UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

MANAGING THE MINEFIELD OF RESIDENTIAL TREATMENT: PROTECTING AGAINST BURNOUT AND COMPASSION FATIGUE

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

Degree of

DOCTOR OF PHILOSOPHY

By

KATIE MARIE CHADWICK
Norman, Oklahoma
2014

Downloaded from SHAREOK. Persistent Handle URL: https://hdl.handle.net/11244/10475

MANAGING THE MINEFIELD OF RESIDENTIAL TREATMENT: PROTECTING AGAINST BURNOUT AND COMPASSION FATIGUE

A DISSERTATION APPROVED FOR THE
DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

BY

_____
Dr. Melissa Frey, Chair

_____
Dr. Denise Beesley

_____
Dr. Jody Newman

_____
Dr. Lara Mayeux

_____
Dr. Nicole Judice-Campbell

© Copyright by KATIE MARIE CHADWICK 2014
All Rights Reserved.

For Mark

I would like to dedicate my dissertation in loving memory of Mark. Thank you for being the first person who encouraged me to pursue psychology and for truly believing, long before I ever did, that I would one day be "Dr. Katie." I wish you were here to see this day. I will always remember your story and pray the significance of my work never loses its salience.

Acknowledgements

First and foremost, I would like to give honor and praise to my Heavenly Father, who called and equipped me for this purpose. "But he said to me, 'My grace is sufficient for you, for my power is made perfect in weakness.' Therefore I will boast all the more gladly about my weaknesses, so that Christ's power may rest on me" - 2 Corinthians 12:9. This would not have been possible without His grace. I pray that the way I live my life and conduct my work brings Him glory and resembles His love.

I want to specially acknowledge and give heartfelt appreciation to the incredible faculty of the OU Counseling Psychology doctoral program: Dr. Lisa Frey, Dr. Denise Beesley, and Dr. Jody Newman. You three women are like the Charlie's Angels of this field in my mind and heart. I will always admire how you have modeled the utmost professionalism, hard work, integrity, respect, and overall excellence in the way you conduct yourselves, even in the midst of difficulty and conflict. Specifically, Dr. Frey, my fearless advisor, thank you for always supporting and encouraging my vision. The safety and trust you created in our relationship through your commitment, openness, and willingness to share gave me the freedom and supported autonomy to grow to my full potential. You have taught me the true power and great responsibility of being an advocate and voice for social justice that I will carry forward with me in everything I do. Dr. Beesley, your genuine encouragement, understanding, and care for each and every one of your students is immeasurable and has deeply impacted me. I constantly strive to model myself after your relatable nature that uplifts and empowers everyone you come into contact with. Dr. Newman, the manner in which you treat each student with the utmost respect and dignity, while upholding high (sometimes intimidating)

standards, has challenged me to new levels of growth I didn't know possible. Your interpersonal modeling and investment in me has permanently and positively shaped me, both personally and professionally, for which I am eternally grateful.

To my awesome supporting cast and outside committee members, Dr. Lara Mayeux and Dr. Nicole Judice-Campbell, I want to sincerely express my gratitude for your commitment to my success. Your constant support, encouragement, ideas, and optimism were immensely appreciated. It has been my true joy to work with each of you! A very special thanks to Jean Carpenter-Williams and Dr. Andrew Schneider-Munoz; your efforts made this research possible. Thank you so much for your enthusiasm, encouragement, time, and effort: data collection would not have been possible without you two! Your commitment to the field is unmatched and I look forward to continued collaboration with you both in the future!

I want to extend a quick, but sincerely heartfelt shout out to my wonderful colleagues and the best ever doctoral cohort; you all made the hardest, most intense parts of graduate school not only more bearable, but actually fun! I especially want to acknowledge my colleague and friend, Jenny Bendure, for her companionship and support. I have learned so much from you through our relationship and cannot express the extent of my appreciation for all of your support and encouragement. I can't wait until we both walk together into our new roles as psychologists!

Finally, to my amazing family and friends that have traveled this long journey with me, I could not have done it without you. Mom: thank you for always being interested in my research and willing to stay up all night, if necessary, just to proofread my papers. Dad: thank you for instilling in me a love for learning, sharpening my

critical reasoning through your constant Socratic questioning, and teaching me to always believe in myself. I thank my big brother Scott for always being a role model I could count on to pave the way for me; your footsteps were large and steadfast. To my dearest lifelong friends, Katy and Angie, many people have known me for parts of my journey, but you two have always been there from the beginning and have seen it all, yet still love me! Thank you! Finally, to my loving husband, thank you for enduring with me, even in the desert of Oklahoma, to help me pursue my dream. This is a shared achievement for us all.

Table of Contents

Acknowledgements iv

List of Tables ix

Abstract x

Chapter 1: Introduction 1

Background of the Problem 2

Statement of the Problem 6

Chapter 2: Review of the Literature 7

Compassion Fatigue 7

Burnout 8

Self-Care Behaviors 11

Vicarious Resilience 13

Perceived Organizational Support 16

Impact of Self-Care Behaviors, Perceived Organizational Support, and Vicarious Resilience on Compassion Fatigue and Burnout 20

Research Questions 22

Chapter 3: Methods 23

Participants 23

Measures 24

Professional Quality of Life Scale (ProQOL 5; Stamm, 2009). 25

Survey of Perceived Organizational Support (SPOS; Eisenberger et al., 1986). 26

Self-Care Assessment Worksheet (SCAW; Saakvitne & Pearlman, 1996). 28

Relational Health Indices (RHI; Liang et al., 2002). 29

Posttraumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996)..... 30
Procedure..... 31
Data Analysis..... 33
Chapter 4: Results..... 34
Multiple Regression Models..... 35
Ancillary Analyses..... 36
Chapter 5: Discussion..... 37
Limitations of the Study..... 43
Areas for Future Research..... 44
Conclusion..... 45
References..... 46
Appendix A: Professional Quality of Life Scale..... 54
Appendix B: Survey of Perceived Organizational Support..... 55
Appendix C: Self-Care Assessment Worksheet..... 56
Appendix D: Relational Health Indices..... 57
Appendix E: Posttraumatic Growth Inventory - Revised..... 58
Appendix F: Demographic Questionnaire..... 59

List of Tables

Table 1: *Means, Standard Deviations, and Intercorrelations of Variables of Interest* .. 60

Table 2: *Multiple Regressions Analyses for Variables Predicting Risk of Burnout and Risk of Compassion Fatigue* 61

Abstract

The purpose of this study was to expand on, and attempt to generalize, findings from a previous study (Chadwick & Frey, 2013) by exploring the impact of self-care behaviors, including relationship quality; levels of perceived organizational support; and levels of vicarious resilience on risk of compassion fatigue and risk of burnout in a national sample of professionals working with youth in residential treatment or detention facilities. Participants included 88 professionals between the ages of 18-77 who worked directly with youth in long-term residential treatment or detention facilities. Two multiple regression models were used to analyze the data, with self-care behaviors, relationship quality, perceived organizational support, and vicarious resilience as the predictors for (a) risk of compassion fatigue, and (b) risk of burnout. Findings from the study indicated increased levels of perceived organizational support and self-care behaviors predicted significantly lower risk of compassion fatigue and burnout. These findings can further inform administrators' understanding of risk and protective factors associated with compassion fatigue and burnout. In addition, this information can be useful in improving staff training and development programs in an effort to further protect against and reduce risk of compassion fatigue and burnout among staff and ultimately lower rates of turnover within agencies.

Chapter 1: Introduction

The treatment of children and adolescents with severe emotional and behavioral disturbances is extremely challenging and often requires an intensive, multidimensional, residential treatment approach due to the youth's extensive trauma and/or abuse histories (i.e., physical, sexual, or emotional abuse and/or neglect), aggressive behaviors (i.e., violence toward others and/or self-injurious behaviors), difficulties functioning in school and the community (e.g., drug abuse, family dysfunction, and/or problems with the juvenile justice system), and often multiple failed living placements (i.e., foster or group homes) (Foltz, 2004). Residential treatment facilities frequently serve as a last resort for children in the custody of the Department of Human Services (DHS) whose problems are too severe for placement in foster homes due to the severity of their emotional and behavioral difficulties (Lieberman, 2004). In 2012, this included approximately 58,001 children under the age of 18 (U.S. Department of Health and Human Services, 2013).

According to Savicki (2002), professionals working with youth in residential facilities are expected to have a vast knowledge of child development and management techniques and have continuous contact with clients, during which they must deal with behavioral issues in the moment. These professionals have a difficult and emotionally taxing job, often working with children and youth with behavioral problems because of the severe abuse and trauma they have experienced (Foltz, 2004). As a result of the high demands of the work environment and their work with trauma survivors, direct care staff and other helping professionals in these settings have an increased risk for experiencing *compassion fatigue* (i.e., symptoms of traumatic stress as a result from

exposure to the traumatic experiences of others, also referred to as *vicarious traumatization* or *secondary traumatic stress*) and *burnout* in the workplace (Stamm, 2002).

Residential treatment and detention facilities for youth and children often have high turnover rates and difficulty staying fully staffed (Connor et al., 2003). This is most likely due to the highly stressful and demanding job requirements (Hook & Rothenberg, 2009). Difficulties with staff retention and high turnover are major problems in residential settings because they can create high training costs and often undermine the treatment of residents by aggravating their symptoms related to past trauma, loss, and instability (Connor et al., 2003). This is especially problematic due to the continued demand on residential treatment facilities to "do extraordinarily difficult work with extremely limited resources" (Lieberman, 2004, p. 279).

Background of the Problem

The increased risk for staff to experience burnout and compassion fatigue as a result of their work further contributes to the difficulties faced by residential treatment and correctional facilities (Savicki, 2002). Eastwood and Ecklund (2008) described how individuals who work with youth in these settings may be at increased risk for negative psychological effects because of some unique aspects of their work, including "the emotionally intense and prolonged interactions with clients, long work hours, and limited training" (p. 106). Symptoms of compassion fatigue and burnout can be extremely distressing and have far reaching impact on the individual, contributing to mood changes, sleep disturbances, and decreased concentration or focus (Killian, 2008). This not only impacts their functioning at work, but also their personal lives.

McCann and Pearlman (1990) originally used the term vicarious trauma, referring to compassion fatigue, and defined it as the experience of traumatic stress symptoms resulting from exposure to the traumatic experiences of others. Compassion fatigue has been described as a product of factors not only within the individual, but also as a result of contextual and situational factors present in the environment in which one works (Dunkley & Whelan, 2006; McCann & Pearlman, 1990; Pearlman & Saakvitine, 1995). Symptoms can include: difficulty sleeping, avoidance of places or things that serve as reminders of the trauma, an increased startle response, recurrent obtrusive thoughts about or images of the trauma, depressed mood, and anxiety (Figley, 1995; Stamm, 2005). In contrast, burnout has been defined as "a syndrome composed of emotional exhaustion, depersonalization, and reduction of personal accomplishments" (Jenaro, Flores, & Arias, 2007, p. 80). Specific symptoms of burnout can include feelings of hopelessness, difficulties dealing with work and performing work tasks effectively, and feeling as though one's work efforts make no difference (Stamm, 2005).

Symptoms of burnout and compassion fatigue are experienced negatively by the individual, but also greatly impact the organization in which the individual works. For example, burnout has been found to be related to decreased job satisfaction and increased intentions to quit (Lee, Lim, Yang, & Lee, 2011), as well as poor job performance, increased absenteeism, and high turnover (Kahill, 1988), all of which negatively impact the organization. In addition, youth who have experienced multiple failed living placements, severe trauma, and abuse frequently have difficulty establishing the trust necessary to foster healing changes during treatment and can be

especially reactive and negatively impacted by organizational instability in treatment staff (Connor et al., 2003). Therefore, it is particularly important in these settings to focus on preventative and protective strategies for staff burnout and compassion fatigue.

According to Eastwood and Ecklund (2008), previous research has focused primarily on *self-care* practices as a conceptual framework for the "prevention and amelioration" (p. 106) of compassion fatigue and burnout in helping professionals. Self-care behaviors are typically conceptualized as activities that enhance positive affect and mental stability. They can include behaviors such as striving for balance, maintaining good health, and engaging in spiritual activities (Jenaro et al., 2007; Keidel, 2002; Radey & Figley, 2007). In addition, seeking out and utilizing social resources, including fostering supportive social and professional relationships, is an important part of self-care (Keidel, 2002). Social support and self-care has been presented in the literature as not only ameliorative, reducing symptoms of compassion fatigue and burnout (Boscarino, Figley, & Adams, 2004), but also protective, in that its absence appears to complicate symptoms of compassion fatigue and burnout (Figley, 1995). However, while self-care strategies may be an important protective component, Inbar and Ganor (2003) argued for the importance of interventions aimed at both the individual and professional or organizational levels to support individual resilience and protect helping professionals from experiencing the negative effects of burnout and compassion fatigue.

Vicarious resilience is an additional protective individual factor proposed in the research literature. Hernandez, Gangsei, and Engstrom (2007) first introduced the term vicarious resilience to describe a phenomenon they noticed when some therapists

working with trauma survivors were able to draw inspiration and hope from their clients. This positive transformative process of vicarious resilience was found to be associated with decreased risk for vicarious traumatization (i.e., compassion fatigue) and burnout (Engstrom, Hernandez, & Gansei, 2008; Horrell Holohan, Didion, & Vance, 2011).

Horrell et al. (2011) emphasized the need for organizational support in addition to individual social support and self-care behaviors, as an important component for increasing vicarious resilience and reducing compassion fatigue and burnout. *Perceived organizational support* refers to an employee's perceptions of support from within the organization in which they work (Eisenberger, Huntington, Hutchison, & Sowa, 1986). It has been found to be positively related to reduced absenteeism (Eisenberger et al., 1986), and negatively related to increased burnout, vicarious trauma, ethical conflicts, and isolation (Hall, Sedlacek, Berenbach, & Dieckmann, 2007). Additionally, perceived organizational support has been found to be important in mental health care settings, contributing to positive outcomes at both the organizational and individual level (Hall et al., 2007). Some research has suggested that perceived organizational support may facilitate other important individual factors, such as self-care behaviors and vicarious resilience (Horrell et al., 2011).

Overall, the literature seems to support the importance of a multifocal intervention strategy, targeting both the organization and individual, for better preventing and protecting against compassion fatigue and burnout. There has, however, been no research examining all of these relationships in one model.

Statement of the Problem

While the professional literature base is full of information and studies about compassion fatigue and burnout in traditional helping professions (e.g., nursing, counseling, social work; Maslach & Jackson, 1984), very little research has addressed professionals working specifically with child victims of trauma and abuse. Even less research has focused on residential treatment and correctional settings for youth (Eastwood & Ecklund, 2008). In order to address the negative impacts of burnout and compassion fatigue on professionals working in residential treatment or detention/correctional facilities, the present study sought to examine potential protective factors, including self-care behaviors and quality of relationships, perceived organizational support, and vicarious resilience, and their predictive relationships with risk of burnout and compassion fatigue.

Chapter 2: Review of the Literature

Compassion Fatigue

The idea that individuals may experience symptoms of trauma through secondary exposure (i.e. without any firsthand experience of trauma) has been around since McCann and Pearlman (1990) described the experiences and reactions of therapists who worked with victims of trauma. Since their initial description of this phenomenon, which can occur when individuals experience posttraumatic stress symptoms after being exposed to the traumatic experiences of others, it has been given many names, including vicarious traumatization (McCann & Pearlman, 1990), secondary traumatic stress (Figley, 1995), compassion fatigue (Bride, Radey, & Figley, 2007), and *empathic stress disorder* (Weingarten, 2003). Additionally, Wilson and Lindy (1994) used the term *empathic strain* to describe a similar construct within the conceptual context of countertransference literature. The terms vicarious trauma, secondary traumatic stress, and compassion fatigue have been used most consistently throughout the literature and, according to Sexton (1999), are frequently used interchangeably. However, some authors have sought to differentiate the three terms and have argued that the descriptive quality of the terms themselves and their inherent and/or implied meanings differ slightly, creating confusion (Dunkley & Whelan, 2006).

Attempting to incorporate all of these definitions, Bride et al. (2007) broadly defined compassion fatigue as "the negative effects on clinicians due to work with traumatized clients" (p. 156). The negative effects of compassion fatigue refer to a variety of different symptoms, including difficulty sleeping, avoidance of places or things that serve as reminders of the trauma, an increased startle response, having

recurrent obtrusive thoughts about or images of the trauma, depressed mood, and anxiety (Figley, 1995). Several researchers (e.g., Dunkley & Whelan, 2006; McCann & Pearlman, 1990; Pearlman & Saakvitine, 1995) have argued for the conceptualization of compassion fatigue as a product not only of individual factors, but also contextual and situational factors present in the environment in which one works.

Regardless of the interchangeable terminology used by authors throughout the literature, research has consistently indicated there are commonly experienced psychological impacts of working with trauma victims that negatively impact the individual, as well as the organizations in which they work and their clients (Sexton, 1999). While the terms and definitions have at times slightly differed, the overarching conceptual framework has remained constant and the compassion fatigue subscale of the Professional Quality of Life Scale has been the instrument consistently used throughout the literature to measure this construct (Stamm, 2009). Therefore, for the purposes of this study, the term compassion fatigue was used by the author in order to remain consistent with the instrumentation. It should be noted that when referencing previous literature, however, the terminology used remained consistent with the cited work.

Burnout

While risk of compassion fatigue has been found to be strongly related to risk of burnout for residential treatment center workers (Eastwood & Ecklund, 2008), the two constructs differ significantly in terms of symptomology. Despite being a widely used term in the research literature and by the lay person in work environments, as well as

often being highly endorsed as experienced by employees, individuals can have dramatically different definitions for the term burnout (Maslach & Schaufeli, 1993).

Freudenberger (1974) first introduced the term burnout to describe a phenomenon he observed among healthcare workers that included symptoms of both physical and emotional exhaustion. According to Freudenberger (1975), burnout is not exclusive to helping professionals, nor isolated to the worlds of the workplace, business, and industry. It is rather a universal phenomenon in which one reaches their limit with whatever activity they may be doing and becomes "inoperative for all intents and purposes" (p. 73), although the degree and symptomology varies widely among people. Despite having the potential to be experienced universally among a wide variety of settings, people, and activities, Freudenberger (1975) argued that burnout may be more prevalent and problematic for helping professionals due to the increased demands of having to contend with and balance "the ills of society, with the needs of the individuals who come to [them] for assistance, and with [their] own personality needs" (p. 73). In 1977, Freudenberger further described burnout as an "occupational hazard" for child care workers and direct care workers due to the pressures on workers, across settings, to be in the "'front lines' of crisis intervention" (p. 90).

More recently, Jenaro et al. (2007) similarly defined burnout in the workplace as "a syndrome composed of emotional exhaustion, depersonalization, and reduction of personal accomplishments" (p. 80). According to Stamm (2005), symptoms of burnout have a gradual onset and include feelings of hopelessness, difficulties dealing with work and performing work tasks effectively, and feeling as though one's work efforts make no difference. Lee et al. (2011) stated that burnout is a universal phenomenon in which

the precursors and effects seem to differ across various fields depending upon the nature of the occupation and the job-related duties. Though present in nearly all occupations, burnout has been found to be especially prevalent in helping professions, such as social work, counseling, and nursing (Maslach & Jackson, 1984).

Jenaro et al. (2007) cited many potential contributors to burnout among human service practitioners, including low salaries, demanding schedules, varying work shifts/hours, low social recognition, lack of financial resources, role ambiguity, and difficult client behaviors. In their professional roles and occupational environments, individuals working with youth in residential settings frequently experience all of these conditions, making them increasingly susceptible to burnout. Burnout has also been found to lower job satisfaction and increase an employees' intentions to quit (Lee et al., 2011), and has been found to be correlated with poor job performance, absenteeism, and high turnover (Kahill, 1988). Savicki (2002) described burnout among youth and child care workers as a major contributing factor to what he called "the revolving door phenomenon of worker turnover" (p. 8), in which residential treatment and correctional facilities lose high quality employees and are left constantly needing to recruit and train new ones:

> Child and youth care work, as an entry level position, is often populated by young, idealistic workers who want to try their hand at helping children and youth. With little or no training, low salaries, and insufficient supervision and support, these workers are soon overwhelmed by the intensity of the work. They find it difficult to separate themselves from the pain, anger, and anxiety of their charges. They expect to make major improvements in the lives of their clients, but find themselves frustrated not only by the severity of the disturbance they are exposed to, but also by their lack of skill and knowledge in fashioning a positive outcome. (p. 8)

This revolving door phenomenon caused by burnout creates additional problems for youth residential treatment and correctional facilities, which are required to maintain a certain staff to resident ratio (Lieberman, 2004). Frequently facilities have difficulty retaining their staff and regularly lose staff just as they become well trained, which leaves their remaining, often ill-equipped, employees faced with even more responsibility due to staff shortages (Savicki, 2002). This instability created by high turnover further undermines client treatment by perpetuating rather than improving trust and attachment issues (Connor et al., 2003).

Self-Care Behaviors

Given the possible negative psychological effects of working as a direct care staff in these settings, and the far reaching adverse impacts on not only the individual employee but also the organization and the client, it is important that research focus on ways of preventing and reducing the effects of compassion fatigue and burnout. One consistently identified means of mitigating burnout and compassion fatigue for helping professionals involves the concept of self-care (e.g., Bourassa, 2009; Newell & MacNeil, 2010; Smith, 2007). Self-care has been identified as an essential component among mental health professionals in effectively managing the professional hazards inherent in helping professions and has recently sparked the proliferation of self-help books and articles (Wise, Hersh, and Gibson, 2012). Engaging in ongoing self-care efforts for the promotion of ones' well-being has been repeatedly discussed throughout the literature as an ethical imperative for mental health professionals, in that it is a strategy for maintaining competence and protecting against the negative psychological

effects of helping (e.g., Barnett, Baker, Elman, & Schoener, 2007; Barnett, Johnston, & Hillard, 2006; Wise et al., 2012).

Self-care as a general concept transcends the mental health field to medical helping professions, such as nursing, and is broadly defined as "activities performed by individuals or communities to achieve, maintain, or promote maximum health" (Lipson & Steiger, 1996, p. 16). According to Richard and Shea (2011), within medical professions self-care broadly refers to "individual responsibilities for healthy lifestyle behaviors required for human development and functioning, as well as those activities required to manage acute and chronic healthcare conditions" (p. 256). Historically, there has been a discrepancy between research related to self-care and the actual practice of self-care behaviors, in that it has been widely practiced by professionals across the health care and human service professions, but was initially absent in the literature (Gantz, 1990). In his review of the limited early literature on self-care, Gantz (1990) highlighted several similarities in the conceptualization of self-care across six different professions (i.e. medicine, nursing, psychology, health education, sociology, and public health), including: the belief that the practice of self-care is bound by culture and situation; engaging in self-care requires the capacity to make choices and act freely; self-care behaviors are influenced by many different individual factors, including one's knowledge, skills, values, locus of control, level of motivation, and efficacy; and self-care is conceptually focused on the aspects of one's well-being and health care that are within the individual's control.

According to Barofsky (1978), within the mental health profession self-care conceptually dates as far back as Freud's egoistic model of social control, which

conceptualized self-care as growth producing natural behaviors driven by instinctual and unconscious forces to preserve oneself. More recently, self-care behaviors have been typically conceptualized as activities that enhance positive affect and mental stability, and can include striving for balance; maintaining good health; seeking out and utilizing social resources, including supportive relationships; and engaging in spiritual activities (Jenaro et al., 2007; Keidel, 2002; Radey & Figley, 2007).

Saakvitne and Pearlman (1996) categorized self-care behaviors along six different dimensions: physical behaviors, psychological behaviors, emotional behaviors, spiritual behaviors, workplace or professional behaviors, and behaviors promoting balance in one's life and work. In addition, Newell and McNeil (2010) emphasized the importance of individuals seeking out and utilizing supportive relationships in both their personal lives and professional settings as a means of self-care for preventing and minimizing the negative effects of working as a helper. Bober and Regehr (2006) found that helping professionals, including social workers, psychologists, nurses, and physicians, all shared the belief that self-care behaviors and leisure activities are useful coping strategies, but had very little time in their schedules for these types of coping behaviors.

Vicarious Resilience

Through their work to manage symptoms of vicarious traumatization with therapists of torture survivors, Hernandez et al. (2007) noticed a phenomenon in which some of the therapists were able to draw inspiration and hope from their clients. Specifically focused on the experiences of therapists who work with these trauma survivors, they noted a reciprocal process occurring in which, as the therapist focused

on facilitating resiliency among their clients, they in turn learned about coping with their own adversity. They referred to this process as vicarious resilience and defined it as a resiliency process that can occur as a result of working with survivors of trauma and is characterized by a positive transformative effect within the therapist in response to the client's resiliency (Hernandez et al., 2007). In 2010, Hernandez, Engstrom, and Gangsei further explained vicarious resilience as a process characterized by positive changes in attitudes, emotions, and behaviors, including "(1) reflecting on human beings' capacity to heal; (2) reaffirming the value of therapy; (3) regaining hope; (4) reassessing the dimensions of one's own problems; (5) understanding and valuing spiritual dimensions of healing; (6) discovering the power of community healing; and (7) making the professional and lay public aware of the impact and multiple dimensions of violence by writing and participating in public speaking forums" (pp. 72-73).

The term *posttraumatic growth* was introduced by Tedeschi and Calhoun (1996) when they developed the Posttraumatic Growth Inventory to measure the positive outcomes and changes experienced by survivors in the aftermath of traumatic events. According to Tedeschi and Calhoun (2004), the aftermath of traumatic events can be a confusing time for survivors that may lead to the questioning and reformulating of fundamental assumptions and core beliefs, which may not always be experienced negatively and can lead to positive changes or growth. Tedeschi (1999) defined posttraumatic growth as the positive changes "in perception of self, philosophy of life, and relationships with others in the aftermath of events that are considered traumatic" (p. 321) reported by some individual survivors. In contrast to vicarious resilience, posttraumatic growth was initially conceptualized and studied as a phenomenon

occurring with individuals who experienced traumatic events firsthand. However, according to Arnold, Calhoun, Tedeschi, and Cann (2005), individuals working with trauma survivors not only can experience negative effects, such as vicarious trauma, as a result of their work, but also vicarious posttraumatic growth. Vicarious posttraumatic growth has been conceptualized as consistent with vicarious resilience (Arnold et al., 2005).

While vicarious resilience is a relatively new term specifically referencing work with trauma survivors, this idea (i.e., that helping work may also yield some positive benefits) is not new. In 1996, Figley and Stamm introduced a similar term, *compassion satisfaction.* According to Stamm (2002, 2005), compassion satisfaction refers to a sense of pleasure derived from one's work as a helper and feeling efficacious in one's ability to perform at work, which may include a sense of joy in helping others, positive feelings about one's work environment and colleagues, or feeling able to make a positive contribution to one's workplace and/or community through work as a helper.

The terms vicarious resilience, vicarious posttraumatic growth, and compassion satisfaction tend to be used interchangeably in the literature (Dunkley & Whelan, 2006). Therefore, in this study, the term vicarious resilience was used and defined in accordance with Hernandez et al.'s (2010) description of the positive changes in attitudes, emotions, and behaviors that occur as a result of witnessing the posttraumatic growth or resiliency in trauma survivors. In referencing prior works, however, the terminology used remains consistent with the original author's verbiage.

Perceived Organizational Support

The idea that workplace support, as a vaguely defined construct, may play an important role in promoting well-being and preventing or reducing the impact of negative psychological experiences has also been addressed in the literature. For example, Garmezy (1991) noted the importance of external sources of professional support, such as an individual mentorship relationship or ties to a larger supportive community or agency, as a consistent protective factor contributing to resilience. More specifically, perceived organizational support is a construct that refers to employees' perceptions of support from within the organization in which they work (Eisenberger et al., 1986).

Organizational support theory has roots in social exchange theory (Emerson, 1976; Homans, 1958) in which employment can be conceptualized as the exchange of labor and loyalty for wages, benefits, and social esteem, therefore the fulfillment of mutual obligations (e.g., Organ, 1990; Shore & Barksdale, 1998). Levinson (1965) originally described this reciprocal process or exchange (termed *reciprocation*) as occurring at both a conscious and subconscious level between an employee and the organization in which one works, and that involves both parties making efforts to fulfill the expectations and demands of the other. According to Levinson, this reciprocation has the potential to facilitate psychological protection and support, psychological growth and stimulation, and mastery of skills for employees, which in turn yields positive benefits for the organization, including the protection, reputation, and production that come from the employee's support and investment. However, when

reciprocation by either party is inadequate, the process fails and results in negative outcomes for both the organization and the employee (Levinson, 1965).

Shore and Shore (1995) described how engaging in this reciprocal exchange agreement with employers comes with a high level of risk for the employee. They noted several barriers to reciprocity that can negatively impact employees, including their inherent position of lesser power within the relationship, the natural delays that often occur in the fulfillment of the employer's obligations, and the complicated, often hierarchical, process of making decisions regarding promotions and raises that involve the influence of multiple agents within the organization. Changes in supervisory staff in environments with high turnover may further perpetuate this risk for employees and contribute to decreased perceptions of organizational support as new supervisors may not be aware of previous promises made or the past performance of the employee (Shore & Shore, 1995). Additionally, Levinson (1965) described the natural tendency of employees to attribute the action or inaction of individual agents within an organization as representative of the organization as a whole. This tendency can be problematic for employees in residential facilities where many supervisors lack the power to actually carry out the exchange agreement without depending on others higher up in the organizational hierarchy.

Employee commitment, investment, and affective attachment to their work organizations is widely valued by employers (Rhoades & Eisenberger, 2002). Greater employee commitment is associated with positive gains not only for the organization, but also for the employee, including increased job satisfaction, improved relationships with coworkers, and better wages and benefits (Mowday, Steers, & Porter, 1979).

Employees' level of commitment to the organization is frequently referred to in the literature as *organizational commitment* and has been found to predict a wide range of employee behaviors, including performance, absenteeism, and turnover (e.g., Mathieu & Zajac, 1990; Somers 1995). In addition, James and Tetrick (1986) demonstrated a reciprocal, causal relationship exists between one's perceptions of one's job and one's actual job satisfaction.

Eisenberger et al. (1986) were interested in this reciprocal process and sought to investigate how employees constructed inferences regarding their organizations' level of commitment and how those perceptions then contributed to the employee's level of commitment to the organization. They termed this construct perceived organizational support and originally described it as the global beliefs held by employees concerning the extent to which the organization they work for values them and the work they do for the organization, and cares about their overall well-being (Eisenberger et al., 1986). Although similar and highly related to organizational commitment, perceived organizational support has been found to better predict employee performance and engagement in extra-role behaviors that promote the goals of the organization (Shore & Wayne, 1993). Additionally, according to Shore and Wayne (1993), employees are more likely to engage in reciprocal behaviors when they feel supported and valued by the organization.

Distinct from the actual level of support and value the organization has for the individual employee, perceived organizational support refers to the employee's subjective experience of feeling valued and supported by the organization (Eisenberger, Fasolo, & Davis-LaMastro, 1990). Given that it is dependent upon the attribution of the

individual, one's perceptions of support from their organization may be influenced by many things, including external factors such as pay, job title or rank, level of influence on the organization and its policies, feelings of satisfaction in one's job or job enrichment, and the frequency of statements of praise or approval and their judged sincerity (Blau, 1964). Rhoades and Eisenberger (2002) highlighted that perceived organizational support also includes a belief and assurance that help is available and that the organization will come to one's aid if needed, which is especially important in the stressful, high-risk work environments characteristic of residential treatment and correctional facilities.

Perceived organizational support has been found to be especially important in mental health care settings, influencing outcomes not only for the organizations and their employees, but also the patients being treated (Hall et al., 2007). When perceived organizational support is high, everyone benefits, but when perceived organizational support is low, everyone suffers. According to Hall et al. (2007), the impact of perceived organizational support, or lack of it, on the clientele served may be even more pronounced for organizations serving minority or stigmatized client populations. This may be true because clients from minority groups often experience more complex psychosocial issues as a result of being stigmatized and experiencing limited access and multiple barriers to treatment. Therefore, Hall et al. argue that clients from minority or stigmatized groups may be even more susceptible to the reduced efficacy of service providers struggling within an organization from which they receive little support.

Impact of Self-Care Behaviors, Perceived Organizational Support, and Vicarious Resilience on Compassion Fatigue and Burnout

Throughout the literature, the concept of self-care is consistently discussed and recommended as a preventative and ameliorative strategy targeting the negative psychological effects of helping. For example, engaging in specific self-care behaviors, such as having a hobby, reading for pleasure, and spending time with supportive people, has been found to reduce the risk of compassion fatigue (Eastwood & Ecklund, 2008) and, conversely, poor self-care has been found to be one of the major contributing factors to compassion fatigue (Figley, 1995). Similarly, Eastwood & Ecklund (2008) found that individuals who feel they are successfully engaging in self-care behaviors are less at risk for both burnout and compassion fatigue. Bourassa (2009) recommended that helping professionals implement self-care strategies to prevent compassion fatigue and suggested that compassion fatigue, if untreated, may lead to burnout.

Radey and Figley (2007) suggested that the absence of self-care behaviors may contribute to worker turnover and burnout, whereas the presence of self-care behaviors appears to increase compassion satisfaction or vicarious resilience, and argued that more research is needed to further examine the apparent relationships among these variables. Despite being a relatively new construct in counseling psychology, the idea that vicarious resilience may reduce the negative impact of working with trauma survivors has received some attention and support in the research literature. For example, Engstrom et al. (2008) found that raising one's awareness to the positive growth processes of vicarious resilience may help counteract compassion fatigue in professionals working with survivors of trauma. Other researchers have explored a

more comprehensive model, suggesting that both individual and organizational factors may be important in combating the negative consequences of helping. In their study of clinicians working with traumatized veterans, Horrell et al. (2011) emphasized the importance of organizational factors such as support and openness, as well as individual factors such as social support and self-care, in increasing vicarious resilience and reducing vicarious trauma and burnout.

Horrell et al. (2011) highlighted the importance of social support and delineated the construct as both an individual factor that one may nurture in personal relationships outside of the work context, but also as an organizational factor that can be fostered by employers in work environments. This is consistent with Boscarino et al.'s (2004) research, which found that supportive work environments were associated with reduced compassion fatigue and burnout in helping professionals. Conversely, lack of support in the workplace and at home has also been found to complicate symptoms of compassion fatigue in clinicians (Figley, 1995). Additionally, Killian (2008) found that receiving support from others and engaging in self-care behaviors were both important factors for reducing compassion fatigue and burnout in professionals working with survivors of trauma.

The research regarding the negative psychological impacts of working as a helping professional may sometimes be discouraging for organizations and employers whose bottom-line and budget is greatly impacted by turnover resulting from high rates of burnout and compassion fatigue. Furthermore, much of the research on burnout and compassion fatigue has focused on individual strategies and factors outside of the organization's or employer's control. However, as Horrell et al. (2011) suggested,

individual factors may represent only one piece of a more complex puzzle in that some research also points to an organizational focus for interventions. For example, Najjar, Davis, Beck-Coon, and Doebbeling (2009) found that organizations can reduce the negative impacts of compassion fatigue and burnout in nurses by promoting stable and supportive work environments. Perception of organizational support has been found to reduce absenteeism in employees (Eisenberger et al., 1986), which is associated with burnout (Kahill, 1988). Recently, perceived organizational support was found to have a negative linear relationship with ethical conflicts, burnout, vicarious trauma, and isolation among health care providers working with survivors of military sexual trauma (Hall et al., 2007).

Based on the theoretical interrelatedness of the constructs discussed above, this study further explored the relationships among the constructs and their potential predictive relationships. Therefore, the purpose of this study was to explore the impact of self-care behaviors, including relationship quality; levels of perceived organizational support; and vicarious resilience on predicting risk of compassion fatigue and risk of burnout in professionals working directly with youth in residential treatment or correctional facilities.

Research Questions

The research questions for the study were: (a) Do perceived organizational support, self-care behaviors, supportive relationships, and vicarious resilience significantly predict risk of burnout and risk of compassion fatigue? and (b) Which individual predictors appear most important in preventing burnout and compassion fatigue?

Chapter 3: Methods

Participants

Participants were professionals working directly with youth in residential treatment and correctional facilities. Specifically, eligible participants had regular direct contact (i.e., direct intervention with residents every work day) involving care-giving with youth residents as part of their primary professional role (e.g., direct care staff, direct care supervisors, mental health professionals, social workers, case workers, etc.). A total of 94 participants agreed to participate in the study and completed the online survey. Incomplete data from 3 participants was excluded from the analysis and an additional 3 participants were excluded because they lived outside of the United States or Canada, leaving a total of 88 participants (64 females, 23 males, and 1 participant who chose not to specify gender) included in the final analysis. The mean age of the sample was 41 (*SD* = 12.55) years and participants ranged in age from 21-77 years old. Participants were 82% (*n* = 72) EuroAmericans/Caucasian, 7% (*n* = 6) Hispanic/Latina/Latino, 4% (*n* = 4) African/African American, 2% (*n* = 2) American Indian/Native American, 1% (*n* = 1) Biracial/Multiracial, and the remaining 3% (*n* = 3) selected the "Other" category. The majority of participants reported completing a Bachelor's degree (36%, *n* = 32) or a Master's degree (36%, *n* = 32) and all participants reported having completed the equivalent of high school or higher: 10% (*n* = 9) completed some college, 2% (*n* = 2) completed an Associate's degree, 8% (*n* = 7) completed a completed some graduate coursework, 6% (*n* = 5) completed a Doctoral degree, and 1% (*n* = 1) completed a professional degree. Reported income levels for

the sample ranged from between $5,000-$9,999 to over $50,000 and the largest percentage of participants reported an income of over $50,000 (40%, *n* = 35).

Regarding the work environment, participants worked at eight different types of facilities: non-profit treatment center (32%, *n* = 28), treatment focused facility (24%, *n* = 21), group home (16%, *n* = 14), detention/correctional facility (10%, *n* = 9), faith-based treatment center (5%, *n* = 4), shelter/emergency shelter (8%, *n* = 7), transitional living facility (3%, *n* = 3), and other (2%, *n* = 2). The length of employment in the field for participants ranged between zero to six months and over 10 years, with the majority of participants (56%, *n* = 49) working in the field for over 10 years. Regarding job title/position, participants were 26% (*n* = 23) direct care/program staff; 21% (*n* = 18) direct care/program staff supervisors; 16% (*n* = 14) mental health professional/counselor/therapists; 16% (*n* = 14) directors; 7% (*n* = 6) case manager/case workers; and 15% (*n* = 13) other professionals. Participants worked in settings across the United States (U.S.) and Canada. U.S. participants were from four different geographic regions: West (35%, *n* = 30); Midwest (25%, *n* = 22); South (18%, *n* = 15); Northeast (7%, *n* = 6). Three percent (*n* = 2) did not report geographic location.

Measures

Measures included the Professional Quality of Life Scale, Version Five (ProQOL 5; Stamm, 2009), the Survey of Perceived Organizational Support (SPOS; Eisenberger et al., 1986), the Self-Care Assessment Worksheet (SCAW; Saakvitne & Pearlman, 1996), the Relational Health Indices (RHI; Liang et al., 2002), the Posttraumtic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996), and a brief demographic questionnaire. The demographic questionnaire consisted of questions

including basic demographic information (i.e., age, gender, ethnicity, education level, income level), as well as questions about the type of adolescent residential facility worked in (i.e., detention/correctional, treatment focused, group home, faith-based), the gender of residents worked with, current length of employment, overall length of employment in the field, the location of the residential facility (i.e., rural, urban, suburban), and the degree of support participants experience from other co-workers. No identifying information was included on the demographic survey or any of the other surveys used for the study in order to assure the anonymity of the participants.

Professional Quality of Life Scale (ProQOL 5; Stamm, 2009). The ProQOL 5 is the most current revision of the original ProQOL, which originated from the Compassion Fatigue Self-Test developed by Figley (1995). The ProQOL 5 is broken down into three subscales: Compassion Satisfaction, Burnout, and Compassion Fatigue/Secondary Trauma. This self-report measure has 30-items (i.e., 10 per subscale). Items include queries about one's reactions and experiences regarding their work as a helping professional. Respondents indicate how frequently they have experienced each of the statement items in the previous 30 days. Responses are scored on a 5-point Likert scale ranging from never (1) to frequently (5), with a total score range of 30 to 150.

For the purposes of this study, only the compassion fatigue and burnout subscales were used. The Compassion Fatigue subscale measures symptoms of secondary trauma as a result of one's work as a helper (e.g., difficulty sleeping, fearfulness, and disturbing thoughts or images). Example items include "As a result of my *[helping]*, I have intrusive, frightening thoughts" and "I jump or am startled by

unexpected sounds." The Burnout subscale measures a sense of hopelessness at work as well as a diminished ability to perform one's job effectively. Example items include "I feel overwhelmed because my case *[work]* load feels endless" and "I feel 'bogged down' by the system." Total scores on each of the subscales range from 10 to 50 and, after reverse items are scored, higher scores on both subscales reflect higher risk of compassion fatigue and burnout.

According to Stamm (2005), the measure's construct validity has been demonstrated in more than 200 peer reviewed articles. For example, in their study with 57 residential childcare workers, Eastwood and Ecklund (2008) reported subscale Cronbach's alphas of .73 for burnout and .81 for compassion fatigue. Craig and Sprang (2010) completed an exploratory factor analysis in their study of 532 behavioral health professionals, which revealed a three-factor structure with reported subscale Cronbach's alphas of .73 for burnout and .81 for compassion fatigue. Additionally, Stamm (2005) has reported subscale Cronbach's alphas of .72 for burnout and .80 for compassion fatigue. The present study produced a Burnout scale Cronbach's alpha of .83 and a Compassion Fatigue scale Cronbach's alpha of .82.

Survey of Perceived Organizational Support (SPOS; Eisenberger et al., 1986). The SPOS in its original format is a 36-item survey instrument designed to measure the overall level of support an employee perceives from the organization for which they work. The items include statements about (a) various evaluative judgments, both favorable and unfavorable, that one's organization might make (e.g., "*The organization* values my contribution to its well-being" and "*The organization* feels there is little to be gained by employing me for the rest of my career"), and (b) beliefs

that one will be treated favorably or unfavorably by the organization as a whole (e.g., "Help is available from ***the organization*** when I have a problem" and "If given the opportunity, ***the organization*** would take advantage of me"). Participants rate their degree of agreement or disagreement with each of the statements on a 7-point Likert scale (1 = *strongly disagree* to 7 = *strongly agree*). Total scores on the SPOS range from 36 to 252, with higher scores reflecting greater levels of perceived organizational support.

Both exploratory and confirmatory factor analyses have been conducted on the 36-item measure, as well as on two additional shorter versions of the measure (16-items and 8-items). The results of these analyses indicated the unidimensionality and reliability of the measure (Armeli, Eisenberger, Fasolo, & Lynch, 1998; Eisenberger et al., 1986; Hellman, Fuqua, & Worley, 2006). The construct validity of the measure was demonstrated through multiple studies (e.g., Eisenberger et al., 1986; Hellman et al., 2006; Rhoades & Eisenberger, 2002) that have shown SPOS scores to be distinct from other related variables, such as organizational commitment, job satisfaction, perceptions of fairness or supervisor support, performance, and job-related affect or involvement. According to Rhoades and Eisenberger (2002), the 16-item version of the measure is most widely used in the literature and, therefore, was the version used for this study. A meta-analysis conducted by Rhoades and Eisenberger (2002) of over 70 studies using the SPOS reported Cronbach's alphas ranging from .67 to .98, with all but three studies reporting Cronbach's alphas within the range of .82 to .98. The present study produced a Cronbach's alpha of .96.

Self-Care Assessment Worksheet (SCAW; Saakvitne & Pearlman, 1996).

Saakvitne and Pearlman (1996) developed the SCAW from the literature on self-care behaviors. It was originally intended as a self-evaluation tool to advocate for and improve self-care behaviors among helping professionals. The SCAW includes a list of 65 different types of self-care behaviors, broken down into six dimensions of well-being: physical (e.g., "Exercise," "Take time off when needed," "Get enough sleep"), psychological (e.g., "Make time for self-reflection," "Write in a journal"), emotional (e.g., "Give yourself affirmations, praise yourself," "Allow yourself to cry"), spiritual (e.g., "Identify what is meaningful to you and notice its place in your life," "Pray," "Be open to inspiration"), professional/workplace (e.g., "Set limits with your clients and colleagues," "Take time to chat with co-workers," "Balance your caseload so that no one day or part of a day is 'too much'"), and balance (e.g., "Strive for balance within your work-life and workday," "Strive for balance among work, family, relationships, play and rest"). Of note is that the SCAW does not include a dimension specific to relational support, although the literature emphasizes social support as an important self-care behavior (see literature review).

A 5-point Likert scale is used on the SCAW to rate the level of frequency in which respondents engage in each of the behaviors (1 = *it never occurs to me* to 5 = *frequently*), with higher scores indicating higher frequency of behaviors (total score range = 65 to 325). Each of the six dimensions differ in the number of individual items included, therefore score ranges on each vary according to the number of items in the subscale.

Although the SCAW has been used in the literature (e.g., Alkema, Linton, & Davies, 2008) as a measure of self-care behaviors, there have been no psychometric properties reported. In an unpublished study by Chadwick and Frey (2013), the total score Cronbach's alpha was found to be .96. The SCAW was chosen for this study because it is widely used and referred to in the literature on self-care behaviors and no other applicable self-care measures were found. The present study produced a total score Cronbach's alpha of .93.

Relational Health Indices (RHI; Liang et al., 2002). The RHI is a 37-item self-report survey measuring the quality of growth-fostering relationships in one's life and is used in this study to measure relational support as a component of self-care. The RHI originally emerged from relational-cultural theory (Miller & Stiver, 1997), which conceptualizes relational quality along three dimensions: empowerment, authenticity, and engagement. The RHI is composed of three separate domains: Peer (12 items), Mentor (11 items), and Community (14 items). Total composite scores can be obtained by summing items within each domain, providing a measure of overall relational quality within each domain. As an alternative scoring method, three subscale scores can be calculated to measure the dimensions of engagement, authenticity, and empowerment across the relational domains. A principal component analysis of the RHI conducted by Frey, Beesley, and Newman (2005) revealed a two-component structure for the Community composite and a unidimensional structure for the Peer and Mentor composites. As a result, they suggested the use of the three composite scores as the most appropriate measure of overall relational quality. The Mentor and Community composite scores were not used due to conceptual overlap between relational quality of

mentor and community relationships and perceptions of organizational support measured by the SPOS (Eisenberger et al., 1986). Therefore, for the purposes of this study, only the total of the Peer subscale composite (i.e., domain) score was used to measure the overall relational quality in personal relationships, from which individuals may be able to draw social support.

The RHI uses a 5-point Likert scale, ranging from 1 (*never*) to 5 (*always*), on which participants indicate a value that best applies to or describes their relationships with others. Example items include: "After a conversation with my friend, I feel uplifted," "I feel understood by my friend," and "My friendship inspires me to seek out other friendships like this one" (Peer). Total composite scores range from 12 to 60 (Peer), with higher scores reflecting greater relational quality. Liang et al. (2002) reported a composite score Cronbach's alpha of .85 for the Peer subscale. In their principal component analysis of the RHI, Frey et al. (2005) found a similar factor structure for women and men, supporting its use with either, and reported a composite score Cronbach's alpha of .90 (Peer). Similarly, in their study with men and women in college, Frey, Beesley, and Miller (2006) reported a composite score Cronbach's alpha of .88 (women) and .88 (men) for the Peer subscale. The present study produced a total score Cronbach's alpha of .90 for the Peer subscale.

Posttraumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996). The PTGI is a 21-item survey measuring vicarious resiliency and personal growth. It was originally developed as a measure of one's perception of positive growth outcomes for survivors following a traumatic event, but has been adapted and used as a measure of vicarious resiliency in therapists who work with trauma survivors (e.g., Brockhouse,

Msetfi, Cohen, & Joseph, 2011; Linley & Joseph, 2007). The measure can be used as a total score of resiliency/posttraumatic growth or can be broken down into scores on five subscales: Relating to Others, New Possibilities, Personal Strength, Spiritual Change, and Appreciation of Life. For the purposes of this study, the total score was used.

The PTGI version adapted for use with therapists uses a 6-point Likert response format to rate the degree to which one experienced change on the item (1 = *"I did not experience this change as a result of my therapy work"* to 6 = *"I experienced this change to a great degree as a result of my therapy*)." Given that the population for this sample included all professionals working with youth in residential treatment and correctional facilities, the scale response options were slightly adapted from *"…as a result of my therapy work"* to *"…as a result of my work as a helper."* Example items include: "I have a greater appreciation for the value of my own life," "I know better that I can handle difficulties," and "I am better able to accept the way things work out." All items are positively scored and produce a possible total score range of 21 to 126, with higher scores reflecting greater resiliency or perceptions of positive growth. Tedeschi and Calhoun (1996) reported a Cronbach's alpha of .90 in their prior reliability analysis of the PTGI. Additionally, Samios, Rodzik, and Abel (2012) reported a Cronbach's alpha of .97 in their sample of 61 therapists who worked with survivors of sexual violence. The present study produced a total score Cronbach's alpha of .96.

Procedure

Participants were recruited using a snowball sampling method and directed to the online survey via email and recruitment flyers. A recruitment email was initially sent to administrators of residential treatment and correctional facilities, as well as a

database of youth and child workers put together by the National Resource Center for Youth Services. Social media websites, such as Facebook, were utilized as a recruitment tool to further circulate information about the online survey and participation eligibility. Additionally, recruitments flyers were passed out to administrators and other professionals attending the 2014 American Association of Children's Residential Centers Annual Conference.

Eligible participants were asked to follow the link provided in the recruitment email or flyer, which directed them to the online survey. Using Qualtrics software, data was collected anonymously. The online survey and raw data were securely stored and maintained digitally through the Center for Educational Development and Research (CEDaR), in an individual password-protected user file for the principal investigator. All recipients were asked to forward the recruitment email on to other eligible participants.

The online survey began by asking eligible participants to read the Information for Consent sheet, which explained the purpose of the study. After reading the Information for Consent sheet, participants who chose to participate were directed to the online survey and participants who chose not to participate were directed to an exit page that thanked them for their time. The online survey packet presented the surveys in random order and included: a brief demographic survey, the Professional Quality of Life Scale (ProQOL 5; Stamm, 2009), the Survey of Perceived Organizational Support (SPOS; Eisenberger et al., 1986), the Self-Care Assessment Worksheet (SCAW; Saakvitne & Pearlman, 1996), the Relational Health Indices (RHI; Liang et al., 2002), and the Posttraumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996). Upon

completion of the survey, participants electronically submitted their survey packets and were directed to an exit page that thanked them for their time and encouraged them to forward the survey on to other potential participants.

Data Analysis

Two separate multiple regression models were used to examine the relationship of the predictor variables (i.e., relevant demographic variables, SCAW total scores, SPOS subscale total scores, RHI scores, and PTGI total scores) to each of the criterion variables, (a) ProQOL 5 Burnout total score, and (b) ProQOL 5 Compassion Fatigue total score. Thus, for the burnout model, predictor variables were entered in the following order: co-worker support (demographic variable) in block one, and self-care behaviors, peer relational quality, perceived organizational support, and vicarious resilience in block two. For the compassion fatigue model, self-care behaviors, peer relational quality, perceived organizational support, and vicarious resilience were entered simultaneously.

Chapter 4: Results

Preliminary analyses indicated no violation of the assumptions of normality, linearity, and homoscedasticity. No multicollinearity was noted among predictors. Pearson's correlational analyses were conducted to determine the bivariate association between the variables of interest. Perceived level of support from co-workers was significantly and negatively related to risk of burnout (r = -.35, p = .001), indicating increased perceptions of co-worker support were associated with lower levels of risk for burnout; thus, co-worker support was included in the regression model for burnout. Co-worker support was not, however, significantly correlated with risk of compassion fatigue and was therefore not included in that regression model. No significant correlations between age, income, current length of employment, or overall length of employment and the criterion variables were found. As expected, the subscales measuring risk of burnout and risk of compassion fatigue were positively correlated (r = .64, p < .001). The means, standard deviations, and intercorrelations for all variables of interest are listed in Table 1.

T-tests and one-way ANOVAs were conducted to explore the variation between demographic groups in scores on risk of burnout and compassion fatigue. In order to run group comparisons, ethnicity was collapsed into two groups: non-EuroAmericans (n = 16) and EuroAmericans/Caucasians (n = 72), with no significant between-group differences found on the criterion variables. Job title/position was collapsed into five groups: direct care/program staff (n = 23), direct care/program staff supervisor (n = 18), mental health professional/counselor/therapist/case worker (n = 20), director (n = 14), and other (n = 13), with no significant between-group differences found on the criterion

variables. Likewise, there were no significant group differences on either of the criterion variables based on gender, education level, gender of youth worked with, location type (i.e., urban, suburban, rural), or facility type.

Multiple Regression Models

Hierarchical multiple regression was used to assess the individual contributions of perceived organizational support, self-care behaviors, peer relational quality, and vicarious resilience in predicting risk of burnout, after controlling for the impact of co-worker support. For burnout, the total model (i.e., co-worker support, self-care behaviors, peer relational quality, perceived organizational support, and vicarious resilience) was significant and predicted 48% of the variance [$F(5,82) = 15.20$, $p < .001$] in risk of burnout scores (see Table 2). In Block 1 of the regression model, co-worker support predicted a significant amount of variance (12%) in scores on burnout. In Block 2, self-care behaviors, peer relational quality, perceived organizational support, and vicarious resilience were entered and significantly predicted an additional 36% of variance. At the final step, self-care behaviors ($p < .001$) and perceived organizational support ($p < .001$) emerged as individually significant predictors.

A simultaneous multiple regression model was used to assess the individual contributions of perceived organizational support, self-care behaviors, peer relational quality, and vicarious resilience in predicting risk of compassion fatigue. As previously noted, due to the *ns* correlation between co-worker support and compassion fatigue, co-worker support was not included in the model. The total model (i.e., self-care behaviors, peer relational quality, perceived organizational support, and vicarious resilience) was significant [$F(4,83) = 5.69$, $p < .001$] and predicted 22% of the variance

in risk of compassion fatigue scores (see Table 2). Perceived organizational support (p = .006) and self-care behaviors (p = .013) emerged as individually significant predictors.

Ancillary Analyses

Several other interesting bivariate associations between demographic and predictor variables were found. A significant and positive relationship emerged between self-care behaviors and income (r = .21, p = .049), indicating that individuals may have more resources to effectively engage in increased self-care behaviors as their income increases. There were also statistically significant group differences between EuroAmericans and non-EuroAmericans for self-care behaviors [$t(86) = 2.02$, p = .046] and vicarious resilience [$t(86) = 2.92$, p = .004]. Perceived organizational support was significantly and positively related to vicarious resilience (r = .27, p = .011), indicating that increased perceptions of perceived organizational support are associated with higher levels of vicarious resilience. Despite not being an individually significant predictor in the overall regression models for burnout or compassion fatigue, it is interesting to note that vicarious resilience was significantly and positively related to burnout (r = -.39, $p < .001$) and to each of the other predictor variables in the models: co-worker support (r = .29, p = .006), perceived organizational support (r = .27, p = .011), self-care behaviors (r = .29, p = .006), and peer relational quality (r = .29, p = .006).

Chapter 5: Discussion

The purpose of this study was to explore the impact of levels of perceived organizational support, self-care behaviors, peer support and relational quality, and vicarious resilience in predicting risk of burnout and compassion fatigue for professionals working directly with youth in residential facilities. More specifically, it was hoped that information from the study would help determine which individual predictors were most impactful in predicting and preventing risk of burnout and compassion fatigue.

Regarding the first research question, the full set of predictors (i.e., perceived organizational support, self-care behaviors, peer relational quality, vicarious resilience, perceptions of co-worker support) significantly predicted risk of burnout. Also, the full set of predictors (i.e., perceived organizational support, self-care behaviors, peer relational quality, vicarious resilience) significantly predicted risk of compassion fatigue. In regard to the second research question, self-care behaviors and perceived organizational support were the most important factors in preventing risk of both burnout and compassion fatigue.

It is interesting to note that perceptions of co-worker support was only significantly related to burnout in the preliminary analyses, and therefore, was only included in the regression model for burnout. This could be due to possible overlap between one's perceptions of co-worker support and the way an individual feels about their workplace, therefore being significantly related to burnout. However, perceived co-worker support does not appear to influence one's reactions or response to the sheer exposure to traumatic material associated with compassion fatigue.

As individual predictors, self-care behaviors and perceived organizational support proved to be the driving forces in the regression models. These results are consistent with previous findings that suggested the absence of self-care behaviors contributed to increased worker turnover and burnout (Radey & Figley, 2007), while increased support and self-care behaviors contributed to reduced burnout and compassion fatigue (Horrell et al., 2011). In addition, research has suggested that engaging in specific self-care behaviors reduced the risk of compassion fatigue (Eastwood & Ecklund, 2008) and, if absent, complicated or contributed to compassion fatigue (Figley, 1995).

These findings also support prior research (e.g., Horrell et al., 2011) suggesting the importance of a comprehensive, multifocal framework for preventing burnout and compassion fatigue that incorporates interventions aimed at increasing self-care behaviors and organizational support. This model is starkly different from current practice in the field of youth care work that primarily relies on the individual worker to adequately engage in self-care behaviors in order to protect against the natural negative effects of burnout and compassion fatigue (e.g., Bourassa, 2009; Newell & MacNeil, 2010; Smith, 2007). As Gantz (1990) highlighted, focusing only on self-care behaviors limits intervention to behaviors within the individual employee's awareness and control, and ignores organizational or contextual factors. This is problematic because individual self-care behaviors can be easily influenced by one's culture or current contextual situation. In addition, self-care behaviors are dependent on the individual having the capacity to make choices and act freely, as well as the knowledge, skills,

values, locus of control, motivation, and efficacy to know what one needs and respond effectively (Gantz, 1990).

It is interesting to note that vicarious resilience was not a significant individual predictor in the regression models for burnout or compassion fatigue, yet it was significantly related to all of the variables included in the models. Keeping in mind that the sample size likely impacted the statistical power to detect effects, one possible explanation is that vicarious resilience may indirectly impact risk of burnout and compassion fatigue through its relationships with perceived organizational support and self-care behaviors. According to Samios et al. (2012), posttraumatic growth (vicarious resilience) had a "stress-buffering effect," by moderating the relationship between secondary traumatic stress (compassion fatigue) and indicators of adjustment, such as depression, anxiety, personal meaning, and life satisfaction. Individuals low in vicarious resilience who experience these struggles may find it more difficult to feel supported at work or adequately engage in self-care behaviors and/or benefit from these protective factors. Furthermore, one's experience and/or expression of vicarious resilience may be impacted by culture. For example, Hernandez et al. (2010) emphasized how vicarious resilience, or the meaning one makes of the traumatic experiences, is influenced by the cultural factors of both the therapist and the client, including one's understanding of their own identities, as well as social and political contexts. According to Hernandez et al. (2007), an individual's various cultural contexts (i.e., societal, communal, familial, professional) also interact with environmental and personal characteristics that may influence one's access to coping

resources and other protective factors, therefore impacting one's ability to respond resiliently.

Similarly, peer relational quality was not an individually significant predictor in either regression model, however was significantly related to both criterion variables and self-care behaviors. Although peer relational quality did not appear to directly influence burnout or compassion fatigue in the models, it too may have an indirect impact through its influence on self-care behaviors and has been considered an important aspect of self-care (e.g., Jenaro et al., 2007; Keidel, 2002; Radey & Figley, 2007). Results from the current study reflect prior research that suggested self-care behaviors are influenced by a variety of different individual and contextual factors (Gantz, 1990). The significant group differences in self-care behaviors based on ethnicity further suggests that sociocultural factors may impact the availability of resources and/or one's culturally influenced expressions of self-care. It is also likely that the SCAW does not include preferred ways of coping and caring for self that are specific to non-EuroAmericans. The significant positive relationship between income and self-care behaviors further emphasizes the influence of contextual factors (e.g., income, peer support, systemic inequalities) in one's ability to access resources and/or effectively engage in regular self-care behaviors. Much more information is needed about the nature of these associative relationships and the possible moderating or mediating effects of vicarious resilience and peer relational quality, and could provide useful information about how individuals develop and foster resiliency.

These results are especially promising for administrators, agencies, and organizations, as they suggest many possible intervention points and strategies for

targeting employees' perceptions of support within the agency. In a study focusing on the self-care behaviors of youth care workers in residential settings, Eastwood and Ecklund (2008) suggested a number of strategies organizations could incorporate (e.g., incorporating overlapping shift changes to allow time for supervision, peer consultation, and trainings; providing training in stress management techniques; maintaining adequate staffing levels to allow appropriate breaks and debriefing; providing time, space, and resources for employees to engage in self-care behaviors in the workplace; providing adequate vacation of leave time; and providing affordable health benefits to employees) to encourage employees to engage in proactive self-care behaviors to reduce compassion fatigue and burnout. Given the high rates of staff turnover that often plague residential facilities (Connor et al., 2003) and the relationships between burnout and increased turnover (Kahill, 1988), incorporating interventions focused on supporting staff and facilitating healthy self-care behaviors could greatly benefit organizations and help reduce staff turnover (e.g., Shore & Shore, 1995; Radey & Figley, 2007).

Similarly, in the present study, correlational analyses revealed significant relationships between perceived organizational support and self-care behaviors. While causality cannot be assumed, this relationship suggests that as perceived organizational support increases, so does self-care behavior. Therefore, organizations, individual employees, and ultimately clientele all benefit when agencies facilitate and directly support their staff's efforts to engage in healthy self-care behaviors (Hall et al., 2007). Similarly, increasing employee perceptions of support may help facilitate good self-

care, therefore reciprocally increasing both perceptions of organizational support and self-care behaviors (Horrell et al., 2011).

As discussed previously, research has demonstrated a variety of negative organizational outcomes associated with increased burnout and compassion fatigue, and decreased perceptions of organizational support. For example, negative outcomes have included employee absenteeism, decreased job satisfaction, increased intentions to quit, poor job performance, increased turnover, decreased client outcomes, and increased ethical conflicts (e.g., Eisenberger et al., 1986; Hall et al., 2007; Kahill, 1988; Lee et al., 2011). Thus, the negative effects of burnout and compassion fatigue put significant strain on residential facilities (Conner et al., 2003). They also result in high training and recruitment costs that further reduce already strained resources (Lieberman, 2004). Therefore, not only would it benefit employees, but also reduce agency costs and improve client outcomes if organizations implemented strategies to further support their employees in making time for self-care behaviors at work.

According to Bober and Regehr (2006), helping professionals consistently valued self-care, though reportedly had limited time in their schedules to engage in self-care behaviors. If agencies incorporated changes such as facilitating appropriate breaks, maintaining a staff break room, facilitating team meetings and/or activities promoting teamwork among co-workers, providing opportunities for employees to share feedback that impacted organizational change, and encouraging employees to strive for an increased balance between personal and professional needs, it could serve agencies well (e.g., Eastwood & Ecklund, 2008). Heaney, Price, and Rafferty (1995) found that implementing a support program for employees, which included training on coping

skills, teamwork, and group problem solving, increased coping resources and improved the mental health of employees who had the highest probability of quitting their job. The results of the current study, along with prior research, provide promising guidance to administrators and agencies regarding fostering the well-being of youth care workers and reducing worker turnover.

Limitations of the Study

While the data collected in the study led to some important conclusions for the field, there were several limitations of the study. The most noteworthy limitation was the small sample size (n = 88), despite significant recruitment efforts, which likely decreased the power to detect effect. It is possible that the contextual factors that increase youth care workers risk of burnout and compassion fatigue, such as the high demands of the job, limited resources or compensation, and inadequate staffing, may leave employees with limited time or resources to engage in anything other than work related activities. Thus, some workers may have opted out of participation due to burnout and compassion fatigue. Other notable characteristics of the sample population were that a majority of participants were female, EuroAmerican/Caucasian, and relatively educated. It is possible that there may have been something inherently different about the individuals who chose to complete and help disseminate the survey, creating the potential for sampling bias.

Regarding data collection measures, self-report measures were used, which can be susceptible to social desirability. The SCAW, in particular, relied on the memory of participants to accurately recall the frequency of a variety of their behaviors. Regardless of these limitations, most notably the small sample size, the results of the

study suggest promising implications for agencies and professionals working with youth in residential settings.

Areas for Future Research

Children and youth are often considered to be the driving force of the future and most people would not hesitate to help children in need. However, children and youth in residential treatment and correctional settings in North America are often forgotten or hidden away from the general public as a last resort for managing their difficult emotional and behavioral problems (Lieberman, 2004). Despite the importance of work as a caregiver for youth in residential settings, there are immense challenges and risks associated with the job duties of a youth care worker. While much research has focused on combating the negative psychological effects of many helping professions, little research has looked at protective and preventative strategies for burnout and compassion fatigue in professionals working with youth in residential settings. One possible reason for the limited research in this area, as demonstrated by the current study, is that it is very difficult to gain access and recruit participants for this population. However, the lack of an overarching governing body for these facilities and the large variability in regulations, accountability, and funding between states make their employees a difficult population to reach, further perpetuating isolation within the field.

Although it is evident that professionals working with youth in residential settings are at increased risk of burnout and compassion fatigue (Savicki, 2002), there is much that can be done to help ameliorate these negative impacts. Future research is needed with larger, more generalizable samples to confirm the results of prior research

and better our understanding of preventative and protective factors. Additionally, it would be helpful to look more specifically at the relationships between perceived organizational support and self-care behaviors in order to better understand how these predictors interact. For instance, this study suggests that variables such as ethnicity, job title/position, vicarious resilience, and the quality of supportive relationships may be important to explore in greater depth, including whether they might function as mediators or moderators in predicting burnout and compassion fatigue. Furthermore, ancillary findings show a significant relationship between perceptions of co-worker support and burnout that should be explored in more detail.

Conclusion

Overall, results from the study provide an optimistic prognosis for youth care workers and emphasize several focal points for intervention within organizations and for professionals. By focusing on increasing perceptions of organizational support and self-care behaviors, we can improve the psychological well-being of youth care workers and in turn, the treatment outcomes of the youth they serve. It is important to note that organizational leaders are in a unique position to facilitate both perceptions of organizational support and self-care behaviors, and that interventions are more effectively implemented when institutional support is present. Youth care workers in residential settings play a very important role in caring for, treating, and ultimately shaping future generations of children with some of the most severe emotional and behavioral difficulties (Foltz, 2004). Further exploration of these variables is warranted and can lead to increased outcomes for agencies, professionals, and perhaps most importantly, to the youth treated in these settings.

References

Alkema, K., Linton, J.M., & Davies, R. (2008). A study of the relationship between self-care, compassion satisfaction, compassion fatigue, and burnout among hospice professionals. *Journal of Social Work in End-of-Life & Palliative Care, 4*(2), 101-119. doi:10.1080/15524250802353934

Armeli, S., Eisenberger, R., Fasolo, P., & Lynch, P. (1998). Perceived organizational support and police performance: The moderating influence of socioemotional needs. *Journal of Applied Psychology, 83*(2), 288-297. doi:10.1037/0021-9010.83.2.288

Arnold, D., Calhoun, L. G., Tedeschi, R., & Cann, A. (2005). Vicarious posttraumatic growth in psychotherapy. *Journal of Humanistic Psychology, 45*(2), 239-263. doi:10.1177/0022167805274729

Barnett, J. E., Baker, E. K., Elman, N. S., Schoener, G. R. (2007). In pursuit of wellness: The self-care imperative. *Professional Psychology: Research and Practice, 38*(6), 603-612. doi: 10.1037/0735-7028.38.6.603

Barnett, J. E., Johnston, L. C., & Hillard, D. (2006). Psychotherapist wellness as an ethical imperative. In L. VandeCreek, & J. B. Allen (Eds.), *Innovations in clinical practice: Focus on health and wellness* (pp. 257-271). Sarasota, FL: Professional Resources Press.

Barofsky, I. (1978). Compliance, adherence and the therapeutic alliance: Steps in the development of self-care. *Social Science & Medicine, 12*, 369-376. doi:10.1016/0271-7123(78)9091-3

Blau, P. M. (1964). *Exchange and power in social life.* New York, NY: Wiley.

Bober, T., & Regehr, C. (2006). Strategies for reducing secondary or vicarious trauma: Do they work? *Brief Treatment and Crisis Intervention, 6*, 1-9. doi:10.1093/brief-treatment/mhj001

Boscarino, J. A., Figley, C. R., & Adams, R.E. (2004) Compassion fatigue following the September 11 terrorist attacks: A study of secondary trauma among New York City social workers. *International Journal of Emergency Mental Health, 6*(2), 57-66.

Bourassa, D. B. (2009). Compassion fatigue and the adult protective services social worker. *Journal of Gerontological Social Work, 52*, 215-229. doi:10.1080/01634370802609296

Bride, B. E., Radey, M., & Figley, C. R. (2007). Measuring compassion fatigue. *Clinical Social Work Journal, 35*, 155-163. doi: 10.1007/s10615-007-0091-7

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

Chadwick, K. M., & Frey, L. L. (2013). *Protective factors for risk of burnout and compassion fatigue in direct care staff.* Poster presentation at the 2013 Annual Conference of the American Psychological Association, Honolulu, HI.

Connor, D. F., McIntyre, E. K., Miller, K., Brown, C., Bluestone, H., Daunais, D., & LeBeau, S. (2003). Staff retention and turnover in a residential treatment center. *Residential Treatment for Children & Youth, 20*(3), 43-53. doi: 10.1300/J007v20n03_04

Craig, C. D., & Sprang, G. (2010). Compassion satisfaction, compassion fatigue, and burnout in a national sample of trauma treatment therapists. *Anxiety, Stress, & Coping, 23*(3), 319-339. doi:10.1080/10615800903085818

Dunkley, J., & Whelan, T. A. (2006). Vicarious traumatisation: Current status and future directions. *British Journal of Guidance and Counseling, 34*(1), 107-116. doi: 10.1080/03069880500483166

Eastwood, C. D., & Ecklund, K. (2008). Compassion fatigue risk and self-care practices among residential treatment center childcare workers. *Residential Treatment for Children & Youth, 25*, 103-122. doi: 10.1080/08865710802309972

Eisenberger, R., Fasolo, P., & Davis-LaMastro, V. (1990). Perceived organizational support and employee diligence, commitment, and innovation. *Journal of Applied Psychology, 75*(1), 51-59. doi:10.1037/0021-9010.75.1.51

Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology, 71*, 500-507. doi: 10.1037/0021-9010.71.3.500

Emerson, R. M. (1976). Social exchange theory. *Annual Review of Sociology, 2*, 335-362. doi:10.1146/annurev.so.02.080176.002003

Engstrom, D., Hernandez, P., & Gangsei, D. (2008). Vicarious resilience: A qualitative investigation into its description. *Traumatology, 14*(3), 13-21. doi:10.1177/1534765608319323

Figley, C. R. (1995). *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized.* London: Brunner-Routledge.

Figley, C. R., & Stamm, B. H. (1996). Psychometric Review of Compassion Fatigue Self Test. In B. H. Stamm (Ed.), *Measurement of Stress, Trauma and Adaptation.*

Baltimore, MD: Sidran Press.

Foltz, R. (2004). The efficacy of residential treatment: An overview of the evidence. *Residential Treatment for Children & Youth, 22*(2), 1-19. doi:10.1300/J007v22n02_01

Freudenberger, H. J. (1974). Staff burn-out. *Journal of Social Issues, 30*(1), 159-165. doi:10.1111/j.1540-4560.1974.tb00706.x

Freudenberger, H. J. (1975). The staff burn-out syndrome in alternative institutions. *Psychotherapy: Theory, Research, & Practice, 12*(1), 73-82. doi:10.1037/h0086411

Freudenberger, H. J. (1977). Burn-out: Occupational hazard of the child care worker. *Child Care Quarterly, 6*(2), 90-99. doi:10.1007/BF01554695

Frey, L. L., Beesley, D., & Miller, M. R. (2006). Relational health, attachment, and psychological distress in college women and men. *Psychology of Women Quarterly, 30*, 303-311. doi:10.1111/j.1471-6402.2006.00298.x

Frey, L. L., Beesley, D., & Newman, J. L. (2005). The relational health indices: Reanalysis of a measure of relational quality. *Measurement and Evaluation in Counseling and Development, 38*, 153-163.

Gantz, S. B. (1990). Self-care: Perspectives from six disciplines. *Holistic Nursing Practice, 4*, 1-12.

Garmezy, N. (1991). Resiliency and vulnerability to adverse developmental outcomes associated with poverty. *American Behavioral Scientist, 34*(4), 416-430. doi:10.1177/0002764291034004003

Hall, M. E., Sedlacek, A. R., Berenbach, J. R., & Dieckmann, N. F. (2007). Military sexual trauma services for women veterans in the Veterans Health Administration: The patient-care practice environment and perceived organizational support. *Psychological Services, 4*(4), 229-238. doi:10.1037/1541-1559.4.4.229

Heaney, C. A. Price, R. H., & Rafferty, J. (1995). Increasing coping resources at work: A field experiment to increase social support, improve work team functioning, and enhance employee mental health. *Journal of Organizational Behavior, 16*, 335-352.

Hellman, C. H., Fuqua, D. R., & Worley, J. (2006). A reliability generalization study on the survey of perceived organizational support: The effects of mean age and number of items on score reliability. *Educational and Psychological Measurement, 66*(4), 631-642. doi:10.1177/0013164406288158

Hernandez, P., Engstrom, D., & Gangsei, D. (2010). Exploring the impact of trauma on therapists: Vicarious resilience and related concepts in training. *Journal of Systemic Therapies, 29*(1), 67-83. doi:10.1521/jsyt.2010.29.1.67

Hernandez, P., Gangsei, D., & Engstrom, D. (2007). Vicarious resilience: A new concept in work with those who survive trauma. *Family Process, 46*(2), 229-241. doi:10.1111/j.1545-5300.2007.00206.x

Homans, G. C. (1958). Social behavior as exchange. *American Journal of Sociology, 63*(6), 597-606.

Hook, M. P. V., & Rothenberg, M. (2009). Quality of life and compassion satisfaction/fatigue and burnout in child welfare workers: A study of the child welfare workers in community based care organizations in central Florida. *Social Work and Christianity: Journal of the National Association of Christian Social Work, 36*(1), 36-54.

Horrell, S. C., Holohan, D. R., Didion, L. M., &Vance, G. T. (2011) Treating traumatized OEF/OIF veterans: How does trauma treatment affect the clinician. *Professional Psychology: Research and Practice, 42*(1), 79-86. doi:10.1037/a0022297

Inbar, J, & Ganor, M. (2003). Trauma and compassion fatigue: Helping the helpers. *Journal of Jewish Communal Service, 79*(2), 109-111.

James, L. R., & Tetrick, L. E. (1986). Confirmatory analytic tests of three causal models relating job perceptions to job satisfaction. *Journal of Applied Psychology, 71*(1), 77-82. doi:10.1037/0021-9010.71.1.77

Jenaro, C., Flores, N., & Arias, B. (2007). Burnout and coping in human service practitioners. *Professional Psychology: Research and Practice, 38*(1), 80-87. doi:10.1037/0735-7028.38.1.80

Kahill, S. (1988). Symptoms of professional burnout: A review of the empirical evidence. *Canadian Psychology, 29*(3), 284-297. doi: 10.1037/h0079772

Keidel, G. C. (2002). Burnout and compassion fatigue among hospice caregivers. *American Journal of Hospice & Palliative Care, 19*, 200-205. doi: 10.1177/104990910201900312

Killian, K. D. (2008). Helping till it hurts? A multimethod study of compassion fatigue, burnout, and self-care in clinicians working with trauma survivors. *Traumatology, 14*, 32-44. doi: 10.1177/1534765608319083

Lee, J., Lim, N., Yang, E., & Lee, S. M. (2011). Antecedents and consequences of three dimensions of burnout in psychotherapists: A meta-analysis. *Professional Psychology: Research and Practice, 42*, 252-258. doi: 10.1037/a0023319

Levinson, H. (1965). Reciprocation: The relationship between man and organization. *Administrative Science Quarterly, 9*(4), 370-390. doi:10.2307/2391032

Liang, B., Tracy, A., Taylor, C. A., Williams, L. M., Jordan, J. V., & Miller, J. B. (2002). The relational health indices: A study of women's relationships. *Psychology of Women Quarterly, 26* 25-35. doi:10.1111/1471-6402.00040

Lieberman, R. E. (2004). Future directions in residential treatment. *Child and Adolescent Psychiatric Clinics of North America, 13*, 279-294. doi:10.1016/S1056-4993(03)00118-4

Linley, P.A., & Joseph, S. (2007). Therapy work and therapists' positive and negative well being. *Journal of Social and Clinical Psychology, 26*(3), 385-403. doi:10.1521/jscp.2007.26.3.385

Lipson, J. G., & Steiger, N. J. (1996). *Self-care nursing in a multicultural context.* Thousand Oaks, CA: Sage.

Mathieu, J. E., & Zajac, D. (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological Bulletin, 108*(2), 171-194. doi:10.1037/0033-2909.108.2.171

Maslach, C., & Jackson, S. E., (1984). Burnout in organizational settings. *Applied Social Psychology Annual, 5*, 133-153.

Maslach, C., & Schaufeli, W. B. (1993). Historical and conceptual development of burnout. In W.B. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional burnout: Recent developments in theory and research.* Philadelphia, PA: Taylor & Francis.

McCann, 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. doi:10.1002/jts.2490030110

McGee, R. A. (1989). Burnout and professional decision making: An analogue study. *Journal of Counseling Psychology, 36*(3), 345-351. doi: 10.1037/0022-0167.36.3.345

Miller, J. B., & Stiver, I. P. (1997). *The healing connection.* Boston, MA: Beacon Press.

Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). The measurement of organizational commitment. *Journal of Vocational Behavior, 14*(2), 224-247. doi:10.1016/0001-8791(79)90072-1

Najjar, N., Davis, L. W., Beck-Coon, K., & Doebbeling, C. C. (2009). Compassion fatigue: A review of the research to date and relevance to cancer-care providers. *Journal of Health Psychology, 14*(2), 267-277. doi:10.1177/1359105308100211

Newell, J. M. & MacNeil, G. A. (2010). Professional burnout, vicarious trauma, secondary traumatic stress, and compassion fatigue: A review of theoretical terms, risk

factors, and preventive methods for clinicians and researchers. *Best Practices in Mental Health, 6*(2), 57-68.

Organ, D. W. (1990). The motivational basis of organizational citizenship behavior. *Research in Organizational Behavior, 12*, 43-72.

Pearlman, L.A., & Saakvitne, K. W. (1995). Treating therapists with vicarious traumatization and secondary traumatic stress disorders. In: Figler, C.R. (Ed.), *Compassion Fatigue: Coping with Secondary Traumatic Stress Disorder in those who Treat the Traumatized* (pp. 150-177). New York: Brunner-Mazel.

Radey, M., & Figley, C. (2007). The social psychology of compassion. *Clinical Social Work Journal, 35*(3), 207-214. doi: 10.1007/s10615-007-0087-3

Rhoades, L. & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology, 87*(4), 698-714. doi:10.1037//0021-9010.87.4.698

Richard, A. A., & Shea, K. (2011). Delineation of self-care and associated concepts. *Journal of Nursing Scholarship, 43*(3), 255-264. doi:10.1111/j.1547-5069.2011.01404.x

Saakvitne, K. W., & Pearlman, L. A. (1996). *Transforming the pain: A workbook on vicarious traumatization.* New York, NY: Norton.

Samios, C., Rodzik, A. K., & Abel, L.M. (2012). Secondary traumatic stress and adjustment in therapists who work with sexual violence survivors: The moderating role of posttraumatic growth. British Journal of Guidance & Counseling, 40(4), 341-356. doi:10.1080/03069885.2012.691463

Savicki, V. (2002). *Burnout across thirteen cultures: Stress and coping in child and youth care workers.* Westport, CT: Praeger.

Sexton, L. (1999). Vicarious traumatisation of counsellors and effects on their workplaces. *British Journal of Guidance & Counseling, 27*(3), 393-403. doi:10.1080/03069889908256279

Shore, L. M. & Barksdale, K. (1998). Examining degree of balance and level of obligation in the employment relationship: A social exchange approach. *Journal of Organizational Behavior, 19*, 731-744. doi:10.1002/(SICI)1099-1379

Shore, L. M., & Shore, T. H. (1995). Perceived organizational support and organizational justice. In R. S. Cropanzano & K. M. Kacmar (Eds.) *Organizational politics, justice, and support: Managing the social climate of the workplace* (pp. 149-164). Westport, CT: Quorum.

Shore, L. M. & Wayne, S. J. (1993). Commitment and employee behavior: Comparison of affective commitment and continuance commitment with perceived organizational support. *Journal of Applied Psychology, 78*(5), 774-780. doi:10.1037/0021-9010.78.5.774

Smith, B. D. (2007). Sifting through trauma: Compassion fatigue and HIV/AIDS. *Clinical Social Work Journal, 35*, 193-198. doi:10.1007/s10615-007-0096-2

Somers, M. J. (1995). Organizational commitment, turnover and absenteeism: An examination of direct and interaction effects. *Journal of Organizational Behavior, 16*(1), 49-58. doi:10.1002/job.4030160107

Stamm, B. H. (2002). Measuring compassion satisfaction as well as fatigue: Developmental history of the compassion satisfaction and fatigue test. In C. Figley (Ed.) *Treating compassion fatigue.* (Vol. 24, 107-119). New York: Brunner-Routledge.

Stamm, B. (2005) *The professional quality of life scale: Compassion satisfaction, burnout & compassion fatigue/secondary traumatic scales.* Retrieved from http://www.proqol.org.

Stamm, B. H. (2009). *Professional Quality of Life: Compassion Satisfaction and Fatigue Version 5 (ProQOL).* Available at /www.isu.edu/~bhstamm or www.proqol.org.

Tedeschi, R. G. (1999). Violence transformed: Posttraumatic growth in survivors and their societies. *Aggression and Violent Behavior, 4*(3), 319-341. doi:10.1016/S1359-1789(98)00005-6

Tedeschi, R. G. & Calhoun, L. G. (1996). The posttraumatic growth inventory: Measuring the positive legacy of trauma. *Journal of Traumatic Stress, 9*(3), 455-471. doi:10.1007/BF02103658

Tedeschi, R. G. & Calhoun, L. G. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry, 15*(1), 1-18. doi:10.1207/s15327965pli1501_01

U.S. Department of health and Human Services, Administration for Children and Families, Administration on Children, youth and Families, Children's Bureau. (2013). *The Adoption and Foster Care Analysis and Reporting System report* (Publication No. 20). Retrieved from http://www.acf.hhs.gov/sites/default/files/cb/afcarsreport20.pdf

Weingarten, K. (2003). *Common shock: Witnessing violence every day-How we are harmed, how we can heal.* New York: Penguin Group.

Wilson, J. P. & Lindy, J. D. (1994). Empathic strain and countertransference. In J.P. Wilson & J.D. Lindy (Eds.), *Countertransference in the Treatment of PTSD* (pp. 5-30). New York, NY: Guilford.

Wise, E. H., Hersh, M. A., & Gibson, C. M. (2012). Ethics, self-care and well-being for psychologists: Reenvisioning the stress-distress continuum. *Professional Psychology: Research and Practice, 43*(5), 487-494. doi: 10.1037/a0029446

Appendix A: Professional Quality of Life Scale

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

1	2	3	4	5
Never	Rarely	Sometimes	Often	Very Often

Please select the number that corresponds with your answer in the blank for each of the following statements.

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

© B. Hudnall Stamm, 2009

Appendix B: Survey of Perceived Organizational Support

Listed below are statements that represent possible opinions that YOU may have about working at (your residential facility). Please indicate the degree of your agreement or disagreement with each statement by selecting the number that best represents your point of view about (administrators/supervisors at your residential facility). Please use the following guide and select your answers for each statement:

0	1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Slightly Disagree	Neither Agree Nor Disagree	Slightly Agree	Moderately Agree	Strongly Agree

1. _____ values my contribution to its well-being. ……	0	1	2	3	4	5	6
2. If _____ could hire someone to replace me at a lower salary it would do so. …	0	1	2	3	4	5	6
3. _____ fails to appreciate any extra effort from me. …….....	0	1	2	3	4	5	6
4. _____ strongly considers my goals and values. ……..	0	1	2	3	4	5	6
5. _____ would ignore any complaint from me. …….	0	1	2	3	4	5	6
6. _____ disregards my best interests when it makes decisions that affect me. ….	0	1	2	3	4	5	6
7. Help is available from ____when I have a problem. ……..	0	1	2	3	4	5	6
8. _____ really cares about my well-being. ……	0	1	2	3	4	5	6
9. Even if I did the best job possible, _____ would fail to notice. ……..……...	0	1	2	3	4	5	6
10. _____ is willing to help me when I need a special favor. …….	0	1	2	3	4	5	6
11. _____ cares about my general satisfaction at work. …….	0	1	2	3	4	5	6
12. If given the opportunity, _____ would take advantage of me. …….	0	1	2	3	4	5	6
13. _____ shows very little concern for me. ……...	0	1	2	3	4	5	6
14._____ cares about my opinions. ……...	0	1	2	3	4	5	6
15. _____ takes pride in my accomplishments at work. …….	0	1	2	3	4	5	6
16. _____ tries to make my job as interesting as possible. …….	0	1	2	3	4	5	6

© University of Delaware, 1986

Appendix C: Self-Care Assessment Worksheet

Using the scale below, rate the following activities in terms of frequency in which you regularly engage in them in your everyday life:
5 = Frequently
4 = Occasionally
3 = Rarely
2 = Never
1 = It never occurred to me

Physical Activities

____ Eat regularly (e.g. breakfast, lunch and dinner)
____ Eat healthy
____ Exercise
____ Get regular medical care for prevention
____ Get medical care when needed
____ Take time off when needed
____ Get massages
____ Dance, swim, walk, run, play sports, sing, or do some other physical activity that is fun
____ Take time to be sexual—with yourself, with a Partner
____ Get enough sleep
____ Wear clothes you like
____ Take vacations
____ Take day trips or mini-vacations
____ Make time away from telephones

Psychological Activities

____ Make time for self-reflection
____ Have your own personal psychotherapy
____ Write in a journal
____ Read literature that is unrelated to work
____ Do something at which you are not expert or in Charge
____ Decrease stress in your life
____ Let others know different aspects of you
____ Notice your inner experience—listen to your thoughts, judgments, beliefs, attitudes, and feelings
____ Engage your intelligence in a new area (e.g. go to an art museum, history exhibit, sports event, auction, theater performance)
____ Practice receiving from others
____ Be curious
____ Say "no" to extra responsibilities sometimes

Emotional Activities

____ Spend time with others whose company you Enjoy
____ Stay in contact with important people in your Life
____ Give yourself affirmations, praise yourself
____ Love yourself
____ Re-read favorite books, re-view favorite movies
____ Identify comforting activities, objects, people, relationships, or places and seek them out
____ Allow yourself to cry
____ Find things that make you laugh
____ Express your outrage in social action, letters and donations, marches, protests
____ Play with children

Spiritual Activities

____ Make time for reflection
____ Spend time with nature
____ Find a spiritual connection or community
____ Be open to inspiration
____ Cherish your optimism and hope
____ Be aware of non-material aspects of life
____ Try at times not to be in charge or the expert
____ Be open to not knowing
____ Identify what is meaningful to you and notice its place in your life
____ Meditate
____ Pray
____ Sing
____ Spend time with children
____ Have experiences of awe
____ Contribute to causes in which you believe
____ Read inspirational literature (e.g. talks, music, etc.)

Workplace or Professional Activities

____ Take a break during the workday (e.g. lunch)
____ Take time to chat with co-workers
____ Make quiet time to complete tasks
____ Identify projects or tasks that are exciting and rewarding
____ Set limits with your clients and colleagues
____ Balance your caseload so that no one day or part of a day is "too much"
____ Arrange your work space so it is comfortable and comforting
____ Get regular supervision or consultation
____ Negotiate for your needs (e.g. benefits, pay raise)
____ Have a peer support group
____ Develop a non-trauma area of professional interest

Balance Activities

____ Strive for balance within your work-life and workday
____ Strive for balance among work, family, and relationships: play and rest

© Norton, 1996

Appendix D: Relational Health Indices

Instructions: Below are statements about thoughts or feelings you might have regarding certain relationships. For each statement, select the appropriate number indicating your response. Please keep the following definition in mind as you respond to the statements:

Peer – a close friend to whom you feel attached to through respect, affection, and/or common interests; someone you can depend on for support and who depends on you

Peer/Close Friend: Please select the appropriate number to for each question below that best applies to your relationship with a close friend.

1=Never 5=Always

1. Even when I have difficult things to share, I can be honest and real with my friend ……...1 2 3 4 5
2. After a conversation with my friend, I feel uplifted ……..1 2 3 4 5
3. The more time I spend with my friend, the closer I feel to him/her ……...1 2 3 4 5
4. I feel understood by my friend ……..1 2 3 4 5
5. It is important to us to make our friendship grow ……1 2 3 4 5
6. I can talk to my friend about our disagreements without feeling judged ……..1 2 3 4 5
7. My friendship inspires me to seek other friendships like this one ……1 2 3 4 5
8. I am uncomfortable sharing my deepest feelings and thoughts with my friend …1 2 3 4 5
9. I have a greater sense of self-worth through my relationship with my friend …...1 2 3 4 5
10. I feel positively changed by my friend ……...1 2 3 4 5
11. I can tell my friend when he/she has hurt my feelings ……1 2 3 4 5
12. My friendship causes me to grow in important ways ……1 2 3 4 5

© Liang, Tracy, Taylor, Williams, Jordan, & Miller, 2002

Appendix E: Posttraumatic Growth Inventory - Revised

Indicate for each of the statements below the degree to which this change occurred in your life as a result of your work as a helper, using the following scale:

1 = I did not experience this change as a result of my work as a helper.
2 = I experienced this change to a very small degree as a result of my work as a helper.
3 = I experienced this change to a small degree as a result of my work as a helper.
4 = I experienced this change to a moderate degree as a result of my work as a helper.
5 = I experienced this change to a great degree as a result of my work as a helper.
6 = I experienced this change to a very great degree as a result of my work as a helper.

1. I changed my priorities about what is important in life.....1 2 3 4 5 6
2. I have a greater appreciation for the value of my own life……1 2 3 4 5 6
3. I developed new interests……....1 2 3 4 5 6
4. I have a greater feeling of self-reliance……..1 2 3 4 5 6
5. I have a better understanding of spiritual matters……...1 2 3 4 5 6
6. I more clearly see that I can count on people in times of trouble……...1 2 3 4 5 6
7. I established a new path for my life…….....1 2 3 4 5 6
8. I have a greater sense of closeness with others……...1 2 3 4 5 6
9. I am more willing to express my emotions……..1 2 3 4 5 6
10. I know better that I can handle difficulties……...1 2 3 4 5 6
11. I am able to do better things with my life……..1 2 3 4 5 6
12. I am better able to accept the way things work out……..1 2 3 4 5 6
13. I can better appreciate each day……1 2 3 4 5 6
14. New opportunities are available which wouldn't have been otherwise……1 2 3 4 5 6
15. I have more compassion for others……...1 2 3 4 5 6
16. I put more effort into my relationships……..1 2 3 4 5 6
17. I am more likely to try to change things which need changing……1 2 3 4 5 6
18. I have a stronger religious faith……1 2 3 4 5 6
19. I discovered that I'm stronger than I thought I was……..1 2 3 4 5 6
20. I learned a great deal about how wonderful people are……1 2 3 4 5 6
21. I better accept needing others……...1 2 3 4 5 6

© Tedeschi & Calhoun, 1996

Appendix F: Demographic Questionnaire

In order to successfully complete this study, I would like to know more about you. The information you provide will not be used to identify you in any way.

1. Age: _____

2. Gender:
   a. Female
   b. Male
   c. Other (please specify): _____

3. State in which you currently live
_____

4. Your ethnicity: (circle one)
   a. African or African American
   b. American Indian or Native American
   c. Asian or Asian American
   d. Biracial or Multiracial
   e. Caucasian
   f. Hispanic/Latina/Latino
   g. Other (please specify):_____

5. What is the highest level of educational you have completed? (circle one)
   a. Middle School or Junior High
   b. High school
   c. Some college
   d. Vocational training
   e. Associate's degree
   f. Bachelor's degree
   g. Some Graduate Coursework
   h. Master's degree
   i. Doctorate degree
   j. Professional degree
   k. Other (please specify):_____

6. Your approximate annual salary: (circle one)
   a. Less than $4,999
   b. $5,000 – $9,999
   c. $10,000 – $14,999
   d. $15,000 – $19,999
   e. $20,000 – $24,999
   f. $25,000 – $29,999
   g. $30,000 – $34,999
   h. $35,000 – $39,999
   i. $40,000 – $44,999
   j. $45,000 – $49,999
   k. Over $50,000

7. What gender of residents do you primarily work with at your facility? (circle one)
   a. girls
   b. boys
   c. both boys and girls

8. How long have you worked at your current residential facility? (circle one)
   a. 0 to 6 months
   b. 6 months to 1 year
   c. Over 1 year and less than 2 years
   d. 2 to 5 years
   e. 5 to 10 years
   f. Over 10 years

9. How long have you worked directly with youth in residential settings overall? (circle one)
   a. 0 to 6 months
   b. 6 months to 1 year
   c. Over 1 year and less than 2 years
   d. 2 to 5 years
   e. 5 to 10 years
   f. Over 10 years

10. Please indicate your level of agreement with the following statement: (circle one)

"I feel supported by my co-workers"

a. Strongly Agree
b. Moderately Agree
c. Slightly Agree
d. Slightly Disagree
e. Moderately Disagree
f. Strongly Disagree

11. What type of residential facility do you work in? (circle one)
   a. Detention/Correctional
   b. Treatment Focused
   c. Group Home
   d. Non-profit Treatment Center
   e. Faith-based Treatment Center
   f. Other (please specify):_____

12. How would you describe the location of the facility that you work in? (circle one)
   a. Rural
   b. Urban
   c. Suburban
   d. Other (please specify): _____

13. What is your job title or position?
   a. Direct Care/Program Staff
   b. Direct Care/Program Supervisor
   c. Counselor/Therapist
   d. Case Manager/Worker
   e. Other (please specify): _____

Table 1: *Means, Standard Deviations, and Intercorrelations of Variables of Interest*

Variable	*M*	*SD*	1	2	3	4	5	6	7
1. Burnout	23.27	6.33	---	.64***	-.44***	-.59***	-.30**	-.39***	-.35***
2. Compassion Fatigue	22.10	5.99		---	-.33**	-.37***	-.22*	-.11	-.13
3. Perceived Organizational Support	78.56	24.25			---	.21	.02	.27	.38***
4. Self-Care Behaviors	253.89	24.72				---	.46***	.29**	.40***
5. Peer Relational Quality	48.09	7.00					---	.29**	.34***
6. Vicarious Resilience	81.49	24.77						---	.29**
7. Perceived Co-Worker Support	5.01	1.21							---

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

Table 2: *Multiple Regressions Analyses for Variables Predicting Risk of Burnout and Risk of Compassion Fatigue*

Independent Variable	*Step*	R^2	ΔR^2	*F Change*	*df*	*B*	*SE B*	β
Burnout (*n* = 88)								
Co-Worker Support	1	.12	.11	11.61***	(1,86)	.08	.50	.02
Perceived Organizational Support	2	.48	.45	14.31***	(5,82)	-.08	.02	-.30***
Self-Care Behaviors	2					-.12	.02	-.47***
Peer Relational Quality	2					-.03	.09	-.03
Vicarious Resilience	2					-.04	.02	-.17
Compassion Fatigue (*n* = 88)								
Perceived Organizational Support	1	.22	.18	5.69***	(4,83)	-.07	.03	-.29**
Self-care Behaviors	1					-.07	.03	-.29*
Peer Relational Quality	1					-.08	.10	-.10
Vicarious Resilience	1					.02	.03	.08

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