common in helping professions and includes the experiences of emotional exhaustion, depersonalization, and a reduced sense of personal accomplishment (Maslach, 1986). Emotional exhaustion can be best described as the depletion of an individual's emotional resources (Jaworska-Burzyńska, Kanaffa-Kilijańska, Przysiężna, & Szczepańska-Gieracha, 2016). Depersonalization refers to a professional's changed attitude towards individuals receiving services; this can include increased cynicism and dehumanization of others (Jaworska-Burzyńska et al., 2016). The reduced sense of personal accomplishment involves the reduction of an individual's overall self-esteem and sense of professional achievement (Jaworska-Burzyńska et al., 2016). Burnout has also been linked with increased mental health concerns such as depression in some populations (Bianchi & Schonfeld, 2016).

Burnout is seen to have crossover with VT within CSDT theory (Pearlman & Saakvitne, 1995). There are risk factors which can contribute to burnout within the work environment (Lambert et al., 2015) and also within personal traits such as gender which cause an individual to become more susceptible to burnout (Carrola et al., 2016). The consequences of burnout can impact the individual's work performance and treatment provided, (Firmin, Steiner, Firmin, & Nonnemacher, 2013; Lambert, Hogan, Griffin, & Kelley, 2015; Munger, Savage, & Panosky, 2015) demonstrating the importance of reviewing the phenomenon in various populations.

Prevalence of Burnout in Helping Professions

There is a high risk for burnout in those working within the helping professions. In mental health workers, as many as 67% of the population was found to experience burnout (Shoji, Lesnierowska, Smoktunowicz, Bock, Luszczynska, Benight, & Cieslak, 2015). In the medical profession, it is estimated that more than 50% of physicians in the United States experience burnout (Shanafelt, Dyrbye, & West, 2017). In addition, in a sample of nurses working in intensive care units and palliative care units 27% reported burnout with those working in intensive care units experiencing higher levels of the phenomenon (Martins Pereira, Teixeira, Carvalho, & Hernández-Marrero, 2016). In relation to the present study, counselors working with offender populations experienced higher levels of burnout than those working with non-offender populations (Carrola, Olivarez, & Karcher, 2016). The above findings of high prevalence of burnout in these varying populations demonstrate the true concern for the development of this phenomenon in individuals in the helping professions.

Risk Factors for Burnout

Vicarious trauma as a risk factor in burnout**.** Burnout and VT have been found to be highly correlated in mental health professionals (Boudoukha et al., 2013 ; Cieslak et al., 2014; Knight, 2010; Munger et al., 2015; Shoji et al., 2015). Human service professionals experiencing burnout were found to be at greater risk of developing symptoms of VT than those in other professions (Shoji et al, 2015). This correlation was also found to be true in correctional staff in adult settings (Boudoukha et al., 2013). This is supported within the CSDT model which recognizes the overlap between burnout and

VT in professionals. Cieslak et al. (2014) conducted a meta-analysis of recent studies further investigating burnout and VT in workers exposed to indirect trauma. This link between VT and burnout can also be due to the similar risk factors present in both experiences. As a result, the consequences experienced when individuals develop burnout and VT can also appear similar.

Risk factors in the workplace. Most risk factors related to burnout are found within the workplace environment than in individual personal factors (Lambert, Hogan, Griffin, & Kelley, 2015) Nurses working in high risk environments, such as correctional and critical care settings, were found to be at increased risk of developing burnout (Munger et al., 2015; Rushton, Batcheller, Schroeder, & Donohue, 2015). Risk for burnout was found to be increased by the presence of violence in the workplace with nurses working in a correctional setting (Munger et al., 2015). High risk environments for correctional officers include maximum security settings which house those with more serious charges (Carrola, Olivarez, & Karcher, 2016). Correctional officers, who work in maximum security settings, were found to experience greater levels of burnout than correctional officers working in less secure environments (Carrola et al., 2016). These findings support a link between higher safety risks in the work environment being associated with higher levels of burnout.

In addition, workplace dynamics have been found to play a role in the development of burnout. Nurses in hospital settings who experienced poor communication and support with coworkers reported moderate to high levels of burnout (Galetta, Portoghese, Ciuffi, Sancassiani, Aloja, & Campagna, 2016). In addition, limited

feelings of empowerment were as also linked with burnout in nurses within the hospital setting (Galetta et al., 2016).

Luther, Gearhart, Fukui, Morse, Rollins & Salyers (2017) investigated the phenomenon of burnout and its relationship to overtime worked. In a population of clinicians working in a community mental health clinic. Participants who worked more overtime were found to experience greater burnout than those who did not. Furthermore, those that worked overtime reported the importance of balancing work to reduce burnout but had less confidence than those not working overtime in their own ability to accomplish this balance.

Lastly, other risk factors possibly contributing to burnout have been found to include dissatisfaction with administrative staff (Firmin et al., 2013) and emotional dissonance (Andela, Truchot, & Borteyrou, 2015). Staff members undergoing emotional dissonance in the workplace can experience discrepancy in the emotions they feel and the emotions they are expected to display (Andela et al., 2015). In other words, emotional dissonance can lead to burnout when an individual is expected to display emotions in the workplace which differ from what their actual emotional experience is. Overall, job demands were found to be predictors of burnout (Lizano & Mor Barak, 2015). These burnout symptoms included emotional exhaustion in child welfare workers (Lizano & Mor Barak, 2015). An individual's job expectations and satisfaction with workplace functioning can impact the development of burnout.

Individual level risk factors associated with burnout. Although organizational factors account for a majority of the risk factors for the development of burnout in

professionals, gender is another possible factor that might play a role in burnout. For example, female correctional officers working in minimum security and inpatient settings were found to have higher levels of burnout than males working in these same settings; this suggests gender as a potential risk factor in burnout (Carrola et al., 2016).

Personal factors pertaining to the individual's personal life also have been shown to impact the development of burnout in professionals. A lack of work-life balance has been shown to be another risk factor contributing to burnout (Rupert, Miller, & Dorociak, 2015). Similarly, this is possible for personal factors such as work-family conflict (Lizano & Mor Barak, 2015). A personal history of trauma also increase and an individual's risk of burnout (Ben-Porat & Itzhaky, 2015).

Protective Factors Against Burnout

Limited research findings are available about specific ways in which burnout can be prevented in correctional settings, thus resulting in a gap in the literature (Lambert et al., 2015). However, in the face of a very challenging clientele, therapy focused on management of traumatic events and a positive self-image were found to be of assistance in preventing burnout (Ben-Porat & Itzhaky, 2015). An individual's perception of control in the work environment was also found to be a protective factor (Ben-Porat & Itzhaky, 2015). The more a worker feels they can make an impact on the work environment and decisions made in the workplace, the less their risk of burnout was found to be (Ben-Porat & Itzhaky, 2015).

Overall self-care can be a key protective factor in preventing burnout in professionals (Rupert, Miller, & Dorociak, 2015). Professionals who exhibited physical

and spiritual well-being also were found to report less burnout than their counterparts (Puig, Baggs, Mixon, Park, Kim, & Lee, 2012; Rushton et al., 2015). Aspects such as social support were found to play a role in decreased burnout (Firmin et al., 2013; Rushton et al., 2015). A professional's sense of hope and overall resilience also have been shown to serve as protective factors in the face of potential workplace factors than can increase risk of burnout (Rushton et al., 2015). In addition, an individual's physical health can be a protective factor against the experience of burnout (Puig et al., 2012). Exercise and nutrition were found to be potentially strong protective factors against burnout (Puig et al., 2012).

Consequences of Burnout

Burnout can lead to negative consequences for the helping professional, particularly in the workplace. Correctional nurses experiencing burnout experienced feelings of exhaustion, disconnectedness, insensitivity to the work environment, unhappiness, and feelings of being overwhelmed (Munger, Savage, & Panosky, 2015). In public school teachers, a relationship was found between depressive symptoms such as dysfunctional attitudes, ruminative responses, and pessimistic attributions and burnout (Bianchi & Schonfeld, 2016).

Burnout has also been shown to impact an individual's functioning at a neurological level. Sokka et al. (2016) investigated a sample from varying educational and workplace backgrounds and measured event related brain potential (ERPs) related to focus related activities. In the group of individuals who identified as having burnout, working memory was decreased and deficits were evident in the participants ability to

process new information. Sokka et al. (2016) concluded that this is indicative of cognitive deficits needed for tasks requiring monitoring and updating information.

In addition to impacting an individual's overall emotional well-being, burnout can also impact an individual's functioning within the workplace. Those experiencing burnout in settings such as community mental health clinics have been found to self-report a poorer perceived quality of care for those they serve (Luther et al., 2017). Individuals experiencing burnout also have less longevity within the agencies they work in (Firmin, Steiner, Firmin, & Nonnemacher, 2013). Burnout is linked to significant performance issues within correctional settings with correctional officers experiencing lower standards, increase in workplace errors, decrease in work quality, poorer decision-making abilities, and less commitment to the agency when also experiencing symptoms of burnout (Lambert, Hogan, Griffin, & Kelley, 2015). As seen, burnout can have a significant negative impact in how the worker performs and the quality of care provided to clients.

ACEs

ACEs are those childhood experiences involving physical, sexual, and emotional abuse as well as family dysfunction (Felitti et al., 1998). These experiences can contribute to various health risks within adulthood Felitti et al, 1998; Liu, Croft, Chapman, Perry, Greenlund, Zhao, & Edwards, 2013; Nurius, Green, Logan-Greene, & Borja, 2015; Salinas-Miranda et al, 2015). In addition, these experiences have been found to have a relationship to the development of VT and burnout (Ben-Porat, & Itzhaky, 2015; Ivicic & Motta, 2016).

Physical Health Risks Associated with ACEs

The existence of ACEs in an individual's life can have negative consequences on the individual's physical and mental well-being (Balistreri, & Alvira-Hammond, 2016; Felitti et al, 1998; Liu, Croft, Chapman, Perry, Greenlund, Zhao, & Edwards, 2013; Nurius, Green, Logan-Greene, & Borja, 2015; Salinas-Miranda et al, 2015). Felitti et al (1998) was the first study to investigate the link between ACEs and the impact these experiences can have on health in adulthood. The study demonstrated that those experiencing multiple ACEs were at increased risk for drug and alcohol abuse, suicidality, smoking, risky sexual behavior, and sexually transmitted diseases (Felitti et al, 1998). Other adulthood diseases such as heart disease, chronic lung disease, skeletal fractures, and liver disease were also found to be more likely in those who had experienced multiple types of ACEs (Felitti et al, 1998).

Impact of ACEs on Mental Health

Fletcher and Schurer (2017) found that certain personality traits were found to be more common with individuals who had experienced various ACEs. Those who experienced sexual abuse as child were found to exhibit more neuroticism. Childhood neglect was found to be negatively associated with conscientiousness and openness to experiences (Fletcher & Schurer, 2017). The experience of ACEs also has been found to mental health disorders and suicidal behavior in adolescents and adults (Balistreri & Alvira-Hammond, 2016; Choi, DiNitto, Marti, & Segal, 2017; Merrick, Ports, Ford, Afifi, Gershoff, & Grogan-Kaylor, 2017).

Individual behavior can also be associated with certain experiences of ACEs. Fang and McNeil (2017) identified that for men living with someone who abused substances as a child contributed to the behavior of binge drinking in men and verbal abuse was associated with binge drinking in women. Overall ACEs have been found to be associated with substance abuse issues in adulthood (Choi et al, 2017; Merrick et al., 2017).

Overall quality of life was found to be impacted by the experiences of ACEs (Salinas-Miranda, et al, 2015). Individuals who had experienced ACEs reported more stress and sleep disturbances (Salinas-Miranda, et al, 2015). Low socioeconomic status (Nurius et al, 2015) and unemployment (Liu et al, 2013) were also found to be linked to ACEs. Although social resources and behaviors which foster health were found to decrease the risk associated with the experience of ACEs, those who had experienced ACEs were also found to lack these resilience resources (Nurius et al, 2015).

ACEs and their relationship with VVT and Burnout

As indicated previously, there have been mixed findings relating trauma history to VT and burnout. Several studies have indicated that past trauma increases risk of VT and burnout (Ben-Porat & Itzhaky, 2015; Ivicic & Motta, 2016). Although more research is needed to conclude such as relationship due to conflicted findings regarding the role of ACEs in the development of VT and burnout.

ACEs and VT. It has been suggested in several studies that trauma history can place a professional at greater risk of developing VT (Ben-Porat, & Itzhaky, 2015; Ivicic

& Motta, 2016; Turgoose & Maddox, 2017). Past trauma history is the most common factor associated particularly with VT in clinicians (Turgoose & Maddox, 2017).

It should be noted that there are some contradictory findings regarding this relationship between the two constructs of past trauma and VT. Several studies have indicated no relationship between a professional's trauma history and the development of VT (Michalopoulos & Aparicio, 2012; Turgoose & Maddox, 2017). In fact, past trauma history has also been indicated to be a factor which can increase an individual's resilience when faced with vicarious trauma. Frey, Beesley, Abbott, and Kendrick (2016) found that personal history of trauma can lead to benefits for the individual through increased vicarious resilience.

ACEs and burnout. There is limited research investigating the direct relationship of ACEs to the construct of burnout. Ben-Porat, and Itzhaky (2015) found that past trauma increased the risk of burnout in social workers. This relationship could be due to the professional's own trauma reactions being retriggered by the exposure to the trauma of the client (Ben-Porat, & Itzhaky, 2015).

Juvenile Justice Residential Settings

Juveniles within the juvenile justice system have generally experienced a high prevalence of trauma in their lives (Dierkhising, Ko, Woods-Jaeger, Briggs, Lee, & Pynoos, 2013; Ford & Blaustein, 2013). There has been increased focus on increasing awareness of trauma within these treatment settings (Bloom & Yanosy Sreedhar, 2008). In addition, focus has been brought to the fact that work with highly traumatized individuals can also impact the workers providing services to these clients (Ford &

Blaustein, 2013; McElvaney & Tatlow-Golden, 2016). Addressing the needs of the organization as a whole as well as the clients is a focus of some models which have gained popularity in these settings.

Prevalence of Trauma in Juveniles

Juveniles who receive treatment in juvenile justice residential facilities have been found to have a high prevalence of trauma in their lives. Juveniles in juvenile justice residential settings are 10 to 15 times more likely to have Posttraumatic Stress Disorder than youth in the general population (Ford & Blaustein, 2013). As much as 92.5% of juveniles placed in these settings are found to have at least one trauma experience (Ford & Blaustein, 2013). In addition, 90% of juveniles in these settings have experienced multiple traumas in his or her life and only 10% reported only having one trauma experience (Dierkhising et al, 2013). A high number of this population (50%) had been exposed to six or more traumatic experiences (Ford & Blaustein, 2013).

This high prevalence of trauma is highly linked with severe mental health and substance abuse problems in this population (Ford & Blaustein, 2013). This creates additional stress not only for the youth in treatment when managing the highly complex issues of these youth but also for the staff and the overall therapeutic milieu in these programs (Ford & Blaustein, 2013). In addition, the high prevalence of trauma within the youth receiving treatment in these settings creates the high likelihood of staff exposure to the vicarious trauma of the youth in their care (Bloom & Yanosy Sreedhar, 2008).

Direct Care Staff and Work with a Traumatized Population

As mentioned previously, youth in juvenile justice residential settings present with complex issues and concerns related to trauma. The high prevalence of trauma not only impacts youth receiving treatment but can also impact the staff working with these highly traumatized youth (Boudoukha, Altintas, Rusinek, Fantini-Hauwel, & Hautekeete, 2013; Dierkhising, Ko, Woods-Jaeger, Briggs, Lee, & Pynoos, 2013; Ford & Blaustein, 2013; McElvaney & Tatlow-Golden, 2016). Staff members have expressed feelings of frustration, fear, and bewilderment in response to having to respond to the complex needs of youth in their care (McElvaney & Tatlow-Golden, 2016). Poor structure and resources can exacerbate the complexity of caring adequately for youth (Ford & Blaustein, 2013).

In response to the complexity of the issues related to the youth, staff may begin to mirror the trauma response found in youth in their care and respond in ways that may further traumatize youth due to his or her own dysregulation (Ford & Blaustein, 2013; McElvaney & Tatlow-Golden, 2016). Staff in these environments have been found to exhibit symptoms of posttraumatic stress syndrome as a response to vicarious trauma as well as witnessed trauma within facilities (Boudoukha et al, 2013). These issues present a particular issue as therapeutic relationships between staff and youth in juvenile justice symptoms can mirror family relationships and provide an opportunity for positive growth and experience for the youth (Kendrick, 2013). However, as mentioned, staff dysregulation in response of trauma presents an opportunity for further traumatization in the residential environment.

Trauma-Informed Care

As seen, the prevalence of trauma in the youth in juvenile justice systems places increased exposure to vicarious and trauma for the staff. The system itself can be traumatizing as inadequate systems manage these complex mental health issues of the youth (McElvaney & Tatlow-Golden, 2016). There has been increasing attention into the issue of many youth being placed in the juvenile justice system having serious mental health concerns. (Ford & Blaustein, 2013). Various models such as the Sanctuary Model (Bloom & Yanosy Sreedhar, 2008) have emerged as a result.

Summary and Conclusion

VT and burnout can have various negative consequences for professionals working with traumatized individuals in both their private and work environments. Factors such as organizational climate, personality, and past history can increase the risk of developing VT and burnout. Past history such as adverse childhood experience can also have impacts on an individual’s health and overall well-being. A possible relationship between individual past trauma and VT in clinical mental health professionals in the literature but this relationship has not been investigated in direct care workers. The present study investigated how past trauma may impact the development of VT in this population. Within juvenile justice settings, there is a high prevalence of trauma among the youth receiving care and also creates an environment for new trauma to occur.

Chapter 3 introduces the methodology used in the present investigation into how ACEs impact VT and burnout in direct care workers in juvenile residential settings. The

next chapter will detail the assessments utilized to measure the main constructs of VT, burnout, and ACEs. In addition, the exact data collection procedures and data analysis will be further explained.

Chapter 3: Research Methodology

The relationship between ACEs and the occurrence of VT and burnout has been studied with many types of mental health providers, but not direct care workers in juvenile justice facilities. The purpose of the present study therefore was to examine the relationship between the number of ACEs, experiences of VT, and burnout with direct care staff working with the youth in juvenile justice residential settings. The study was completed with participants who are currently employees at juvenile justice residential facilities using quantitative tools designed to measure ACEs, burnout, and VT.

The study used a quasiexperimental design and random sample of direct care workers currently working at juvenile justice facilities. Recruitment took place through Amazon Mechanical Turk. All participants in the study were over the age of 18 and only those who identified as being currently employed as direct care staff in a juvenile justice facility were included in the data analysis.

Measurements of the constructs of ACEs, VT, and burnout that have been already established and psychometrically sound were used for data collection. Resources were provided to participants whose distress may be triggered by the data collection process. All recruitment and data collection procedures were reviewed by the Walden University IRB to ensure safety for all participants involved. The IRB approval number for the present study is 08-02-18-0456332. Care was also taken to protect all data collected as part of the proposed study. Chapter 3 also addresses the precise data analysis procedures to answer the research questions. Lastly, the chapter addresses any threats to validity and relevant ethical considerations.

Research Design and Rationale

This study was a quantitative study using a quasiexperimental approach design. This study sought to determine the extent to which the independent variable of ACEs impacts the dependent variables of burnout and VT in direct care staff in juvenile justice residential facilities. In addition, ACEs included three categories: sexual abuse, physical/emotional abuse, and family dysfunction. Analysis was also conducted regarding the degree to which the category of ACE impacts the dependent variables of burnout and VT. This research design was aimed to further knowledge regarding how these variables interact with the sample of direct care workers in juvenile justice facilities. As mentioned in Chapter 1, this population was not investigated in previous studies investigating the role of ACEs in the development in VT and burnout.

Quasi-experimental designs are most appropriate in situations in which participants cannot be randomly assigned into groups due to the impracticality of manipulating study conditions or if conditions were created prior to the study (Rudestam & Newton, 2015). In the case of the present study, ACEs cannot be manipulated as these are past childhood events. Therefore, random assignment into control and non-control groups was not possible as it would be impossible for the researcher to manipulate occurrences of ACEs in a sample of adult participants.

Methodology

Population

The target population for the present study wad direct care staff aged 18 and older working in juvenile justice residential facilities. Direct care staff refers to staff members

whose job duties entail the supervision and care of youth receiving treatment in the facility. The total population size for this population of direct care workers in juvenile justice treatment facilities is currently unknown.

Sampling and Sampling Procedures

The present study used a sample of direct care workers from select juvenile justice residential facilities located in the United States. The sample included only those who identified as direct care workers whose job responsibilities involve the supervision and care of youth receiving treatment in the facility. This excluded individuals employed as therapists, administrative staff, and case managers who do not have the duty of supervising youth in treatment.

A power analysis using G*Power software indicated that a sample size of 158 would be required when considering a medium effect size of .25, power size of .80, and alpha level of .05. A power size of .80 and alpha level of .05 were selected as these are generally accepted criteria for most research. A medium effect size was selected for the present study as this has been used as an effect size for several studies investigating similar variables and populations. The present study used an actual sample size of 163 participants.

Procedures for Recruitment, Participation, and Data Collection

It was originally proposed that recruitment and data collection would take place directly through the facilities in which participants worked. However, this recruitment did not yield a large enough sample size. Therefore, the researcher used recruitment through Amazon Mechanical Turk and reimbursed participants $0.50 for their completion of the

survey. The questionnaires used for the study were administered in an online survey form through SurveyMonkey.

At the time of data collection, participants were provided with informed consent forms. Basic demographic information such as gender, education level, age, and length of time employed at the facility were also collected from the participants (see Appendix B). Included with the online survey, the researcher provided resources including hotlines and resources to locate local mental health providers should any participant's distress have been triggered by questions during the data collection process.

Instrumentation and Operationalization of Constructs

The variables measured in this study were ACEs, VT, and burnout. Measures included the ACE module of the 2012 Behavioral Risk Factor Surveillance System (BRFSS) historical questions, the Trauma and Attachment Belief Scale (TABS, and Maslach Burnout Inventory Human Services Survey (MBI-HSS. An additional covariate of workplace organization was included in data collection and analysis and was measured using the workplace organization indices.

ACEs. ACEs refer to exposure to childhood abuse and household dysfunction prior to the age of 18. Childhood abuse includes physical, emotional, and sexual abuse. Household dysfunction includes exposure to drug use in the home, familial mental instability, domestic abuse, and criminal behavior (Felitti et al., 1998).

The ACE module of the 2012 BRFSS historical questions was used to collect historical information regarding the existence of ACEs. This questionnaire gathers information regarding types of ACEs previously mentioned and allows for the researcher

to obtain a number of ACEs for each participant. In addition, the questionnaire categorizes ACEs into family dysfunction, physical/emotional abuse, and sexual abuse. As this is a questionnaire regarding historical events rather than an assessment, no psychometric data is applicable.

VT. VT is defined as the experiencing of symptoms of traumatization related to indirect exposure to another individual's trauma (McCann & Pearlman, 1990). According to the CSDT, this disruption can occur as an event is experienced or, in the case of helping professionals, detailed which the individual is unable to incorporate the affective experience into his or her previously held schemas and views. There are five different aspects of the self which are impacted by the traumatic information: frame of reference, self-capacities, ego resources, psychological needs and cognitive schemas, and the memory system (Pearlman & Saavakvtine, 1995).

Vicarious traumatization was measured using the TABS that measures trauma using the CSDT framework of trauma development. The internal consistency of the overall TABS score has been found to be .96 and retest reliability was found to be between .72 and .75 for the overall TABS score with a sample of college students with the most recent version of the assessment. (Pearlman, 2003). The TSI Belief Scale Version L (TSI-BSL), a previous version of the assessment, was found to have significant construct validity, r (97) = .58, $p < .001$ when studied with a group of sexual assault and domestic violence counselors (Jenkins & Baird, 2002).

Burnout. Burnout refers to a syndrome which is common in helping professions which includes the experiences of emotional exhaustion, depersonalization, and a reduced

sense of personal accomplishment (Maslach, 1986). Emotional exhaustion refers to the helping professional feeling emotionally overextended (Maslach, 1986). Depersonalization is the experience in which the affected individual begins to be unfeeling towards others in his or her life which can result in a negative and callous presentation towards others (Maslach, 1986). Finally, personal accomplishment refers to the meaning one places in his or her work (Maslach, 1986). An individual may begin to feel as if they have failed in their employment or that his or her work has become meaningless (Maslach, 1986).

Burnout was measured utilizing the Maslach Burnout Inventory Human Services Survey (MBI-HSS; Maslach et al., 1981). This inventory contains three subscales of Emotional Exhaustion, Depersonalization, and Personal accomplishment. Cronbach's alpha levels were .90 for Emotional Exhaustion, .79 for Depersonalization, and .71 for Personal Accomplishment. Test retest reliability was also completed with these subscales. After several weeks, test retest coefficients were .82 (Emotional Exhaustion), .60 (Depersonalization), and .80 (Personal Accomplishment). After 3 months, reliability coefficients were .75 (Emotional Exhaustion), .64 (Depersonalization), and .62(Personal Accomplishment. Coefficients of test retest reliability up to 1 year were .60 (Emotional Exhaustion), .54 (Depersonalization), and .57 (Personal Accomplishment) (Maslach et al., 1981).

Workplace Organization. Workplace organization can be conceptualized as organizational culture poor decision making, high stress, structural deficits, and poor leadership within the work environment. Workplace Organization was measured utilizing

the Workplace Organization Indices (WOI; Boreham, Povey, & Tomaszewski, 2016). This measure includes six indices including Participative Management, Flexible Work Hours, Job Insecurity, and Work to Life Interference.

As for validity, a factor analysis was completed and resulted in the items of each index loading on one factor with factor loadings higher than .70. Chronbach's alpha for all but the indices of Flexible Work and Employment Security were above .85 (Boreham, Povey, & Tomaszewski, 2016) The two indices with lower reliability remained in the measure due to the importance in the theoretical framework utilized in the measure's development (Boreham, Povey, & Tomaszewski, 2016). A copy of the Workplace Organization Indices is located in .

Administration of Instruments

Informed consent was obtained at the beginning of the Survey Monkey Survey. All demographic information and assessments were collected using an online survey through Survey Monkey. Demographic information was the last in the data collection process to be completed. However, participants were asked to confirm that they were direct care staff before they could continue with the survey. The assessments will be given in the following order: Adverse Childhood Experience module on the BRFSS, MBI-HSS, TABS, and Workplace Organizational Indices. At the completion of the survey, the researcher provided resources for participants to locate mental health providers and national crisis lines. A copy of the resources provided to the participants can be found in Appendix B.

Research Questions

The research questions and hypotheses for this study are as follows:

RQ1: Will ACEs have a significant effect on the development of burnout in direct care staff working in juvenile justice residential facilities?

$H_0$1: The presence of ACEs in this population will have no significant effect on burnout.

H_a1: The presence of ACEs in this population will have a significant effect on burnout.

RQ2: Do ACEs affect the onset of VT in direct care workers in juvenile justice residential facilities?

$H_0$2: The presence of ACEs in this population will have no significant effect on level of VT.

H_a2: The presence of ACEs will have a significant effect on level of VT in this population.

RQ3: Does the type of ACE reported (physical/emotional abuse, sexual abuse, and family dysfunction) have an effect of the development of VT for direct care staff in juvenile justice residential facilities?

$H_0$3: The type of ACE will have no effect on VT in this population.

H_a3: The type of ACE will have a significant effect on VT in this population.

RQ4: Does the type of ACE reported (physical abuse, sexual abuse, and family dysfunction) have an effect on the development of burnout in direct care staff working in juvenile justice residential facilities?

$H_0 4$: The type of ACE will have no effect on burnout in this population.

$H_a 4$: The type of ACE will have a significant effect on burnout in this population.

Data Analysis

IBM SPSS Statistics for Windows, Version 23.0 was used to complete the statistical analysis for the present study. Any missing data was excluded if the responses from a participant had more than 25% of the data are missing. The case was not be utilized as it will not allow for an accurate analysis.

Analysis of the data first utilized a series of independent samples t-test to analyze group differences between those participants with ACEs and those with no ACEs. The initial independent samples t-test focused on two groups, participants with ACEs and participants with no reported ACEs, and the dependent variable of VT. A subsequent independent samples t-test was completed with the same groups for the independent variable of ACEs and the dependent variable of burnout. The independent samples t-tests will assess group equivalence between the two groups of those with ACEs and those without concerning the dependent variables of burnout and VT.

Additionally, a univariate analysis of covariance (ANCOVA) was completed analyzing three groups of ACEs (sexual abuse, physical/emotional abuse, and family dysfunction) and the dependent variable of VT and will be repeated utilizing the dependent variable of burnout. The interpretation of the significance of the *F*-ratio will utilize an alpha level of .05. This analysis will assess variance among the three groups of ACEs in experience of VT and burnout. This analysis will also analyze the covariate of organizational climate.

Threats to Validity

A potential threat to external validity can be found in the demographics of participants. Limited diversity in some the demographics of participants can present an issue of generalizability to all direct care staff in juvenile justice settings. Although recruitment was open to any gender and age range, responders to the survey were primarily male and between the ages of 18 and 29 years of age. This threat to validity will be further addressed in subsequent chapters.

Potential threats to internal validity existed due to the workplace organization of the facilities in which participants worked. Organizations with high levels of stress and structural deficits, such as ineffective decision making, poor boundaries, and lack of effective leadership, can contribute to trauma-related symptoms (Pross & Schweitzer, 2010). Therefore, a participating facility with poor structure and high stress may produce more direct care workers with symptoms typically related to vicarious trauma which may not be necessarily resulting from ACEs experienced by the participants. Due to this potential influence on vicarious trauma, workplace organizational climate was included as a covariate in the present study to control for its effects on the dependent variables.

Ethical Procedures

There are several ethical considerations involved in the methodology and recruitment for the present study. Ethical concerns regarding participation were addressed beginning at the recruitment phase. Due to the study involving sensitive material such as past trauma, the recruitment post on Amazon Mechanical Turk included details regarding this to remain very transparent to the participants regarding the type of material he or she

may be asked. This may have also helped to reduce any participants withdrawing from participation before all data is collected as the participants were prepared for difficult material prior to beginning the Survey. Also, due to the fact that sensitive material will be discussed in the data collection process pertaining to past trauma, a list or resources of how to locate local mental health professionals and national crisis lines were provided to each participant who had completed the data collection process.

The data collected from participants was also be protected. Data was collected in an anonymous fashion and did not require any identifying information from the participant. The data collected for the study was also only be viewed by the researcher. The data collected through the online survey was password protected which limited access to this information to the researcher only.

Summary

This study used a quasiexperimental design and utilizing a random sample of adult direct care workers employed in juvenile justice residential facilities recruited through Amazon Mechanical Turk. An assessment battery including psychometrically sound measures for the ACEs, VT, and burnout was given via online survey through Survey Monkey. All data collected was password protected and only accessible to the researcher. All procedures for recruitment and data collection were reviewed and approved by the Walden University IRB and other ethical considerations regarding potentially triggering material will also be addressed by the researcher.

This study used a series of independent t-tests and ANCOVA statistical analyses in order to capture the variances present with all levels of the independent variable with

the dependent variables of vicarious trauma and burnout. Threats to internal validity may lie in the influences of structural challenges of the facility and external validity may be threatened through lack of diversity in the demographics of study participants.

This chapter provided a detailed description of methodology for the present study. In addition, the research design has been more thoroughly discussed. Constructs measured and measurements utilized in the study have also been described including the psychometrics for the tools of measurement utilized. Data analysis relevant to the proposed research questions has also been addressed. The present chapter also detailed potential threats to validity as well as ethical considerations relevant to the proposed study. Results from data collection and analysis and any pertinent information regarding the process or issues regarding data collection is discussed in Chapter 4.

Chapter 4: Results

The purpose of the proposed quantitative study was to examine the relationship between presence of ACEs, experiences of VT, and burnout with direct care staff working with the youth in juvenile justice residential settings. In addition, the study sought to investigate the impact of the type of ACE experiences (family dysfunction, physical/emotional abuse, and sexual abuse) on the development of burnout and VT. Chapter 4 provides a description of participant demographics as well as results of the analysis completed to address the proposed research questions. A brief summary of the analysis findings is presented.

Data Collection

Data collection procedures were altered from proposed procedures due to the researcher being unable to gain access to facilities allowing for research collection in person. The researcher did reach out to a variety of facilities in states throughout the United States. However, this did not result in a sufficient number of participants to meet the ideal sample size. Data collection procedures were then changed to online data collection with the approval of Walden University’s IRB. Online data collection involved a Survey Monkey survey to administer the BRFSS-ACEs Module, MBI-HSS, TABS, and WOI to collect demographic information. The researcher used Amazon Mechanical Turk for recruitment and reimbursed study participants $0.50 for survey completion.

Data Cleaning Procedures

A total of 417 responses were collected through the web-based survey. Data were collected between 2/12/19 and 3/20/19. Of the 417 responses received, 235 respondents

did not meet inclusion criteria due to the individuals identifying themselves as being in a role of case manager or therapist (n = 92) or administration (n = 162). The final sample size was 163 after rejecting those who did not meet inclusion criteria.

Demographic Information of the Sample

The sample appears to be representative of a variety of locations throughout the United States and U.S. territories with participants reporting from 36 different U.S. states and territories. Most participants were male (55.2%, n = 90), between the ages of 18 and 29 (47.2%, n = 77), and held bachelor's degrees (n = 66, 40.5%). Detailed information regarding the demographics of the sample can be found in Table 1.

Table 1

Demographic Information of the Sample

Category	n	%
Male	90	55.2
Female	56	34.4
No Response	17	10.4
Age		
18-29	77	47.2
30-44	55	33.7
45-59	13	8.0
60+	1	0.60
No Response	17	10.4
Highest Level of Education		
Associate's degree	10	6.1
Bachelor's Degree	66	40.5
Doctoral Degree	9	5.5
High School Degree/GED	12	7.4
Other professional degree	3	10
Some college	10	6.1
Some graduate coursework	5	3.1
No response	15	9.2

Descriptive Statistics for Dependent Variables

The MBI-HSS was used as a measure of burnout. There are three subscales on the MBI-HSS: emotional exhaustion, depersonalization, and personal accomplishment. The MBI-HSS does not provide an overall burnout score. Higher scores on the emotional exhaustion and depersonalization subscales indicate higher levels of burnout whereas lower scores on the personal accomplishment subscale indicates higher levels of burnout. Mean scores on the MBI subscales and TABS for all participants were: $M = 26.44$, $SD = 12.11$ for the emotional exhaustion scale, $M = 15.23$, $SD = 7.31$ for the depersonalization scale, $M = 48$, $SD = 29.49$ for the personal accomplishment scale, and $M = 63.85$, $SD = 14.53$ for TABS. Mean scores on MBI subscales and TABS of the two groups (participants who identified ACEs and those who did not identify ACEs) are presented in Table 2.

Table 2

Descriptive Statistics for Dependent Variables

Dependent Variable	ACEs	n	M	SD	SE_M
MBI-HSS					
Emotional Exhaustion	Yes	151	27.08	11.88	0.97
	No	12	18.42	12.65	3.65
Depersonalization	Yes	151	15.77	7.07	0.58
	No	12	8.33	7.02	2.03
Personal Accomplishment	Yes	151	29.84	10.3	0.84
	No	12	25.08	12.7	3.54
TABS	Yes	151	70.14	11.55	0.94
	No	12	58.42	14.74	4.26

Results

RQ1

Levene's test for equality of variances was completed for all dependent variables to test for the assumption of equal variances. For the emotional exhaustion subscale, the result of Levene's test of equal variances was $F(161) = .023$, $p = 0.88$. Results of Levene's test of equal variance for the depersonalization subscale was $F(161) = 0.06$, $p = 0.82$. Regarding the personal accomplishment subscale, results for Levene's test of equal variances was $F(161)=0.86$, $p = 0.35$. As none of the results were significant, the assumption of homogeneity of variances was satisfied.

An independent samples t-test was completed to analyze the impact of the presence of ACEs on levels of burnout as measured by MBI-HSS subscales. The results of the independent samples t-test for the emotional exhaustion subscale was $t(161) = -2.42$, $p = .017$. Results of the independent samples t-test for the depersonalization subscale was $t(161) = -3.51$, $p = .001$. For the personal accomplishment subscale, results of the independent samples t-test were $t(161) = -1.52$, $p = .13$. Both the emotional exhaustion subscale and depersonalization subscale results indicated statistical significance in terms of the presence of ACEs impacting higher scores on these burnout scales. The results for the personal accomplishment subscale did not show statistical significance. Therefore, the null hypothesis was rejected.

RQ2

The impact of the presence of ACEs on VT as measured by the TABS. Levene's test of equal variances was used to test for the assumption of homogeneity of variances.

The results for the Levene's test of equal variances for the TABS was $F(161) = 0.99$, $p = 0.32$. As the results were not statistically significant, this assumption was met. Results of the independent samples t-test for the TABS was $t(161) = -3.31$, $p = .001$. Results of this analysis were statistically significant with those who had ACES experiencing higher scores on the TABS. Therefore, the null hypothesis was rejected.

RQ3

An ANCOVA was used to analyze the impact of the type of ACE present (family dysfunction, physical/emotional abuse, and sexual abuse) on burnout as measured through the MBI-HSS subscales. The results for the ANCOVA with the Emotional Exhaustion Subscale were: family dysfunction, $F(1,154)=1.56$, $p=.214$; physical/emotional abuse, $F(1,154)=0.01$, $p=.94$; and sexual abuse, $F(1,154)=4.56$, $p=.03$. The ACE category of sexual abuse was found to demonstrate a statistically significant impact in scores on the Emotional Exhaustion subscale. The covariate of workplace organization as measured by the WOI was included in the analysis and was found to have a statistically significant impact, $F(1,154)=19.108$, $p<.001$.

The results for the ANCOVA with the Depersonalization Subscale were: family dysfunction, $F(1,154)=.64$, $p=.42$; physical/emotional abuse, $F(1,154)=.23$, $p=.63$; and sexual abuse, $F(1,154)=12.29$, $p=.001$. The ACE category of sexual abuse was found to demonstrate a statistically significant impact in scores on the Depersonalization subscale. The covariate of workplace organization as measured by the WOI was included in the analysis and was found to have a statistically significant impact, $F(1,154)=13.82$, $p<.001$.

The results for the ANCOVA with the Personal Accomplishment Subscale were: family dysfunction, $F(1,154)=0.17$, $p=.68$; physical/emotional abuse, $F(1,154)=0.72$, $p=.40$; and sexual abuse, $F(1,154)=1.41$, $p=.24$. None of the categories of ACEs demonstrated a statistically significant impact on the Personal Accomplishment subscale. The covariate of workplace organization as measured by the WOI was included in the analysis and was found to have a statistically significant impact, $F(1,154)=3.58$, $p=.06$. The null hypothesis was rejected due to the ACE of sexual abuse demonstrating a difference in impact on burnout scores from other ACE categories.

RQ4

An ANCOVA was used to analyze the impact of the type of ACE present (family dysfunction, physical/emotional abuse, and sexual abuse) on VT as measured through the TABS. The results for the ANCOVA with the TABS were: family dysfunction, $F(1,154)=0.07$, $p=.80$; physical/emotional abuse, $F(1,154)=.47$, $p=.50$; and sexual abuse, $F(1,154)=19.39$, $p<.001$. The ACE category of sexual abuse was found to demonstrate a statistically significant impact in scores on the TABS. The covariate of workplace organization as measured by the WOI was included in the analysis was found to have a statistically significant impact, $F(1,154)=31.03$, $p<.001$. The null hypothesis was rejected due to the ACE of sexual abuse demonstrating a difference in impact on TABS scores from other ACE categories.

Summary

The present study sought to analyze the effect of ACEs on burnout and VT in direct care workers in juvenile justice settings. In participants who reported experiencing

an ACE experience, had significantly higher scores on the Emotional Exhaustion Subscale and the Depersonalization Subscale than participants who did not report experiencing any ACEs. In addition, those who experienced an ACE had significantly higher scores on the TABS than those who reported no ACEs.

In regard to the influence of the type of ACE on scores of burnout as measured by the MBI-HSS, only sexual abuse demonstrated statistical significance in scores on the Emotional Exhaustion and Depersonalization subscales. There was no statistical significance found with any of the categories of ACEs and their impact on scores for the Personal Accomplishment Subscale. It should be notes that workplace organization as measured by the WOI demonstrated a statistically significant impact on scores for all of the MBI-HSS subscales.

When looking at VT as measured by the TABS, the only ACE category showing statistically significant impact was sexual abuse. Just as with scores found on the MBI-HSS, scores on the WOI demonstrated a statistically significant impact on scores. The null hypothesis for all research questions was rejected. The implications of these findings that will be discussed in the next chapter.

Chapter 5 provides a detailed interpretation of the results presented in this chapter. The next chapter will also discuss the implications of results found. In addition, the researcher will make recommendations for future research. The limitations of the present study will also be identified and discussed in this subsequent chapter.

Chapter 5: Interpretation of Results

The impact of past trauma and the development of VT and burnout been investigated with mental health professionals in outpatient settings. However, it had not been researched with direct care workers working in juvenile justice settings. VT and burnout can have a negative impact on work quality and overall wellbeing of impacted individuals. The present study sought to investigate the impact of ACEs on VT and burnout among direct care workers in juvenile justice settings.

The results of this study indicated that the existence of ACEs predicted higher levels of depersonalization and emotional exhaustion in burnout and also higher levels of VT. In addition, sexual abuse specifically was found to have a significant impact on levels of depersonalization and emotional exhaustion in burnout and VT. The present study included a covariate of workplace organization and found that this construct had a significant impact on all areas of burnout (depersonalization, emotional exhaustion, and personal accomplishment) as well as VT.

Interpretation of Findings

The present study's findings indicate that the existence of ACEs is associated with greater burnout when looking at depersonalization and emotional exhaustion. This is consistent with the limited amount of research that is available that suggests past trauma may pose as a risk factor to burnout. The presence of ACEs appears to be related to higher levels of VT. This finding supports previous research which also suggests the existence of such a relationship between ACEs and VT. The null hypothesis for RQ1 and

RQ2 were rejected as those with ACEs did score higher on two of the three scales on the MBI-HSS and also scores of VT as indicated by the TABS.

The present study expanded on what has been previously researched as it indicates that prior experiences involving sexual abuse significantly contribute to higher levels of burnout when looking at depersonalization and emotional exhaustion as well as VT. The literature review found no previous studies in which researchers investigated specific subtypes of ACEs and their relationship with burnout and VT specifically. Michalopoulos and Aparicio (2012) indicated that there is no relationship between trauma history and VT. As there was a difference between the three categories of ACEs in regard to impact on VT and burnout, null hypotheses for RQ3 and RQ4 were rejected.

The included covariate of workplace organization was found to have a significant impact on all measures of burnout (depersonalization, emotional exhaustion, and personal accomplishment) as well as VT. This indicates that poorer workplace organization can be predictive of greater burnout and VT in workers. This finding was also consistent with what can be found in previous research regarding the potential relationship between burnout and VT.

Theoretical Interpretation

These findings are consistent with CSDT. This theory conceptualizes VT as the professional's attempt to fit the traumatic material of the individual they are working with into his or her preestablished schemas (Howlett & Collins, 2014; Pearlman & Saakvitne, 1995; Trippany et al., 2004). With professionals who have a previous history of trauma, the traumatic material of individuals they are working with may retrigger their memories

of their own trauma as they attempt to fit this new traumatic material into their own schemas. This can cause them to also relive strong emotions associated with their own personal history in addition to a more intensive empathetic response to the traumatized individual they are providing services for, leading to the development of VT (Pearlman & Saakvitne, 1995).

Findings involving the covariate of workplace organization also have a significant impact on aspects of burnout as well as VT. Pearlman and Saakvitne (1995) said organizational factors such as perceived lack of control may contribute to the development of both burnout and VT due to feelings of inadequacy, resentfulness, and neglect which can feed into experiences involving VT. Pross & Schweitzer (2010) found that in settings where work with traumatized individuals is performed, significant structural dysfunction due to high stress and conflict levels has been found, and workers were found to display symptoms related to VT. However, once structural reform occurred, these symptoms subsided.

Limitations of the Findings

There are several limitations in the present study. Data collection through Amazon Mechanical Turk might have posed a potential limitation regarding trustworthiness of responses received. As data were collected anonymously and through the Internet, there is no way to confirm with certainty that the responders were in fact direct care workers in juvenile justice settings. The researcher did attempt to safeguard against this by indicating several times the intended study demographic in both the recruitment letter and survey itself.

Lerias and Byrne (2003) suggested that those with a past history of trauma who may still struggle with symptoms related to this traumatic history may reexperience these symptoms when faced with new traumatic material. Due to this, another limitation of the present study is the use of the TABS to measure VT. Due to this involving measuring symptoms of traumatization in general, there is a possibility that the relationship between ACEs and scores on the TABS may be more associated with participants' continued difficulty managing traumatic experiences that have happened directly to them, either in childhood or adulthood, rather than the fact that they are dealing with traumatized individuals in the present.

The sample demographics also potentially served as a limitation. Most of the study participants were male and between the ages of 18 and 29. This may present an issue in terms of attributing findings to direct care workers of other genders or who are 30 years old and over. Munger, Savage, and Panosky (2015) used a sample of correctional nurses who were majority female (89.9%) and only 10% of participants under the age of 40 and found that participants were in the low to moderate ranges of risk for both burnout and VT. It would be useful to investigate whether similar results are found in older female direct care workers in juvenile settings and assess if age and gender serve as possible protective factors in this particular population.

Recommendations

After consideration of the findings of the study as well as the limitations of the study, there are several recommendations for future research that can be made. The present study assessed only for the presence but not the complete analysis about how the

number of ACEs may impact levels of burnout and VT. Investigating how the number of ACEs experienced impact the development of burnout and VT in this population should be a direction for further research.

To address the limitations found in the present study, it may be beneficial for future studies investigating this population to access this population directly. Accessing the population of direct care workers directly at juvenile justice facilities or worker groups ensures that the data collected are, in fact, only from the targeted population. This reduces any risk of any responses from those not working in the field. In addition, future studies may wish to expand upon the demographics of the sample utilized for this study. For example, future research may want to investigate the impact of ACEs on burnout and VT in female direct care workers working with juvenile justice populations or investigate this in older direct care workers in this environment.

Implications

The present study has several implications related to positive social change. The goal of this study to bring attention to factors that may contribute to burnout and VT due to how they can impact and individual's well-being as well as quality of work. Awareness of how a direct care worker's own traumatic past may help to inform facilities on how they can better support workers in order to ensure that quality and dependable care is being provided to youth within their care, further improving rehabilitation efforts.

Implications for practice related to the findings of the present study can also be found,. There are recommendations that can be made at an organizational level. Knowing that ACEs can impact a worker's functioning in and outside of the workplace

can inform organizational policy. Facilities can use this information to provide mental health benefits and access to community resources for workers to better address his or her own traumatic history to possibly prevent burnout and VT in their staff.

Summary and Conclusion

The present study sough to investigate the impact of ACEs on burnout and VT in direct care workers in juvenile justice settings. Findings of the study did support previous research suggesting that ACEs can contribute to higher levels of burnout and VT (Ben-Porat & Itzhaky, 2015; Ivicic & Motta, 2016; Turgoose & Maddox, 2017) and also expanded on previous research through finding a significant impact of sexual abuse specifically on the development of burnout and VT in this population. The findings also reinforced the importance of workplace organization as this too had a significant impact on burnout and VT, just as it has been shown in other research (Dombo & Blome, 2016; Galetta et al., 2016; Lambert, Hogan, Griffin, & Kelley, 2015; Pross & Schweitzer, 2010). Further research is recommended to address the limitations of trustworthiness, reliability, and generalizability found in the present study through more targeted recruitment and data collection. In addition, future researchers may wish to expand this study to a more inclusive sample of females and older workers.

The researcher sought to expand present knowledge on factors such as ACEs and how they contribute to burnout and VT in direct care workers in juvenile settings to begin to address issues related to quality of life for the worker as well as the youth receiving rehabilitation in facilities. It is hoped that the knowledge obtained from the study can be utilized to further research into factors that can impact workers in these settings and

inform organizational changes geared towards improvement in well-being in juvenile justice facilities for direct care workers and those receiving care.

References

Abramovitz, R., & Bloom, S. L. (2003). Creating sanctuary in residential treatment for youth: From the “well-ordered asylum” to a “living-learning environment”. *Psychiatric Quarterly, 74*(2), 119-135. Retrieved from http://ezp.waldenulibrary.org/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=mnh&AN=12602829&site=eds-live&scope=site

Andela, M., Truchot, D., & Borteyrou, X. (2015). Emotional labour and burnout: Some methodological considerations and refinements. *Canadian Journal of Behavioural Science, 47*(4), 321-332. doi:10.1037/cbs0000024

Anne Dombo, E., & Whiting Blome, W. (2016). Vicarious trauma in child welfare workers: A study of organizational responses. *Journal of Public Child Welfare, 10*(5), 505. doi:10.1080/15548732.2016.1206506

Baird, S., & Jenkins, S. R. (2003). Vicarious traumatization, secondary traumatic stress, and burnout in sexual assault and domestic violence agency staff. *Violence and Victims, 18*(1), 71-86. Retrieved from http://search.proquest.com/docview/208373085?accountid=14872

Balistreri, K., & Alvira-Hammond, M. (2016). Original Research: Adverse childhood experiences, family functioning and adolescent health and emotional well-being. *Public Health, 132*, 72-78. doi:10.1016/j.puhe.2015.10.034

Ben-Porat, A., & Itzhaky, H. (2015). Burnout among trauma social workers: The contribution of personal and environmental resources. *Journal of Social Work, 15*(6), 606-620. doi:10.1177/1468017314552158

Bercier, M. L., & Maynard, B. R. (2015). Interventions for secondary traumatic stress with mental health workers: A systematic review. *Research on Social Work Practice, 25*(1), 81-89. doi:10.1177/1049731513517142

Bianchi, R., & Schonfeld, I.S. (2016). Burnout is associated with a depressive cognitive style. *Personality and Individual Differences, 100,* 1-5. doi: 10.1016/j.paid.2016.01.008

Bloom, S. L., & Yanosy Sreedhar, S. (2008). The sanctuary model of trauma-informed organizational change. *Reclaiming Children & Youth, 17*(3), 48-53. Retrieved from the ERIC database (Accession #?).

Boreham, P., Povey, J., & Tomaszewski, W. (2016). Workplace organization indices. *Psyctests,* doi:10.1037/t49440-000

Boudoukha, A. H., Altintas, E., Rusinek, S., Fantini-Hauwel, C., & Hautekeete, M. (2013). Inmates-to-staff assaults, PTSD and burnout: Profiles of risk and vulnerability. *Journal of Interpersonal Violence*, (11), 23-32. doi:10.1177/0886260512475314

Branson, D., Weigand, D., & Keller, J. (2014). Vicarious trauma and decreased sexual desire: A hidden hazard of helping others. *Psychological Trauma-Theory Research Practice and Policy, 6*(4), 398-403. Retrieved from http://ezp.waldenulibrary.org/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=edswss&AN=000339664100014&site=eds-live&scope=site

Bride, B. (2007). Prevalence of secondary traumatic stress among social workers. *Social Work, 52*(1), 63-70. Retrieved from

http://ezp.waldenulibrary.org/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=edswss&AN=000244998200007&site=eds-live&scope=site

Brockhouse, R., Msetfi, R. M., Cohen, K., & Joseph, S. (2011). Vicarious exposure to trauma and growth in therapists: The moderating effects of sense of coherence, organizational support, and empathy. *Journal of Traumatic Stress, 24*(6), 735-742. doi:10.1002/jts.20704

Buchanan, M., Anderson, J. O., Uhlemann, M. R., & Horwitz, E. (2006). Secondary traumatic stress: An investigation of Canadian mental health workers. *Traumatology, 12*(4), 272-281. doi:10.1177/1534765606297817

Byrne, A. M., & Sias, S. M. (2010). Conceptual application of the discrimination model of clinical supervision for direct care workers in adolescent residential treatment settings. *Child & Youth Care Forum, 39*(3), 201-209. doi:10.1007/s10566-010-9100-z

Carrola, P. A., Olivarez, A., & Karcher, M. J. (2016). Correctional counselor burnout: Examining burnout rates using the Counselor Burnout Inventory. *Journal of Offender Rehabilitation, 55*(3), 195-212. doi:10.1080/10509674.2016.1149134

Choi, N. G., DiNitto, D. M., Marti, C. N., & Segal, S. P. (2017). Adverse childhood experiences and suicide attempts among those with mental and substance use disorders. *Child Abuse & Neglect*, *69*, 252-262. doi:10.1016/j.chiabu.2017.04.024

Center for Disease Control and Prevention (CDC). (2012) *Behavioral Risk Factor Surveillance System (BRFSS) Historical Questions*. Retrieved from

https://chronicdata.cdc.gov/Behavioral-Risk-Factors/Behavioral-Risk-Factor-Surveillance-System-BRFSS-H/iuq5-y9ct

Cieslak, R., Shoji, K., Douglas, A., Melville, E., Luszczynska, A., & Benight, C. C. (2014). A meta-analysis of the relationship between job burnout and secondary traumatic stress among workers with indirect exposure to trauma. *Psychological Services*, *11*(1), 75-86. doi:10.1037/a0033798

Cieslak, R., Anderson, V., Bock, J., Moore, B. A., Peterson, A. L., & Benight, C. C. (2013). Secondary traumatic stress among mental health providers working with the military: Prevalence and its work- and exposure-related correlates. *Journal Of Nervous And Mental Disease, 201*(11), 917-925. doi:10.1097/NMD.0000000000000034

Cohen, K., & Collens, P. (2013). The impact of trauma work on trauma workers: A metasynthesis on vicarious trauma and vicarious posttraumatic growth. *Psychological Trauma: Theory, Research, Practice, And Policy, 5*(6), 570-580. doi:10.1037/a0030388

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches (4th ed.)*. Thousand Oaks, CA: Sage.

Culver, L. M., McKinney, B. L., & Paradise, L. V. (2011). Mental health professionals' experiences of vicarious traumatization in post-Hurricane Katrina New Orleans. *Journal Of Loss And Trauma, 16*(1), 33-42. doi:10.1080/15325024.2010.519279

Dagan, K., Itzhaky, H., & Ben-Porat, A. (2015). Therapists working with trauma victims: The contribution of personal, environmental, and professional-organizational

resources to secondary traumatization. *Journal of Trauma & Dissociation, 16*(5), 592-606. doi: 10.1080/15299732.2015.1037038

DeLongis, A., & Holtzman, S. (2005). Coping in Context: The Role of Stress, Social Support, and Personality in Coping. *Journal Of Personality*, (6), 1633. Retrieved from:http://ezp.waldenulibrary.org/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=edswss&AN=000233019400007&site=eds-live&scope=site

Dierkhising, C. B., Ko, S. J., Woods-Jaeger, B., Briggs, E. C., Lee, R., & Pynoos, R. S. (2013). Trauma histories among justice-involved youth: Findings from the National Child Traumatic Stress Network. European *Journal Of Psychotraumatology, 4*, doi: 10.3402/ejpt.v4i0.20274

Fang, L., & McNeil, S. (2017). Original Research: Is there a relationship between adverse childhood experiences and problem drinking behaviors? Findings from a population-based sample. *Public Health,* 15034-42. doi:10.1016/j.puhe.2017.05.005

Felitti, V.J., Anda, R.F., Nordenberg, D., Williamson, D.F., Spitz, A.M., Edwards, V., Koss, M.P., & Marks, J.S. (1998). Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults. *American Journal of Preventative Medicine, 14*(4), 248-255. doi:10.1016/S0749-3797(98)00017-8

Finklestein, M., Stein, E., Greene, T., Bronstein, I., & Solomon, Z. (2015). Posttraumatic Stress Disorder and Vicarious Trauma in Mental Health Professionals. *Health & Social Work, 40*(2), 25-31. doi:hsw/hlv026

Firmin, M. W., Steiner, H. M., Firmin, R. L., & Nonnemacher, K. A. (2013). Challenging, intrinsic factors that affect the longevity of direct care staff who work with clients possessing intellectual disabilities. *Journal Of Management Policy & Practice, 14*(6), 116-130. Retrieved from https://search ebscohostcom.ezp.waldenulibrary.org/login.aspx?direct=true&db=bth&AN=9446 0021&site=eds-live&scope=site

Fletcher, J. M., & Schurer, S. (2017). Origins of adulthood personality: The role of adverse childhood experiences. *Journal of Economic Analysis & Policy, 17*(2), 69-90. doi:10.1515/bejeap-2015-0212

Ford, J., & Blaustein, M. (2013). Systemic Self-Regulation: A Framework for Trauma-Informed Services in Residential Juvenile Justice Programs. *Journal of Family Violence, 28*(7), 665-677. doi:10.1007/s10896-013-9538-5

Ford, D. C, Merrick, M. T., Parks, S. E., Breiding, M. J., Gilbert, L. K., Edwards, V. J., & Thompson, W. W. (2014). Examination of the factorial structure of adverse childhood experiences and recommendations for three subscale scores. *Psychology of Violence, 4*(4), 432-444. doi:10.1037/a0037723

Frey, L. L., Beesley, D., Abbott, D., & Kendrick, E. (2017). Vicarious resilience in sexual assault and domestic violence advocates. *Psychological Trauma: Theory, Research, Practice, And Policy, 9*(1), 44-51. doi:10.1037/tra0000159

Galetta, M., Portoghese I., Ciuffi, M., Sancassiani, F., D'Aloja, E., & Campagna, M. (2016). Working and environmental factors on job burnout: A Cross-sectional

study among nurses. *Clinical Practice & Epidemiology in Mental Health, 12*, 132-141. doi: 10.2174/1745017901612010132

Griller Clark, H., & Mathur, S. R. (2015). Merging two worlds: A tier two model to promote transition of youth from residential settings to the community. *Residential Treatment For Children & Youth, 32*(4), 280-298. doi:10.1080/0886571X.2015.1113456

Harrison, R. L., & Westwood, M. J. (2009). Preventing vicarious traumatization of mental health therapists: Identifying protective practices. *Psychotherapy: Theory, Research, Practice, Training, 46*(2), 203-219. doi:10.1037/a0016081

Hatcher, R., & Noakes, S. (2010). Working with sex offenders: the impact on Australian treatment providers. Psychology Crime & Law, 16(1-2), 145-167. doi: 10.1080/10683160802622030

Howlett, S. L., & Collins, A. (2014). Vicarious traumatisation: Risk and resilience among crisis support volunteers in a community organisation. *South African Journal of Psychology, 44*(2), 180-190. doi:10.1177/0081246314524387

IBM Corp. (2015). *IBM SPSS Statistics for Windows, Version 23.0.* Armonk, NY: IBM Corp.

Ivicic, R., & Motta, R. (2016). Variables associated with secondary traumatic stress among mental health professionals. *Traumatology*, doi:10.1037/trm0000065

Jankoski, J. A. (2010). Is vicarious trauma the culprit? A study of child welfare professionals. *Child Welfare, 89*(6), 105-120. Retrieved from:

http://ezp.waldenulibrary.org/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=mnh&AN=21877566&site=eds-live&scope=site

Jaworska-Burzyńska, L., Kanaffa-Kilijańska, U., Przysiężna, E., & Szczepańska-Gieracha, J. (2016). The role of therapy in reducing the risk of job burnout - a systematic review of literature. *Archives of Psychiatry & Psychotherapy, 18*(4), 43-52. doi:10.12740/APP/65815

Jenkins, S. R., & Baird, S. (2002). Secondary Traumatic Stress and Vicarious Trauma: A Validational Study. *Journal Of Traumatic Stress, 15*(5), 423. doi: 10.1023/A:1020193526843

Jordan, K. (2010). Vicarious trauma: Proposed factors that impact clinicians. *Journal Of Family Psychotherapy, 21*(4), 225-237. doi:10.1080/08975353.2010.529003

Kadambi, M. A., & Truscott, D. (2003). Vicarious traumatization and burnout among therapists working with sex offenders. *Traumatology, 9*(4), 216-230. doi:10.1177/153476560300900404

Kendrick, A. (2013). Relations, relationships and relatedness: residential child care and the family metaphor. *Child & Family Social Work, 18*(1), 77-86. doi:10.1111/cfs.12040

Knight, C. (2010). Indirect trauma in the field practicum: Secondary traumatic stress, vicarious trauma, and compassion fatigue among social work students and their field instructors. *Journal of Baccalaureate Social Work, 15*(1), 31-52. Retrieved from http://ezp.waldenulibrary.org/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=sih&AN=48682995&site=eds-live&scope=site

Lambert, E. G., Minor, K. I., Wells, J. B., & Hogan, N. L. (2015). Leave your job at work: The possible antecedents of work–family conflict among correctional staff. *The Prison Journal, 95*(1), 114-134. doi:10.1177/0032885514563284

Lambert, E. G., Hogan, N. L., Griffin, M. L., & Kelley, T. (2015). The correctional staff burnout literature. *Criminal Justice Studies: A Critical Journal of Crime, Law & Society, 28*(4), 397-443. doi: 10.1080/1478601X.2015.1065830

Langhinrichsen-Rohling, J., Arata, C., O'Brien, N., Bowers, D., & Klibert, J. (2006). Sensitive research with adolescents: Just how upsetting are self-report surveys anyway?. *Violence and Victims, 21*(4), 425-444. doi:10.1891/vivi.21.4.425

Lerias, D., & Byrne, M. K. (2003). Vicarious traumatization: symptoms and predictors. *Stress And Health: Journal of The International Society For The Investigation of Stress, 19*(3), 129-138. doi:10.1002/smi.969

Liu, Y., Croft, J., Chapman, D., Perry, G., Greenlund, K., Zhao, G., & Edwards, V. (2013). Relationship between adverse childhood experiences and unemployment among adults from five US states. *Social Psychiatry & Psychiatric Epidemiology, 48*(3), 357-369. doi:10.1007/s00127-012-0554-1

Lizano, E. L., & Mor Barak, M. (2015). Job burnout and affective wellbeing: A longitudinal study of burnout and job satisfaction among public child welfare workers. *Children And Youth Services Review*, 5518-28. doi:10.1016/j.childyouth.2015.05.005

Luther, L., Gearhart, T., Fukui, S., Morse, G., Rollins, A. L., & Salyers, M. P. (2017). Working overtime in community mental health: Associations with clinician

burnout and perceived quality of care. *Psychiatric Rehabilitation Journal, 40*(2), 252-259. doi:10.1037/prj0000234

Maguire, G. & Byrne, M.K. (2017). The Llaw is not as blind as It seems: Relative rates of vicarious trauma among lawyers and mental health professionals. *Psychiatry, Psychology and Law, 24*(2), 233-243, doi: 10.1080/13218719.2016.1220037

Măirean, C., & Turliuc, M. N. (2013). Predictors of vicarious trauma beliefs among medical staff. *Journal of Loss And Trauma, 18*(5), 414-428. doi:10.1080/15325024.2012.714200

Martins Pereira, S., Teixeira, C. M., Carvalho, A. S., & Hernández-Marrero, P. (2016). Compared to palliative care, working in intensive care more than doubles the chances of burnout: Results from a nationwide comparative study. *Plos ONE, 11*(9), 1-21. doi:10.1371/journal.pone.0162340

Maslach, C., Jackson, S. E., Leiter, M. P., Schaufeli, W. B., & Schwab, R. L. (1981). Maslach Burnout Inventory [Third Edition Manual]. Retrieved from the Mental Measurements Yearbook with Tests in Print database.

Maslach, C. (1986). Stress, burnout, and workaholism. In R. R. Kilburg, P. E. Nathan, R. W. Thoreson, R. R. Kilburg, P. E. Nathan, R. W. Thoreson (Eds.), *Professionals in distress: Issues, syndromes, and solutions in psychology* (pp. 53-75). Washington, DC, US: American Psychological Association. doi:10.1037/10056-004

McCann, I. L., & Pearlman, L. A. (1990). Vicarious Traumatization: A Framework for Understanding the Psychological Effects of Working with Victims. *Journal Of*

Traumatic Stress, 3(1), 131-149. Retreived from the SocINDEX with Full Text database.

McElvaney, R., & Tatlow-Golden, M. (2016). A traumatised and traumatising system: Professionals' experiences in meeting the mental health needs of young people in the care and youth justice systems in Ireland. *Children and Youth Services Review*, 6562-69. doi:10.1016/j.childyouth.2016.03.017

Merrick, M. T., Ports, K. A., Ford, D. C., Afifi, T. O., Gershoff, E. T., & Grogan-Kaylor, A. (2017). Research article: Unpacking the impact of adverse childhood experiences on adult mental health. *Child Abuse & Neglect,* 6910-19. doi:10.1016/j.chiabu.2017.03.016

Michalopoulos, L. M., & Aparicio, E. (2012). Vicarious Trauma in Social Workers: The Role of Trauma History, Social Support, and Years of Experience. *Journal Of Aggression, Maltreatment & Trauma, 21*(6), 646-664. doi:10.1080/10926771.2012.689422

Molnar, B. E., Sprang, G., Killian, K. D., Gottfried, R., Emery, V., & Bride, B. E. (2017). Advancing science and practice for vicarious traumatization/secondary traumatic stress: A research agenda. *Traumatology, 23*(2), 129-142. doi:10.1037/trm0000122

Moulden, H. M., & Firestone, P. (2007). Vicarious traumatization: The impact on therapists who work with sexual offenders. *Trauma, Violence, & Abuse, 8*(1), 67-83. doi:10.1177/1524838006297729

Munger, T., Savage, T., & Panosky, D. M. (2015). When caring for perpetrators becomes a sentence: Recognizing vicarious trauma. *Journal of Correctional Health Care, 21*(4), 365-374. doi:10.1177/1078345815599976

Nurius, P. S., Green, S., Logan-Greene, P., & Borja, S. (2015). Life course pathways of adverse childhood experiences toward adult psychological well-being: A stress process analysis. *Child Abuse & Neglect,* 45143-153. doi:10.1016/j.chiabu.2015.03.008

Pack, M. (2010). Transformation in progress: The effects of trauma on the significant others of sexual abuse therapists. *Qualitative Social Work: Research and Practice, 9*(2), 249-265. doi:10.1177/1473325009361008

Pearlman, L. A. (2003). Trauma and Attachment Belief Scale. Retrieved from the Mental Measurements Yearbook with Tests in Print database.

Pearlman, L. A., & Saakvitne, K. W. (1995). *Trauma and the therapist: Countertransference and vicarious traumatization in psychotherapy with incest survivors*. New York: W.W. Norton & Company.

Pross, C., & Schweitzer, S. (2010). The culture of organizations dealing with trauma: Sources of work-related stress and conflict. *Traumatology, 16*(4), 97-108. doi:10.1177/1534765610388301

Puig, A., Baggs, A., Mixon, K., Park, Y. M., Kim, B. Y., & Lee, S. M. (2012). Relationship between job burnout and personal wellness in mental health professionals. *Journal of Employment Counseling, 49*(3), 98-109. doi:10.1002/j.2161-1920.2012.00010.x

Ray, S. L., Wong, C., White, D., & Heaslip, K. (2013). Compassion satisfaction, compassion fatigue, work life conditions, and burnout among frontline mental health care professionals. *Traumatology, 19*(4), 255-267. doi:10.1177/1534765612471144

Rivard, J. C., Bloom, S. L., Abramovitz, R., Pasquale, L. E., Duncan, M., McCorkle, D., & Gelman, A. (2003). Assessing the implementation and effects of a trauma-focused intervention for youths in residential treatment. *Psychiatric Quarterly, 74*(2), 137-154. doi:10.1023/A:1021355727114

Rose, J., Madurai, T., Thomas, K., Duffy, B., & Oyebode, J. (2010). Reciprocity and burnout in direct care staff. *Clinical Psychology & Psychotherapy, 17*(6), 455-462. doi: 10.1002/cpp.688

Rudestam, K. E., & Newton, R. R. (2015). *Surviving Your Dissertation: A Comprehensive Guide to Content and Process (4th ed.)*. London: Sage.

Rupert, P. A., Miller, A. O., & Dorociak, K. E. (2015). Preventing burnout: What does the research tell us?. *Professional Psychology: Research and Practice, 46*(3), 168-174. doi:10.1037/a0039297

Rushton, C. H., Batcheller, J., Schroeder, K., & Donohue, P. (2015). Burnout and resilience among nurses practicing in high-intensity settings. *American Journal of Critical Care, 24*(5), 412-421. doi:10.4037/ajcc2015291

Salinas-Miranda, A.A., Salemi, J.L., King, L.M., Baldwin, J.A.; Berry, E.L., Austin, D.A.; Scarborough, K., Spooner, K.K., Zoorob, R.J., Salihu, H.M., (2015). Adverse childhood experiences and health-related quality of life in adulthood:

revelations from a community needs assessment. *Health & Quality Of Life Outcomes, 13*(1), 1-12. doi:10.1186/s12955-015-0323-4

Setti, I., Lourel, M., & Argentero, P. (2016). The role of affective commitment and perceived social support in protecting emergency workers against burnout and vicarious traumatization. *Traumatology, 22*(4), 261-270. doi:10.1037/trm0000072

Shanafelt, T. D., Dyrbye, L. N., & West, C. P. (2017). Addressing physician burnout: The way forward. *JAMA: Journal of The American Medical Association, 317*(9), 901-902. doi:10.1001/jama.2017.0076

Shoji, K., Lesnierowska, M., Smoktunowicz, E., Bock, J., Luszczynska, A., Benight, C. C., & Cieslak, R. (2015). What comes first, job burnout or secondary traumatic stress? Findings from two longitudinal studies from the U.S. and Poland. *Plos ONE, 10*(8), doi:10.1371/journal.pone.0136730

Smith Hatcher, S., Bride, B. E., Oh, H., Moultrie King, D., & Franklin Catrett, J. (2011). An assessment of secondary traumatic stress in juvenile justice education workers. *Journal Of Correctional Health Care, 17*(3), 208-217. doi:10.1177/1078345811401509

Sokka, L., Leinikka, M., Korpela, J., Henelius, A., Ahonen, L., Alain, C., & ... Huotilainen, M. (2016). Job burnout is associated with dysfunctions in brain mechanisms of voluntary and involuntary attention. *Biological Psychology*, 11756-66. doi:10.1016/j.biopsycho.2016.02.010

Takarangi, M. T., Strange, D., & Lindsay, D. S. (2014). Self-report may underestimate trauma intrusions. *Consciousness and Cognition: An International Journal*, *27*, 297-305. doi:10.1016/j.concog.2014.06.002

Topitzes, J., Pate, D. J., Berman, N. D., & Medina-Kirchner, C. (2016). Research article: Adverse childhood experiences, health, and employment: A study of men seeking job services. *Child Abuse & Neglect*, 6123-34. doi:10.1016/j.chiabu.2016.09.012

Turgoose, D., & Maddox, L. (2017). Predictors of compassion fatigue in mental health professionals: A narrative review. *Traumatology, 23*(2), 172-185. doi:10.1037/trm0000116

Trippany, R. L., Kress, V. E. W., & Wilcoxon, S. A. (2004). Preventing vicarious trauma: What counselors should know when working with trauma survivors. *Journal of Counseling & Development, 82*(1), 31-37. doi:10.1002/j.15566678.2004. tb00283.x

Varra, E. M., Pearlman, L. A., Brock, K. J., & Hodgson, S. T. (2008). Factor Analysis of the Trauma and Attachment Belief Scale: A Measure of Cognitive Schema Disruption Related to Traumatic Stress. *Journal Of Psychological Trauma, 7*(3), 185-196. doi:10.1080/19322880802266813

Williams, A. M., Helm, H. M., & Clemens, E. V. (2012). The effect of childhood trauma, personal wellness, supervisory working alliance, and organizational factors on vicarious traumatization. *Journal Of Mental Health Counseling, 34*(2), 133-153. doi: 10.17744/mehc.34.2.j3l62k872325h583

Appendix A: Demographic Questionnaire

1. What U.S. state or territory do you live in?

2. What is your gender?

__Male

__Female

3.What is your age?

__18-24

__24-29

__30-44

__45-59

__60+

4. What is the highest level of education you have completed?

5. How would you best describe your current position?

__Direct Care Role

__Case Manager or Therapist

__Administration

Appendix B: Mental Health Resources

I understand that some items pertaining to past adverse events and current challenges may have brought up some negative emotions for you.

I would like to provide you with some resources should you need additional support following this survey:

Childhelp National Child Abuse Hotline (Available 24 hours a day):

1-800-422-4453

National Suicide Prevention Hotline (Available 24 hours a day):

1-800-273-8255

To find a therapist or support group for additional support, you can utilize Psychology Today's directory to find a provider in your area:

https://www.psychologytoday.com/us/therapists