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Compassion Fatigue and Coping in Mental Health Professionals Working in Residential Treatment with Traumatized Youth

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Philadelphia College of Osteopathic Medicine

Department of Psychology

COMPASSION FATIGUE AND COPING IN MENTAL HEALTH PROFESSIONALS

WORKING IN RESIDENTIAL TREATMENT WITH TRAUMATIZED YOUTH

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Doctor of Psychology

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Dissertation Approval

This is to certify that the thesis presented to us by Michael J. Baniewicz on the 5th day of

May 2015, in partial fulfillment of the requirements for the degree of Doctor of

Psychology, has been examined and is acceptable in both scholarship and literary quality.

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Abstract

This study utilized a prospective cross-sectional design to examine if a coping profile can be identified, indicating whether or not a professional is able to cope effectively with exposure to trauma symptoms while working in a residential treatment setting. The participants in this study were employees at a residential treatment facility in the suburbs of a major metropolitan area. Results indicated that individuals who utilized an emotion-focused or problem-focused coping style were less likely to experience symptoms of burnout. Participants who worked directly with those individuals who had experienced trauma experienced levels of burnout similar to those who had not, but experienced significantly higher levels of secondary traumatic stress. Furthermore, participants who worked a high number of hours per week and utilized an emotion-focused coping style were at higher risks for developing symptoms of burnout. Participants who utilized an avoidant coping style experienced low levels of compassion satisfaction; those who had experienced abuse in their past were at highest risk for developing symptoms of secondary traumatic stress. Access to effective supervision was related to lower levels both of burnout and of secondary traumatic stress. These findings support conceptualizing burnout and secondary traumatic stress as separate constructs, and also provide insight into risk factors for the development of negative symptoms in employees working with traumatized youth in a residential treatment setting.

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Chapter 1: Introduction

Statement of the Problem

Each year, approximately 93,000 children in the United States receive mental health treatment in residential treatment centers (RTCs) (Justice Policy Institute, 2009). Residential treatment is an expensive and intensive level of care used to treat high-risk individuals on a long-term basis. These children typically require treatment in a RTC due to frequent episodes of physical aggression, extreme avoidant behavior, and/or psychosis that continues to occur after numerous treatment failures (Frensch & Cameron, 2002). Usually when children are placed in a RTC, they live outside of their home communities, and are unable to participate in essential developmental activities such as engaging with a prosocial peer group, having consistent contact with their families, and participating in a regular education process (Duchnowski, Johnson, Hall, Kutash, & Friedman, 1993; McCurdy & McIntyre, 2004).

Additionally, between 60-70% of children in residential treatment have experienced abuse or neglect, and many meet the diagnostic criteria for posttraumatic stress disorder, or PTSD (APA, 2000; Farragher & Yanosy, 2005). In children, the presentation of trauma may manifest as a variety of behavioral symptoms, many of which may be aggressive in nature. Symptoms may include self-injury, attacking individuals who remind the child of past aggressors, and violent sexual behaviors (Cohen, Mannarino, & Deblinger, 2006).

When continuously exposed to the aggressive behaviors and vivid stories of clients who have experienced trauma, it is possible that mental health professionals

develop their own trauma symptoms. The development of trauma symptoms after being

exposed to others who were traumatized is known as secondary traumatic stress (STS) or

vicarious trauma (VT) (Jenkins & Baird, 2002). STS and VT are often used

interchangeably in the literature; however, the definitions do differ slightly. The concept

of STS focuses on behavioral symptoms, whereas VT focuses on cognitive changes that

occur in individuals working with traumatized patients (Figley & Kleber, 1995; Pearlman

& Saakvitne, 1995). However, both manifest symptoms similar to the *DSM-IV-TR* criteria

for PTSD; there are elements of reliving the trauma, avoidance of people and/or

situations reminiscent of the trauma, and physiological arousal when encountering trauma

reminders (Figley & Kleber, 1995; Pearlman & Saakvitne, 1995). Developing either of

these syndromes can have a negative impact on the caregiver and on the client.

Caregivers may avoid their clients and/or treat them in an insensitive manner to protect

themselves from being re-exposed to trauma symptoms. Clients may feel neglected and

invalidated due to the emotional distance caregivers may unknowingly place between

them and the clients in order to shield themselves from further vicarious trauma. Based

on the emotional toll experienced by caregivers, the development of STS or VT by those

caring for traumatized clients is often referred to as compassion fatigue (CF) (Figley,

1995; Devily, Wright, & Varker, 2009).

In conjunction with the development of CF, when a place of employment is

emotionally exhausting for its staff, employees may begin to feel resentful for having to

work with aggressive clients, frustrated by having to perform a seemingly hopeless task,

and underappreciated due to the high demands of their employer (Savicki, 2002). This

phenomenon is known as burnout (Maslach, 2003). Burnout is composed of three

dimensions: emotional exhaustion, depersonalization, and reduced personal accomplishment. When there is an imbalance in any of these dimensions, the employee's risk of becoming less effective and dissatisfied is heightened (Maslach, 2003). Individuals working in RTCs are at high risk for burnout due to prolonged exposure to clients exhibiting aggressive behaviors, extended hours of work, and inadequate training in how to cope with the effects of working in a RTC (Savicki, 2002).

Folkman, Lazarus, Dunkel-Schetter, DeLongis and Gruen (1986) proposed at least eight different styles in which individuals cope with stressful events. These include actively confronting the problem, attempting to distance oneself from the stressful event, internalizing dissatisfaction, seeking social support, accepting responsibility for one's part in a problem, attempting to escape, actively using a problem solving approach, and attempting to reframe a negative situation into a positive one. When applied to those working in residential treatment, two coping styles have been associated with a decreased sense of burnout: active problem-solving and positive reframing (Anderson, 2000; Devereux, Hastings, Noone, & Totskia, 2009). Furthermore, employees who used social support as a coping strategy were better able to cope with stress (Gray-Stanley & Muramatsa, 2011). In contrast, individuals who utilized avoidant, distancing, and confrontational coping styles were found to experience an increased sense of burnout (Devereux, Hastings, Noone, & Totskia, 2009).

Purpose of the Study

Although much of the literature on burnout and coping is based on a population under treatment in RTCs, this research has focused on therapists and direct care workers working with intellectually disabled adults. Little research has examined how coping

styles affect those working with traumatized children in RTCs and their development of

STS, VT, or CF (Eastwood & Ecklund, 2008). The purpose of this study is to determine

if certain coping styles predict burnout or compassion fatigue in residential care workers

treating traumatized youth. This study would help to clarify whether or not professionals

in RTCs are experiencing burnout due to job demands, compassion fatigue due to

exposure to trauma symptoms, or a combination of both. Additionally, this study will

examine if a coping profile can be identified, indicating whether or not a professional is

able to cope effectively in the RTC setting. A better understanding of coping styles as

related to staff burnout may help employees of RTCs by promoting effective coping

strategies to decrease burnout, improve job satisfaction and ultimately improve client

care.

History of Residential Treatment

The treatment of children in residential settings is a crucial part of the mental

health treatment system. Each year, over 90,000 children receive mental health treatment

while living outside of their homes. (Justice Policy Institute, 2009). A recent report

showed that 5.3 billion dollars of the mental health budget of the United States was

required to cover the cost of residential treatment (National Alliance on Mental Illness,

2011). However, the nature of the currently utilized facilities has begun to change.

Recently, there has been a shift away from residential treatment of mental health

disorders towards a community-based model of treatment delivery. Youth who may

require mental health treatment are being admitted to corrections-based detention centers

where their mental health needs frequently go untreated. Despite this, the cost of mental

health residential treatment is disproportionate to the number of children who utilize it.

Approximately eight percent of children who require mental health treatment utilize

residential treatment centers, but the cost of residential treatment care is nearly 25% of

mental health funding, due to the high cost of running inpatient facilities (Butler &

McPherson, 2006).

    The first residential treatment centers (RTC) for adolescents in the United States

were established in the 1920s. The initial purpose of residential treatment centers for

youth was to provide care for children who were abused, neglected, and/or without

families who could adequately care for them (Kolko, 1992). With the advent of social

work and applied psychology following World War II, residential treatment centers

began to shift their focus away from caring only for those without adequate means and

began to provide treatment for adolescents who were suffering from mental illness

(Magellan Health Services Children's Service Task Force, 2008). As treating children

with mental health issues became more popular, the number of residential treatment

centers catering to youth expanded. In 1954 there were 261 residential treatment centers

in the United States. By the mid-1980s 125,000 children were being treated in residential

treatment centers each year. In 2000, the number of children being treated in residential

treatment centers was approximately 250,000 annually (Magellan Health Services

Children's Service Task Force, 2008).

    However, as the prevalence of residential treatment expanded, the scope of

service and purpose of treatment became diffuse. Any setting where mental health

services were offered and where a youth spent the night was considered residential

treatment (Magellan Health Services Children's Service Task Force, 2008). No

distinction existed between acute care settings and long-term care institutions. As

managed care services were introduced, a distinction was made between short-term acute care settings, termed hospitals, and long-term treatment-focused settings, identified as residential treatment centers. The intervention and funding provided by managed care services changed the layout of residential treatment centers and began to emphasize evidence based practices to improve providers' outcomes for their clients (Magellan Health Services Children's Service Task Force, 2008).

Nearly a quarter of a million children coping with mental illness were being treated in residential treatment centers, and the treatment modality came under a great deal of criticism (Duchnowski, Johnson, Hall, Kutash, & Friedman, 1993; Magellan Health Services Children's Service Task Force, 2008). The primary criticisms of residential treatment included children's being separated from their families for long periods of time, lack of family involvement in treatment, children exhibiting institutionalized behaviors, poor outcomes, and under utilization of evidence-based practices. Additionally, the admission criteria for placement into a residential treatment center were inconsistent, and many children with low acuity mental health issues received extensive treatment outside of their homes (U.S. Surgeon General, 1999). Due to the overuse of this treatment modality, including its high cost, extensive reforms were introduced and enacted throughout the previous decade (Magellan Health Services Children's Service Task Force, 2008).

Most of the recent changes to residential treatment have been to improve consistency, safety, and treatment outcomes for clients utilizing this level of care (Magellan Health Services Children's Service Task Force, 2008; Mercer, 2008). These changes include developing evidence-based approaches, stricter guidelines for the

physical locations where children reside, ancillary services to improve family involvement, and attempts to streamline the residential treatment programs in order to maximize a cost to benefit ratio (Magellan Health Services Children's Service Task Force, 2008). Each change has led to improved outcomes in residential treatment centers (Frensch & Cameron, 2002; McCurdy & McIntyre, 2004; Mercer, 2008). However, the changes made to streamline the residential treatment programs have also had mixed consequences for those who provide the most important services in residential treatment centers: the employees.

The Residential Treatment Setting

There are several different types of residential treatment. Among the services considered as residential treatment are therapeutic foster homes, where children live on a short-term basis with a foster family who has had some training in identifying and intervening with behavioral problems; multidimensional treatment foster care, where children live on a short-term basis with a family who has received specialized behavior management training and also receive professional community-based mental health services; therapeutic group homes, where several children live in a community-based setting with professional staff members providing mental health support, and the traditional residential treatment center, where larger numbers of children live in a self-contained center that is staffed 24 hours per day by medical and psychological professionals (Magellan Health Services Children's Service Task Force, 2008). Although each of these services provides a residential component to their treatments, the focus of this review is on the later iteration: the traditional residential treatment program.

Residential treatment programs tend to be facilities situated in remote locations and are self-contained (Drais-Parillo, Baker, Fojas, Gunn, Kurland, & Schnur, 2004). Groups of children live in buildings which are supervised by direct care staff at all times. Children in RTCs can range in age from five to 21 years. Programs can vary in their levels of security. Some programs are open campuses, where the only doors that are locked are those going into the buildings. Other campuses have locks going into and out of buildings, and some programs are considered secure due to multiple sets of locked doors between the treatment population and the community. RTCs vary in their method of providing educational services to children. Programs which are open tend to utilize community-based school programs, but more secure facilities tend to utilize on-campus educational programs. However, every residential treatment program provides medical and psychological services to clients. RTCs follow a medical model of service delivery in which a physician or team of physicians directs treatment. Under the supervision of the physician is a team of psychologists, social workers, mental health professionals, recreational therapists, occupational therapists, nurses, and various other healthcare providers.

The primary caregiver in a RTC is a direct care worker who works a shift-type schedule (Drais-Parillo, et al., 2004). Although education requirements are not universal, and may vary between a bachelor's degree and no requirement, direct care staff members are generally required to have a high school diploma or equivalent training. Several hours of training are provided prior to the beginning of work; this includes education about behavioral management, crisis intervention, first aid/CPR, and program policies. Following the initial training, several hours of on the job training is provided prior to

having direct care workers begin to supervise children independently (Drais-Parillo, et al., 2004).

In order to be admitted to a RTC, children must have behavioral symptoms which pose a significant disturbance to themselves or their home communities (Connor, Doerfler, Toscano, Colungis, & Steingard, 2004). Children in residential treatment centers carry a range of psychiatric diagnoses. The most prevalent category is that of disruptive behavior disorder which is characterized by the presence of externalizing behaviors, impacting children's ability to perform their daily functioning adequately. Diagnoses in the category of disruptive behavior disorders consist of conduct disorder, oppositional defiant disorder, and attention deficit-hyperactivity disorder. Forty-nine percent of children in residential treatment centers fall into the category of disruptive behavior disorders. The second most prevalent category of DSM-IV-TR diagnoses in children residing in RTCs is mood and anxiety disorders, with 31% of children carrying this diagnosis. Psychotic disorders account for 12% of children receiving treatment in RTCs. Despite the prevalence of these aforementioned diagnoses, 92% of children in residential treatment have comorbid Axis I diagnoses (Connor, Doerfler, Toscano, Colungis, & Steingard, 2004). These diagnoses represent a behavioral constellation that consists of aggressive behaviors, affect dysregulation, and lack of impulse control.

Family stressors may also play a role in a child being admitted to a RTC. Of children admitted to RTCs, many had mothers experiencing serious stressors (Drais-Parillo, et al., 2004). Twenty-nine percent of mothers were diagnosed with a psychiatric disorder; 20% had been convicted of a crime; 37% met criteria for alcohol dependency, and 45% met criteria for chemical dependency. Fathers of children residing in RTCs also

experienced similar stressors. Eighteen percent were diagnosed with psychiatric

disorders; 52% had been convicted of a criminal offense; 58% met criteria for alcohol

dependency, and 54% met criteria for chemical dependency (Drais-Parillo, et al., 2004).

The negative impact of parental substance abuse and psychiatric disorders on their

children is vast and well-established. Children may imitate behaviors they have seen

and/or be genetically predisposed to having similar issues (Matthies, Selge, & Klöckner,

2012).

Research on the efficacy of residential treatment is mixed. The primary criticisms

are the lack of consistency across programs, the lack of the utilization of evidence based

treatments, and the lack of ability to generalize progress into a child's home community

(Duchnowski, Johnson, Hal, Kutash, & Friedman, 1993; Hair, 2005; Magellan Health

Services Children's Service Task Force, 2008; McCurdy & McIntyre, 2004). The

outcome research regarding RTCs that is available is primarily about the efficacy of

medication trials for treating aggression (Foltz, 2004).   The current circumstances

position employees to work with children exhibiting highly disruptive behaviors, yet have

few tools to treat them effectively.

Aggressive Behaviors as Trauma Symptoms

Many children enter RTCs in order to receive treatment for physically aggressive

behaviors that put both themselves and their home communities at risk for harm

(Magellan Health Services Children's Service Task Force, 2008). An important factor

when discussing aggressive and high-risk behaviors is trauma history. A history of

trauma has been a potential, causal factor for many behaviors seen in children who

present with externalizing behaviors such as physical aggression, destruction of property,

psychotic behaviors, and school avoidance (Cohen, Mannarino, & Deblinger, 2006). The

percentage of children in RTCs who have experienced trauma prior to admission is high.

In 2004, a nationwide study of residential treatment centers conducted by the Child

Welfare League of America found that 56% of children had been physically abused; 38%

had been sexually abused; 25% had been abandoned by their primary caregivers; 47%

had experienced neglect, and 34% had been witnesses to domestic violence (Drais-

Parillo, et al., 2004).

When exposed to sexual abuse, domestic violence, extreme losses, physical abuse,

and/or neglect, children may develop PTSD or PTSD-like symptoms (Cohen, Mannarino,

& Deblinger, 2006; D'Andrea, Ford, Stolbach, Spinazzola, & van der Kolk, 2012).

According to the DSM-IV-TR (APA, 2000), symptoms of PTSD include avoiding

reminders of a traumatic event; having intrusive thoughts about a traumatic event, and

entering into a state of physiological arousal when encountering reminders of the

traumatic event. Symptoms of trauma are similar both for children and for adults.

However, as with other diagnoses in the DSM-IV-TR, it is believed that children may

manifest symptoms of trauma in a manner slightly different from adults (D'Andrea, Ford,

Stolbach, Spinazzola, & van der Kolk, 2012). Children may experience different

symptoms due to developing coping strategies, inexperience with disturbing emotions,

and the impact that traumatic events have on a developing brain. In turn, their

experiences of the trauma may lead to dysregulation of mood and behavior and an

increase of aggressive and avoidant behaviors (Cohen, Mannarino, & Deblinger, 2006).

Children may learn to use aggression in an instrumental way through their trauma

experiences (Bancroft & Silverman, 2002; Cohen, Mannarino, & Deblinger, 2006). One

way in which this may occur is through modeling. For example, a child exposed to domestic violence may watch a parent harm another as a response to anger. As a result of this response, the child may learn that violence is an appropriate way to express anger and may utilize violence whenever anger is experienced (Bancroft & Silverman, 2002; Calvete & Orue, 2011).

Children may also learn to utilize aggression as a means to exert control over situations (Little, Brauner, Jones, Nock, & Hawley, 2003). From a functional standpoint, becoming physically aggressive may allow a child to escape an unwanted circumstance or set into motion a chain of predictable events. Children who are exposed to chronic abuse and violence tend to have developed in highly unpredictable environments; establishing some sense of predictability, no matter how detrimental, can be reassuring to them (Cohen, Mannarino, & Deblinger, 2006).

Regardless of whether or not aggression is due to impeded cognitive development, to the lack of ability to cope; to its being used instrumentally, or is a learned behavior, physical aggression is the primary admission criteria for children entering RTCs (Magellan Health Services Children's Service Task Force, 2008). Employees working in RTCs almost certainly will come into contact with aggressive children, whose aggression is in part due to past traumatic events. They will have to engage children who seem to be indiscriminately aggressive on a daily basis, and some of that aggression may be directed towards the employees. Having to work in an environment that is constantly plagued by the threat of violence can have a negative impact on the employee and may lead to the feeling of being burned-out.

Burnout

Burnout is defined as "a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who do 'people-work' of some kind" (Maslach, 2003). The concept of burnout was initially proposed in the 1970s by Freudenberger and Maslach through research conducted on caregivers (Kristensen, Borritz, Villadsen & Christensen, 2005). However, several studies have found that burnout occurs in any profession in which the personal requirements are subjectively viewed as greater than the outcomes gained (Maslach, 2003).

Maslach's (2003) theory of burnout is a three factor model which includes emotional exhaustion, depersonalization, and a sense of reduced personal accomplishment. These three factors are widely discussed in articles and generally relate to individuals in caregiving professions. However, as the theory was refined and generalized to a broader population, the factors were renamed in order to be more universal. Emotional exhaustion became exhaustion, which signifies the stress response of the individual. Depersonalization was changed to cynicism, which denotes the negative reactions to others in the workplace. Reduced personal accomplishment was changed to inefficacy in order to capture internal and external implications of dissatisfaction with one's job (Maslach, 2003). Although these changes have been made to the core theory and provide a broader means to conceptualize an individual's reaction to his or her work environment, they have not been widely adopted in the literature (Maslach, 2003).

Criticisms of Burnout

Maslach's theory of burnout has been and continues to be dominant in burnout research (Kristensen, Borritz, Villadsen & Christensen, 2005). Approximately 90% of all studies conducted on burnout use the Maslach Burnout Inventory (MBI), which focuses on Maslach's three factor concept of burnout. However, issues with Maslach's theory and inventory have been raised for the past two decades. Among the major criticisms of Maslach's theory is that it focused primarily on those who do "people-work." The term "people-work" was included in her definition of burnout and items on the MBI were specifically tailored to those who work with others (Kristensen, Borritz, Villadsen, & Christensen, 2005). As previously mentioned, Maslach eventually updated her theory, renamed her constructs, and reworded the MBI in order to capture a broader array of burnout syndromes across various fields of employment.

Another criticism of Maslach's theory is that the MBI does not truly align with the concept of burnout (Kristensen, Borritz, Villadsen, & Christensen, 2005). However, Maslach's theory of burnout is conceptualized as a sum of symptoms across her three domains. Despite this, the MBI measures the three concepts separately, with each being interpreted independently. Critics have stated that the three factors are indeed important to job performance and satisfaction; however, they should not be interpreted together as one concept (Schutte, Toppinen, Kalmino, & Schaufeli, 2000).

A final major criticism of Maslach's theory is that the three factors are a mix of a subjective state, a coping strategy, and an outcome (Kristensen, Borritz, Villadsen, & Christensen, 2005). Depersonalization is a technique that individuals use in order to cope with a subjective state that is experienced under stress. A sense of reduced personal

accomplishment is a consequence of enduring long-term stress. Emotional exhaustion is viewed as a subjective state that has not been adequately quantified. Critics of this aspect of Maslach's theory acknowledge the importance of identifying coping strategies and consequences, but state that they should not be incorporated into the construct of burnout (Kristensen, Borritz, Villadsen, & Christensen, 2005).

In response to these criticisms of Maslach's model, the Copenhagen Burnout Inventory (CBI) was constructed to study the same concept, but to clarify the operational definition of burnout (Kristensen, Borritz, Villadsen, & Christensen, 2005). The theory underlying the CBI focuses on two factors of burnout: fatigue and exhaustion. Supporting these factors is a body of research that generally defines burnout as a combination of physical and emotional exhaustion, combined with cognitive weariness (Pines & Aronson, 1988; Schaufeli & Greenclass, 2001; Shirom, 1989). Additionally, the concepts of fatigue and exhaustion can be generalized across various domains in an individual's life. Burnout can be experienced within a person, within a work environment, and between workers and clients. The common feature in each domain, burnout, can be experienced asthe causal attribution of fatigue and exhaustion experienced in the work environment (Kristensen, Borritz, Villadsen, & Christensen, 2005).

Despite attempting to build a better concept and measure for burnout, research on the CBI has been mixed. Studies have found that it is highly correlated with well-being measures, but they have also found that there is a large amount of overlap between the two factors (Milfont, Denny, Ameratunge, Robinson, & Merry, 2008; Winwood & Winefield, 2004; Yeh, Cheng, Chen, Hu, & Kristensen, 2007). The CBI and its associated theory have gained some traction in the field of burnout due to being offered to the public

free of cost and as an alternative to the MBI. However, Maslach's theory has been refined

to account for many of its criticisms and continues to be the most widely accepted theory

of burnout. Many researchers continue to use the MBI or a combination of the MBI and

another measure of burnout (Schaufeli, Leiter, & Maslach, 2009).

Causes of Burnout

   Two main causes of burnout are commonly discussed in burnout literature:

personal characteristics and the work setting (Maslach, 2003; Seti, 2007). Personal

characteristics consist of aspects of the employee's personality that he or she brings to the

work environment. Research on this aspect is varied. For example, employee age is

commonly used as a research variable. Some researchers have found that younger

individuals are more susceptible to burnout and develop it more intensely (Dietzel &

Coursey, 1998; Russel, Altmaier, & Van Velzen, 1987) whereas others have found no

link between employee age and the development of burnout (Corcoran, 1987). The

amount of experience that an employee has working in the mental health field is also a

frequently used variable in burnout research. Similar to employee age, there are varied

outcomes among these studies (Ross, Altmaier, & Russel, 1989; Coady, Kent, & Davis,

1990).

   Personality factors are also studied as a potential cause of burnout. Employees

who tend to be idealistic, rigid, neurotic, and have a Type A personality may be more

susceptible to developing burnout symptoms (Freudenberger, 1980; Nowack, 1986;

Holloway & Wallinga, 1990; Burke & Richardsen, 1996). Most of this research has been

conducted on staff members who work with adults. Lakin, Leon, and Miller (2008)

examined personality factors in staff members who work with children in RTCs. Their

findings indicated that experience, education, emotional contagion, and coworker support were not able to predict levels of burnout in direct care staff members. It was also found that a significant amount of variability existed in the degree of burnout that employees experienced between treatment organizations, and suggested that the main determinant of burnout may be organizational in nature.

The work setting is the second major cause of burnout and is generally viewed as having two components: role characteristics and organizational characteristics (Seti, 2007). Role characteristics include the daily activities and responsibilities in which an employee engages. Direct client contact is the most highly researched variable in this area, producing mixed findings. Some researchers have found that a high level of direct client contact is related to a higher prevalence and intensity of burnout (Acker, 1999; Freudenberger, 1980; Perlman & Hartman, 1982); however, others have found there is no relationship between client contact and burnout (Coady, Kent, & Davis, 1990; LeCroy & Rank, 1987). Research suggests that boredom with daily routine has been found to correlate with burnout and appears to be a consistent contributing factor to the development of employee dissatisfaction (Freudenberger, 1974; Hagen, 1989).

Role stress is the characteristic that is most strongly related to the development of burnout (Seti, 2007). Role stress consists of inconsistencies and ambiguities in job expectations; it also consists of those situations and times when the requirements of a job are in conflict with an employee's personal feelings and beliefs (Holloway & Wallinga, 1990). Stress from not knowing what is expected and consistently having to act in a manner that is contradictory to an employee's instincts promotes the development of all

three aspects of burnout, but primarily that of emotional exhaustion (Brookings, et al.,

1985; Leiter & Maslach, 1988; Munn, Barber, & Fritz, 1996).

Of all potential causes of burnout, organizational characteristics are the most

consistently responsible for the development of the syndrome. The social support that is

available, formally and informally, in an organization is a major factor in the

development or prevention of burnout. Several studies have shown that with less social

support, employees are at a higher risk of developing burnout (Jackson, Schwab, &

Schuler, 1986; Jackson & Schuler, 1983; Maslach & Jackson, 1981; Maslach & Pines,

1977; Pines & Maslach, 1978; Wade, Cooley, & Savicki, 1986). Social support can come

either from peers or from superiors in a work environment. A positive sense of social

support is thought to lead to decreased levels of burnout and may even remediate burnout

that has developed (Wade, Cooley, & Savicki, 1986). In conjunction with this, Rose,

Maduriai, Thomas, Duffy, and Oyebode (2010) found that the feedback and relationship

supervisors have with their staff members is important in understanding burnout. Positive

feedback and a sense that supervisors are investing as much in their employees as the

employees are investing in their jobs is important to prevent and remediate burnout in

direct care staff members (Rose, Maduriai, Thomas, Duffy, & Oyebode, 2010). Efforts

have been made to improve reciprocity in RTCs by attempting to increase the sense of

equality between staff members, supervisors, and clients and to improve open and honest

communication (Bloom, 2005).

Organizations that are large or have excessive amounts of bureaucratic procedures

may lead an employee to develop a decreased sense of autonomy, which in turn leads to

the development of depersonalization and a reduced sense of personal accomplishment

(Cordes & Dougherty, 1993; Schaufeli & Buunk, 1996; Seti, 2007). Additionally, a lack of opportunity to advance oneself within an organization, which is common in mental health treatment centers, has been shown to correlate with burnout (Decker, Bailey, & Westergaard, 2002). Thus, employees feel trapped in their roles and put less effort into providing competent care to their patients.

The Cost of Burnout in Residential Treatment Staff

Although Maslach's theory of burnout has been tested in various populations, the research related to burnout in residential treatment staff members is particularly salient. Freudenberger's (1974) original concept of burnout was tested in a RTC, which, in turn, was the catalyst for the current understanding of burnout.

The development of burnout among mental health workers has a significant impact on clients in treatment and on the organizations that provide treatment (Morse, Slayers, Rollins, Monroe-Devita, & Pfahler, 2011). Specifically, staff burnout leads to decreased levels of staff retention and an increase in staff turnover rates (Hoge, Morris, Daniels, Stuart, Huey, & Adams, 2007). From a human resource perspective, as the competent candidate pool is used up due to burnout, the potential pool of competent candidates to work in a direct care role is reduced. In a recent evaluation conducted to improve outcomes in mental health treatment and to reduce abuse and fraud, the United States government has identified burnout as one of the primary problems in developing an efficient behavioral healthcare system (Hoge, Morris, Daniels, Stuart, Huey, & Adams, 2007). Some of the results of burnout include: the increased staff turnover rates because of burnout, cost organizations money through the time spent in training new staff members, and in missed work due to staff inability to cope with stress. One study found

that turnover due to burnout and the training of new staff members cost organizations approximately $62,000 per six month time period, per patient in an RTC (Gilbody, Cahill, Barkham, Richards, Bee, & Glanville, 2006). Overall, the dissatisfaction and personal turmoil that a burned out employee is experiencing may lead to an increase in accidents, absenteeism, and an increased use of sick time due to physiological reactions to stress (Firth & Britton, 1989; Maslach & Jackson, 1986; Morse, Salyers, Rollings, Monroe-DeVita, & Pfahler, 2011; Razza, 1993).

There is also an interpersonal cost to burnout. As previously mentioned, staff members who develop the depersonalization aspect of burnout may interact with their patients in a cold and impersonal manner (Maslach, 2003). A child who has built a trusting relationship with a staff member who is experiencing the depersonalization aspect of burnout may feel a breach of trust and may experience a lack of support when it is needed. This has the potential to undo any progress that has been made in treatment on interpersonal skills and trust and lead to less effective interventions in the RTC setting (Seti, 2007).

Additionally, staff members who begin to treat patients in an impersonal manner may begin to view them as objects rather than as individuals who are suffering (Figley, 1995). This, accompanied by frustration over lack of client progress, and irritability due to managing aggressive behaviors may potentially lead to an increase in staff mistreating or abusing clients. Abuse in residential treatment centers has been established historically and is currently poorly understood (Hobbs, Hobbs, & Wynne, 1999; Parkin & Green, 1997). Clients tend to allege abuse frequently, but the vast majority of allegations are unfounded (Smith, 2008).

Vicarious Trauma, Secondary Traumatic Stress, and Compassion Fatigue

Employees who work in RTCs may gradually develop the symptoms of burnout (i.e., emotional exhaustion, depersonalization, and experience a reduced sense of accomplishment); they may also suddenly experience negative effects directly related to the trauma experienced by their clients (Figley, 1995). When they work closely with clients who have experienced traumatic events, and have potentially developed PTSD symptoms, it is possible for employees to develop symptoms which mimic those formed after direct exposure to trauma (Jenkins & Baird, 2002). Symptoms generally fall broadly into the categories of having intrusive thoughts about the trauma stories and/or the person who experienced them, avoiding individuals who have experienced trauma, and physiological arousal when encountering trauma reminders (Figley & Kleber, 1995; Pearlman & Saakvitne, 1995). When one who works with traumatized individuals develops such symptoms, the syndrome is referred to as vicarious trauma or secondary traumatic stress (Jenkins & Baird, 2002).

Most of the research on vicarious trauma (VT) and secondary traumatic stress (STS) indicates that the terms are used interchangeably (Jenkins & Baird, 2002). However, the two constructs differ in how the effects of trauma impact the individual. The construct of VT focuses on the cognitive shifts that occur with an individual after interacting with someone who has experienced trauma. Pearlman and Saakvitne (1995) define VT as a "transformation in the inner experience of the therapist that comes about as a result of empathic engagement with clients' trauma material." Through exposure to another's trauma material, an individual's own cognitions regarding self, the world, individual needs, and interpersonal relationships can be altered. Cognitions are

fundamentally changed due to a reconceptualizing of the danger of the world and can be altered permanently (Pearlman & Saakvitne, 1995; Jenkins & Baird, 2002).

The construct of STS focuses on the behavioral changes that an individual experiences when exposed to trauma material (Jenkins & Baird, 2002). The criteria and symptoms of STS are the same as those for PTSD: reliving the trauma experience, avoidance of reminders of trauma, and persistent physiological arousal (Figley & Kleber, 1995). However, the primary difference between PTSD and STS is that individuals who develop PTSD have been in a perceived life-threatening situation, whereas individuals who develop STS have contact with those who have been in a perceived life-threatening situation. The development of STS can be temporary, preventable, and treatable. The interaction between the traumatized person and one who develops STS also delineates the difference between STS and VT. Individuals who develop STS generally have an empathic connection or relationship with the traumatized person. Due to the empathic nature of the relationship in many of those who have developed STS, Figley (1995) further clarified the construct and renamed it compassion fatigue. Compassion fatigue is a form of STS that develops in those who treat traumatized individuals (Figley, 1995).

The two largest factors indicating whether or not individuals are vulnerable to compassion fatigue are exposure to trauma material and the ability to have empathy (Figley, 1995). Although specific professions have additional factors leading to CF vulnerability, exposure and empathy are general vulnerability factors across professions. If either of these factors is absent, it is more difficult for an individual to develop CF. However, in order to provide effective and meaningful treatment to traumatized persons, it is important to be present and to care for them, thus inherently placing caregivers at

risk to develop CF (Figley, 1995; Figley, 2002). Additionally, individuals treating

traumatized people may have experienced traumas of their own. Being exposed to

additional trauma and the reactions of others to traumatic events may trigger a trauma

response in the caregiver or become a reminder of his or her own trauma. Due to their

inadequate abilities to cope with traumatic memories, caregivers who have unresolved

trauma may develop CF more quickly and intensely than those who do not have

unresolved trauma. Finally, certain populations may be more difficult for caregivers to

handle; of particular difficulty are children who have experienced trauma (Figley, 1995).

Criticisms of Vicarious Trauma, Secondary Traumatic Stress, and Compassion

Fatigue

VT, STS, and CF have similar criticisms. Primarily, little evidence has supported

each of these ideas as distinct constructs (Devilly, et al., 2009). Critics state that the

theoretical basis of VT, STS, and CF appears to be sound, but the implementation and

detection of these phenomena is flawed. Devilly and colleagues (2009) found that STS

and VT were more closely correlated with burnout than they were with each other.

Additionally, they found that work stress was more highly correlated with PTSD-like

symptoms than were measures of STS, VT, or burnout. Additionally, Devilly and

colleagues (2009) found that there was little relationship between the presence of STS or

VT symptoms and prolonged exposure to client traumatic memories in therapists. It is

argued that STS and VT do not display construct validity, and that this constellation of

symptoms is better defined in the context of a more valid construct: burnout (Devilly, et

al., 2009). Finally, a qualitative study conducted on trauma therapists found that empathic

engagement with traumatized individuals was actually a protective factor against PTSD-

like symptoms. This finding called into question the validity of the two key components in the development of CF: exposure and empathy (Harrison & Westwood, 2009).

In response to criticisms regarding lack of differentiation between CF, STS, and burnout, Stamm and Figley (2009) created a new model of CF. This model posits that CF is a higher level construct regarding the well-being of an employee; it consists of two components: secondary trauma and burnout. Secondary trauma consists of the sudden symptoms akin to PTSD when working with traumatized individuals, and is theoretically the same as STS. Burnout is conceptualized as feelings of hopelessness and of having difficulty working effectively in an environment. When taken together, the sum of secondary trauma and burnout is CF (Pearlmann & Caringi, 2009; Stamm & Figley, 2009; Stamm & Figley, 2010).

Compassion Fatigue in Residential Treatment Centers

Children residing in residential treatment centers are likely to have experienced trauma. Sixty to seventy percent of children in residential treatment centers have been victims of abuse or neglect, and many meet the diagnostic criteria for PTSD (Farragher & Yanosy, 2005). Individuals working with children in RTCs are exposed to the children's trauma memories and their symptoms on a daily basis, thus placing the staff in a high risk category because of exposure to, and caring for children with trauma histories (Figley, 1995).

There is a paucity of published research on compassion fatigue in residential treatment centers. Research that has been conducted has focused primarily on direct care workers who are supervising children 24 hours per day (Eastwood & Ecklund, 2008; Nelson-Gardell & Harris, 2003). One study found that approximately one- third of

individuals working in residential treatment experience symptoms of compassion fatigue

(Eastwood & Ecklund, 2008). However, the largest predictor of compassion fatigue was

the degree of burnout. This may be expected because burnout is a subconstruct in Stamm

and Figley's (2009) revised model of compassion fatigue. However, question remains

about whether or not compassion fatigue is a separate construct from burnout, and if the

two can accurately be differentiated from each other, especially given the high prevalence

of burnout experienced by employees working in RTCs.

Coping

In order to manage the emotions that are triggered by the experience of burnout or

compassion fatigue individuals utilize various styles of coping. Coping styles are a form

of problem solving that individuals utilize in order to handle stressful events (Folkman,

Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986). Individuals who are experiencing

stress may utilize a number of different approaches, both positive and negative, to handle

stress.

Coping theory can be traced to Lazarus's (1966) work on psychological stress.

His theory consists of a two-process approach to stress and coping. The first part,

cognitive appraisal, is "a process through which the person evaluates whether a particular

encounter with the environment is relevant to his or her well-being, and if so, in what

ways" (Folkman, et al., 1986). Cognitive appraisal consists of two sub processes, primary

appraisal and secondary appraisal. Primary appraisal is how an individual decides if a

situation is a threat or if something could be lost by a certain situation occurring. In

secondary appraisal, an individual identifies if anything can be done to remediate the

stressful situation and/or prevent it from occurring again (Folkman, et al., 1986; Lazarus,

1966). After conducting both forms of appraisal, an individual is able to establish whether or not a situation is good for personal well-being, and what degree of danger it represents (Folkman, et al. 1986).

The second portion of coping theory consists of the coping process (Folkman, et al. 1986; Lazarus & Folkman, 1984). Coping is "a person's constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the person's resources" (Folkman, et al., 1986). Coping is both process-oriented and contextual. Coping changes throughout a stressful event and an effective means of coping in one situation may not be the same for an individual in another situation (Folkman & Lazarus, 1984). Also, despite societal norms, coping is not labeled as good or bad, only as effective or ineffective (Folkman, et al., 1986). The original theorists attempted to focus on the process of the individual, but as research has evolved in the field, the terms positive and negative coping have taken root (Herbert, Zdaniuk, Schultz, & Scheier, 2009; Shapiro, Schwartz, & Astin; 1996). However, these terms do not appear to be pejorative, but rather a comment on the effect that the coping approach has on the individual's well being.

Coping has two broad functions, to regulate the emotions associated with stress, also known as emotion-based coping, and problem-focused coping, which is how an individual can alter his/her relationship with a stressful situation or event (Folkman, et al. 1986; Folkman & Lazarus, 1980). Both functions occur in relation to a majority of stressful encounters, but individuals may have a preference for the function on which they primarily focus (Folkman & Lazarus, 1980; Folkman & Lazarus, 1985; Folkman, et al., 1986).

The initial effort to further define coping and increase specificity in understanding coping styles was conducted by Folkman and colleagues in 1986. Through the study on married couples, eight different forms of coping were identified. These consisted of confrontive coping, which was defined as aggression directed towards a stressful event; distancing, including efforts to detach from stress; self-control, defined as attempting to control emotions; seeking social support; accepting responsibility for one's role in the stressful event; escape-avoidance, including cognitive and behavioral efforts to avoid contact with stress; planful problem-solving, defined as methodical efforts to change or resolve the stressful situation; and positive reappraisal, which includes attempting to find meaning through a stressful situation (Folkman, et al., 1986). The measure used in this test group was later published as the Ways of Coping Questionnaire (WCQ), and has been frequently used in coping research since its publication (Folkman & Lazarus, 1988; Hatton & Emerson, 2010; Kieffer & MacDonald, 2011).

Several attempts have been made to further refine Lazarus's theory of coping into measurable inventories of coping (Schwarzer & Schwarzer, 1996; Steed, 1998). Many of the inventories created have targeted specific clinical populations and cultural groups (Dise-Lewis, 1988; Kakabaraei, Moradi, Afrooz, Hooman, & Shokri, 2012; Krohne, 1993; Patterson & McCubbin, 1987). However, most of these inventories suffer from poor psychometric properties and lack of connection to theoretical underpinnings (Schwarzer & Schwarzer, 1996; Steed, 1998). Despite this, two research teams were able to create coping inventories that effectively captured Lazarus's coping theory and further defined specific aspects of the theory (Carver, Scheier, & Weintraub, 1989; Endler & Parker, 1990).

Criticisms of Folkman and Lazarus's theory of coping and its associated measure include the lack of strong psychometric properties and the fact that coping can be radically different across situations (Schwarzer & Schwarzer, 1996). In response to this, Endler and Parker (1990) created the Coping Inventory for Stressful Situations (CISS). The aim of the CISS was to capture a broader and more consistent picture of how individuals cope with stressful events. They were able to distill the various coping styles into three primary categories: task-oriented, emotion-oriented, and avoidance-oriented coping. Task-oriented coping focuses on activities that individuals undertake to resolve stressful situations. Avoidance-oriented coping focuses on both distraction and social diversion techniques used to cope with stressful events. The new, three factor structure was found to be more consistent across situations (Endler & Parker, 1999). Despite the improved reliability of this scale, the main criticism of the CISS is that it is too broad and does not capture the nuances involved in coping with a variety of stressful situations across various contexts (Schwarzer & Schwarzer, 1996).

Another criticism of the WCQ was that the concepts of emotion-focused and problem-focused coping were overly simplified (Carver, Scheier, & Weintraub, 1989; Schwarzer & Schwarzer, 1996). In response to this criticism and to refine coping theory, the COPE was developed (Carver, Scheier, & Weintraub, 1989; Carver, 1997). The COPE identifies a total of 15 subcomponents of coping, each with a specific subscale. These subscales were arrived at by further breaking apart certain aspects of the WCQ (ex. escape and avoidance becomes behavioral disengagement and mental disengagement), and also by adding elements that may have been overlooked, such as religious coping and substance use (Carver, Scheier, & Weintraub, 1989; Cook, Thompson, & Coca-Lyle,

2011). As with the CISS, this formulation of coping strategies was more consistent across

context. Similar also to the CISS, factors of the COPE were studied further and found to

group into higher order factors. These factors consist of problem-focused, emotion-

focused, avoidance-oriented, and social support coping dimensions (Carver, Scheier, &

Weintraub, 1989; Carver, 2007; Litman, 2006).

Coping Styles and Burnout

A fair amount of research has been conducted on coping styles in relation to

burnout. However, the research on coping styles and burnout in individuals working with

children in RTCs is limited (Seti, 2007). Therefore, the closest approximations in the

published literature include child protection workers, individuals working in RTCs with

disabled adults, caregivers of special needs children, and healthcare workers. (Anderson,

2000; Devereux, Hastings, Noone, Firth. & Totsika, 2009; Hastings & Brown, 2002; Ling

& Mak, 2012; Morse, Salyers, Rollins, Monroe-DeVita, & Pfahler, 2011). Regardless of

the population studied, the research on burnout and coping demonstrates mixed results.

Some studies have found that coping strategies have little impact on degree of burnout

(Anderson, 2000; van Wyk, Pillay-van Wyk, & Zwarenstein, 2010). Other studies have

found that specific, high-order coping styles have a significant impact on the degree of

burnout experienced (Devereux, et al., 2009; Morse, et al., 2011).

Anderson (2000) examined veteran child protection employees who were

working with children that had been removed from their homes due to abuse and/or

neglect. She examined the training that workers received as well as how they actually

coped with stress following several years of experience. Her findings indicated that many

of the workers experienced a high degree of emotional exhaustion. Although the workers

were taught how to utilize problem-focused coping strategies, this method of coping was

ineffective for them because of the limited control the worker actually has over the

outcome of the situation in which he or she is placed. However, workers who utilized

emotion-focused coping strategies were better able to provide context for their work and

experienced decreased levels of emotional exhaustion and depersonalization (Anderson,

2000).

A study that focused on staff members working with children with intellectual

disabilities found that many of the staff members utilized maladaptive coping strategies

(Hastings & Brown, 2002). Maladaptive coping strategies were identified as coping

styles that could have a negative impact either on the child or on the caregiver. Primarily,

these consisted of avoidant and emotion-focused coping styles. Findings indicated that

staff members who used maladaptive coping strategies experienced higher degrees of

burnout across dimensions. Additionally, using maladaptive coping magnified the effect

that challenging behaviors had on the degree of emotional exhaustion experienced,

indicating the importance of implementing problem-focused and social support coping

strategies for individuals working with children who have challenging behaviors

(Hastings & Brown, 2002).

Some research has been done on coping and burnout in the residential treatment

setting (Devereux, Hastings, Noone, Firth, & Totsika, 2009; Gray-Stanley & Muramatsu,

2011). However, these studies have focused primarily on staff members working with the

intellectually disabled population (Devereux, et al., 2009). One study found a positive

correlation between work demand and emotional exhaustion. However, the use of wishful

thinking, one form of a positive reframing coping strategy, was found to decrease the

impact that work demand had on emotional exhaustion. Additionally, having a strong network of social support was found to dramatically impact a staff member's sense of personal accomplishment (Gray-Stanley & Muramatsu, 2011). Effective coping and a robust support system may decrease the effects of burnout (Devereux, et al., 2009). Staff stress has also been found to correlate positively with emotion-based coping strategies (Mitchell & Hastings, 2001).

Some concerning results arise from a meta-analysis on coping and burnout in healthcare workers (van Wyk, Pillay-van Wyk, & Zwarenstein, 2010). After examining ten different studies focused on the outcomes of preventing burnout in healthcare workers, including coping training, findings indicate that, although there is an immediate decrease in emotional exhaustion and depersonalization following training, that training in coping strategies does not affect the dimensions of burnout for a significant amount of time following a coping training (van Wyk, Pillay-van Wyk, & Zwarenstein, 2010). A similar review of outpatient mental healthcare workers found that 21-67% of mental health workers experience a significant amount of at least one dimension of burnout (Morse, et al., 2011). One of the primary critiques raised in this analysis was that little has been done to understand coping in the mental health field, and ironically, mental health is one of the few fields in which the effect of coping strategies on burnout has not been investigated (Morse, et al., 2011; Paris & Hoge, 2010).

Another confounding issue is that the relationship between coping style and burnout can be bi-directional and is currently unclear (Seti, 2007). When an individual experiences a high degree of burnout, burnout may impact the coping style. However, if an individual has adequate coping resources, coping style may impact the degree of

burnout. Those who experience high levels of burnout may not have adequate resources

needed to apply coping strategies other than avoidance and depersonalization, which

leads to a decrease in job performance and an increase in burnout (Etzion & Pines, 1986,

Seti, 2007).

Coping Styles and Compassion Fatigue

Similar to the respective bodies of research on burnout and compassion fatigue

theory, the amount of research on coping and compassion fatigue is less developed. Most

of the literature on coping styles and compassion fatigue has been published by authors of

various chapters in Figley's books on compassion fatigue (Figley, 1995; Figley, 2002).

Most authors suggest coping strategies that are theoretically connected to compassion

fatigue but lack evidence to identify whether or not these strategies are effective

(Monroe, Shay, Fisher, Makary, Rapperport, & Zimering, 1995; Pearlman & Saakvitne,

1995; Trippany, Kress & Wilcoxon, 2004; Yassen, 1995).

One coping strategy that is often proposed as helping with compassion fatigue is

humor (Moran & Figley, 2002). Humor may be a means of reframing a situation in a way

that is easier for an individual to incorporate into his/her worldview without having to

adjust cognitive schemas. However, what is confounding about humor is that it has also

been proposed as a marker of psychological well-being (Moran & Massam, 1997;

Overholser, 1992). Individuals with a sense of humor have been found to cope better

when interacting with individuals experiencing trauma symptoms. Therefore, humor has

been hypothesized as a moderator for the development of compassion fatigue (Moran,

2002).

The primary coping strategies that are suggested in regard to compassion fatigue include supervision, leisure activities, self-care, and learning more about trauma (Pearlman & Saakvitne, 1995). Each of these practices is specific to the mental health environment, and most do not fit into the constructs defined in popular coping theories. Therefore, these practices present a novel approach to coping. Based on this assumption, Bober, Regeher, & Zhou (2006) created a coping inventory focusing on these dimensions. However, when tested on a sample of trauma therapists, no association was found between engagement in these practices and decreases in the presence and/or intensity of secondary trauma symptoms (Bober & Regehr, 2006).

Another study looking specifically at self-care practices identified three practices found to have a strong relationship with ameliorating compassion fatigue (Eastwood & Ecklund, 2008). These activities included having a hobby, reading for pleasure, and taking vacations. However, 26 other self-care practices were found to have no association with the decrease of compassion fatigue symptoms (Eastwood & Ecklund, 2008; O'Halloran & O'Halloran, 2001). Although these practices are somewhat effective in diminishing the effects of compassion fatigue, they do not adequately identify how an individual approaches a situation in which he or she may develop symptoms of compassion fatigue. In terms of traditional coping theory, self-care practices would be an amalgamation of self-distraction, active coping, and planning. Additionally, the only means for a person to engage in the three self-care practices proposed by Eastwood & Ecklund (2008) would be to detach from his or her role as caregiver. This may be a positive and protective routine; however, it does not account for how an individual copes with stressful situations in the moment.

Summary of Literature

In summary, a fair amount of research has been conducted on burnout and compassion fatigue in RTCs. Although some overlap exists between the two constructs, it is clear that employees who experience either burnout or secondary traumatic stress suffer personally and professionally. However, most of the research conducted has been on individuals working with intellectually disabled adults. Few published articles have examined how individuals working with traumatized youth are affected by burnout and compassion fatigue (Eastwood & Ecklund, 2008). Furthermore, although research on coping strategies for dealing with burnout is fairly well established, few researchers have looked at coping styles in the mental health field. Common assumptions are that effective coping styles for healthcare workers will generalize to the mental health field (Morse, et al., 2011). Additionally, most literature that discusses coping with compassion fatigue focuses on self-care techniques rather than on an effective style of cognitive appraisal.

In order to minimize the negative effect that working with traumatized youth has on employees, it is important to understand the individual factors that lead to the development of burnout and compassion fatigue. The purpose of the present study is to clarify whether or not there is a difference in coping styles for those who are experiencing STS and burnout in RTCs. Another purpose is to understand whether or not the experience of STS is limited only to those who have direct contact with individuals who are experiencing trauma symptoms. Additionally, the investigator hopes to identify which coping styles predict the development of compassion fatigue and/or burnout in RTC staff members. The present study also aims to identify a coping profile indicating whether or not a professional will be able to cope effectively with the demands of

working in a RTC setting with traumatized youth. Hopefully, these results can be used to

promote effective coping strategies, retain employees, and improve the care of clients

who have experienced trauma.

Chapter 2: Hypotheses

In evaluating the experiences of individuals working with traumatized youth in residential treatment, the following hypotheses were tested:

Hypothesis One

Employees who use emotion-focused, problem-focused, or dysfunctional/avoidant coping strategies will differ in their levels of reported burnout and secondary traumatic stress. Information regarding coping styles was gathered through use of the Brief COPE. Burnout and secondary traumatic stress scores were gathered through the use of the ProQOL-5. The literature indicates that individuals have different levels of burnout and secondary traumatic stress, depending on their coping style (Anderson, 2000; Devereux, et al., 2009; Morse, et al., 2011; van Wyk, Pillay-van Wyk, & Zwarenstein, 2010).

Hypothesis Two

Employees working directly with traumatized clients will show higher degrees of secondary traumatic stress than employees working in indirect roles. However, there will be no significant difference on scores of reported burnout. Burnout and secondary traumatic stress scores were gathered through the use of the ProQOL-5. Controversy exists in the literature about the validity of the constructs of secondary traumatic stress and burnout. (Etzion & Pines, 1986, Seti, 2007).

Hypothesis Three

A combination of the predictor variables of coping style, abuse history, and compassion satisfaction will predict secondary traumatic stress scores as measured by the ProQOL-5. Identifying which predictors lead to increased levels of secondary traumatic

stress will expand upon the findings of previous studies of secondary traumatic stress and burnout (Eastwood & Ecklund, 2008; Seti, 2007).

Hypothesis Four

A combination of the predictor variables of coping style, number of hours worked per week, and number of restraints will predict burnout scores as measured by the ProQOL-5. Identifying which predictors lead to increased levels of burnout will expand upon the findings of previous studies of secondary traumatic stress and burnout (Eastwood & Ecklund, 2008; Seti, 2007).

Chapter 3: Method

Design

This study was conducted using a prospective, cross-sectional design. All data were obtained through self-report questionnaires that were administered via an online survey service. Demographic information was collected on all participants. Additionally, all participants were assessed, using standardized measures of compassion fatigue, burnout, and coping.

Participants

The participants included 78 residential treatment workers, including both direct and indirect care workers. Fifty-two participants were direct care workers, defined as staff members whose primary job description was interacting with clients who received mental health services in residential treatment. Sixteen participants were indirect care workers, defined as individuals whose primary job description was administrative in nature and who did not have regular contact with clients as part of their job descriptions. The participants represented both genders across various ethnic backgrounds and age ranges. Both full-time and part-time employees participated in this study.

Inclusion criteria.

All participants were employees in good standing at a residential treatment center in the suburb of a major metropolitan area; they had been employed for at least 30 days prior to completing the study. Participants were required to be fluent in English, have access to email, and have a computer capable of viewing basic web pages.

Exclusion criteria.

Exclusion criteria included those individuals who were involved in the creation of this

study, or those individuals who became employed at a residential treatment center in the

suburb of a major metropolitan area less than 30 days from the start of the study.

Measures

*The Professional Quality of Life Scale, fifth edition (ProQOL-5) (*Stamm, 2010) is

an empirically validated measure designed to evaluate burnout, secondary traumatic

stress and compassion satisfaction of individuals working in the helping profession

(Stamm, 2010). The measure consists of a 30 item, self-report questionnaire designed to

evaluate each dimension. Items are arranged on a five point Likert scale ranging from 1

(Never) to 5 (Very Often). The ProQOL-5 consists of three subscales: compassion

satisfaction, secondary traumatic stress, and burnout. A review of the measure (Stamm &

Figley, 2009; Stamm, 2010) reveals coefficient alphas of .88 for compassion satisfaction,

.75 for burnout, and .81 for secondary traumatic stress. The ProQOL has also been found

to have good discriminant, convergent, and construct validity (Stamm, 2010). The

ProQOL has been found to be reliable, valid, and the most commonly used inventory to

measure compassion fatigue; almost half of the published articles on the topic have

utilized the ProQOL (Stamm, 2010).

The Brief COPE (Carver, 1997) was utilized to assess the coping styles of the

study participants. The instrument consists of a 28 item, self-report questionnaire

designed to identify styles of coping. Items are arranged on a 4 point Likert scale ranging

from 1 (I haven't been doing this at all) to 4 (I've been doing this a lot). The Brief COPE

measures 14 different coping styles including self-distraction, active coping, denial,

substance abuse, use of emotional support, use of instrumental support, behavioral disengagement, venting, positive reframing, planning, humor, acceptance, religion, and self-blame. Although the author did not initially identify higher-order coping strategies, subsequent researchers have factor analyzed three specific subscales: emotion-focused strategies, problem-focused strategies, and dysfunctional/avoidant coping strategies (Coolidge, Segal, Hook, & Stewart, 2000; Cooper, Katona, Orrell, & Livingston, 2006; Cooper, Katona, & Livingston, 2008; Schnider, Elha, & Gray, 2007). Problem-focused coping consists of the items related to seeking social support for instrumental reasons, active coping, planning, and restraint coping. Emotion-focused coping consists of items related to positive interpretation, religion, humor, acceptance, and seeking social support for emotional reasons. Dysfunctional/avoidant coping consists of items related to venting of emotions, denial, behavioral disengagement, mental disengagement, and substance use (Coolidge, et al., 2000; Schnider, Elhai, & Gray, 2007). A review of the measure reveals coefficient alphas of .72 or higher for each subscale. The Brief COPE has been found to be a reliable and valid measure of coping styles across several populations, with alpha reliabilities for validation studies ranging from .62 to .90 (Carver, 1997; Cooper, Katona, & Livingston, 2008; Miyazaki, Bodenhorn, Zalaquett, & Kok-Mun, 2008).

The RTC Staff Experience Questionnaire, a demographic and background questionnaire, was designed specifically for this study. The questionnaire was used to gather information regarding general demographics and experiences of participants who are working in the residential treatment setting. The data that were collected included staff role and location of employment, number of hours worked per week, number of

restraints performed in the previous month, experiences of abuse, whether or not access to supervision exists, and the perceived helpfulness of supervision that is available.

Procedure

The investigator sent an introductory email to each employee working at the residential treatment centers, requesting their participation in the study. The email introduced the current study as an attempt to better understand what is required to work effectively in a RTC setting, to improve employee retention, and to improve client care. The investigator also introduced himself as an employee and as a student who is in the process of completing a doctoral degree in clinical psychology. Participants were informed that involvement in the study was voluntary and they had the right to withdraw at any time. Participants were informed that they had the option to enter into a drawing for a $100 gift card following completion of the study. They were also informed of the investigator's intent to maintain confidentiality. The email guided each participant to a

link with instructions to answer, completely, each question on ProQOL-5, Brief COPE, and a demographic questionnaire. They were also prompted to complete each measure independently. A link was provided to a digitized version of each measure on SurveyMonkey

The investigator created a digital version of the ProQOL-5 and the Brief COPE using the online survey site, SurveyMonkey. The authors of both of these allow free use of the measure as long as content is not altered and each author is credited. Each item was replicated from the source measure. The online survey consisted of the demographic questions followed by ProQOL-5, the Brief COPE, and ended with a link to enter into the prize drawing. Data from the questionnaires were entered into a Statistical Program for

the Social Sciences (SPSS), Version 19.0 database electronically, through

SurveyMonkey. Following completion of the questionnaires, the participants were asked

to submit their email address voluntarily for the purpose of being selected for a gift card.

One participant's raffle entry was drawn from a collection of those who completed the

survey. The participant was selected at random through a function of the SurveyMonkey

website. No identifying information was disclosed to the experimenter. After data

collection was complete, participants who opted to provide their email addresses were

randomly selected for the $100 gift card.

Chapter 4: Results

Method of Analysis

To test the hypothesis that employees who use emotion-focused, problem-focused, or dysfunctional/avoidant coping strategies differ in their levels of reported burnout and secondary traumatic stress, two one-way ANOVAs were conducted across three levels of coping styles (emotion-focused, problem-focused, and dysfunctional/avoidant). This analysis allowed the researcher to view the differences in reported levels of burnout and secondary stress and to compare the scores between and among groups. Significant differences in the levels of reported burnout and secondary traumatic stress across coping strategies support the utilization of varying coping strategies to cope with burnout and/or secondary traumatic stress.

To test the hypothesis that employees working directly with traumatized clients show higher degrees of secondary traumatic stress than employees working in an indirect role, two one-way ANOVAs were conducted. These analyses allowed the researcher to examine the differences between reported levels of burnout and secondary traumatic stress between direct and indirect care workers.

To examine whether coping style, as measured by the Brief COPE; compassion satisfaction, as measured by the ProQOL-5, and abuse history can predict levels of secondary traumatic stress, as measured by the ProQOL-5, a multiple regression analysis was conducted. The analysis was used to determine if coping style, abuse history, and compassion satisfaction are able to predict secondary traumatic stress scores on the

ProQOL-5, potentially suggesting a predictive relationship between coping style, abuse history, compassion satisfaction, and secondary traumatic stress.

To examine whether or not coping style, as measured by the Brief COPE, number of hours worked per week, and number of restraints performed in the previous month will predict burnout scores, as measured by the ProQOL-5, a multiple regression analysis was conducted. The analysis was used to determine if coping style, number of hours worked per week, and number of restraints are able to predict burnout scores on the ProQOL-5, thus suggesting a predictive relationship between coping styles, number of hours worked, number of restraints, and burnout.

Descriptive Statistics

The total sample consisted of 78 participants. Participants that did not complete one or more of the measures (ProQoL-5, Brief COPE, Residential Staff Experience Questionnaire) were excluded from the analyses. Furthermore, participants with data missing from any of the independent variables were excluded from the analysis through the pairwise deletion method. Because of the exclusion of participants through the two deletion methods, the total sample size decreased to 68 participants. Demographic variables that consisted of more than two levels were dummy- coded to make them dichotomous.

Of those remaining, 52 direct care and 16 indirect care employees participated in this study; 44 worked primarily at an all-male campus and 24 worked primarily at an all-female campus. Employees reported working for a variable number of hours per week over the previous month, ranging from 20 to 72 hours ($M = 45.75$, SD $= 8.12$). Employees also reported participating in a range of physical restraints over the previous

month, from 0 to 5 (*M* = .79, SD = 1.23). Of the employees who participated, 19 had past

histories of abuse or neglect.

Table 1

Descriptive Statistics for Employees

Variable	*n*	*M*	SD	Range
Direct care	52			
Indirect care	16			
Hours worked	68	45.75	8.12	20 – 72
Restraints	68	.79	1.23	0 – 5

Employees also reported a broad range of coping styles as measured by the Brief COPE.

Employees utilized a range of emotion-focused coping techniques and achieved scores

ranging from 10 to 35 (*M* = 26.20, SD = 5.41). They also utilized a range of problem-

focused coping techniques and achieved scores ranging from 8 to 29 (*M* = 20.13, SD =

5.02). Furthermore, employees utilized a range of avoidant coping techniques, ranging

from 10 to 34 (*M* = 17.87, SD = 4.82) on the Brief COPE. Table 2 shows this

information.

Table 2

Descriptive Statistics for Coping Styles

Coping Style	*n*	*M*	SD	Range
Emotion	68	26.20	5.41	10 – 35
Problem	68	20.13	5.02	8 – 29
Avoidant	68	17.87	4.82	10 – 34

Hypothesis One

To test the hypothesis that employees who use emotion-focused, problem-

focused, or dysfunctional/avoidant coping strategies differ in their levels of reported

burnout and secondary traumatic stress, two one-way ANOVAs were conducted across

three levels of coping styles (emotion-focused, problem-focused, and

dysfunctional/avoidant). A Box's test was conducted in order to assess the equality of covariance matrices. The results of the Box's test $M = 22.038$, $F (6, 1780.40) = 3.23$, $p = .004$ were significant, indicating that the matrices were unequally distributed. Upon inspection, the distribution was unequal due to a high number of individuals who utilized a primarily emotion-focused coping style. In order to bring equivalence to the groups, ten subjects were randomly selected from those who primarily used an emotion-focused coping style and these were included in the sample. The other individuals who used an emotion-focused coping style were excluded. A post hoc power analysis indicated a low level of statistical power, $f^2(V) = .16$.

There was a significant effect of coping styles on levels of secondary traumatic stress, $F (2, 22) = 5.85$, $p = .01$. Post hoc tests were conducted and revealed statistically significant differences between emotion-focused and avoidant coping, MD = -11.45, $p = .023$, and between problem-focused and avoidant coping, MD = -13.56, $p = .019$. These results indicate that those who utilize emotion-focused or problem-focused coping are less likely to experience STS than those who utilize an avoidant coping style. These results are shown in Table 3. However, no significant differences were found between coping style and level of burnout, $F (2,22) = 1.22$, $p = .32$.

Table 3
Mean Differences between Coping Style on the Brief COPE and STS on the ProQoL-5

Coping 1	Coping 2	MD	Error	Sig.
Emotion	Problem	2.10	4.48	.887
	Avoidant	-11.46	3.99	.023
Problem	Emotion	-2.10	4.48	.887
	Avoidant	-13.56	4.57	.019
Avoidant	Emotion	11.46	3.99	.023
	Problem	13.56	4.57	.019

Hypothesis Two

To test the hypothesis that employees working directly with traumatized clients will show higher degrees of burnout and STS than employees working in an indirect role, two one-way ANOVAs were conducted. Levene's test for equality of variances was not significant for either STS, $p = .57$, or for burnout $p = .17$, indicating that equal variances can be assumed

There was a significant effect on role on the level of STS, $F = 10.19, p < .01$. Individuals in a direct care role ($M = 24.75, SD = 7.91$) reported a higher level of STS than individuals in an indirect care role ($M = 17.88, SD = 6.11$). Table 4 shows these results. However, there was not a significant difference between role and burnout, $F = 0.01, p > .05$.

Table 4

Means and Standard Deviations for STS Scores on the ProQoL-5 Based on Role (N = 68)

Role	n	M	SD
Direct care	52	24.75	7.91
Indirect care	16	17.88	6.11

Hypothesis Three

To test the hypothesis that coping style, abuse history, and compassion satisfaction will predict secondary traumatic stress scores as measured by the ProQOL-5, a multiple regression analysis was conducted. In order to do so, the analyzed variables were inspected to assess if any were highly correlated. The intercorrelations among all variable in the analysis to test hypothesis three can be found in Table 5.

Table 5
Intercorrelations Among Predictor Variables and STS Scale (N = 68)

Variable	1	2	3	4	5
STS Scale	-.07	-.28*	.55*	-.57*	-.43*
Independent Variables					
1. Emotion Focused	--	.67*	.23*	.11	.07
2. Problem Focused		--	-.14	.51*	-.01
3. Avoidant			--	-.54*	-.26*
4. Compassion Satisfaction				--	.23*
5. Abuse History					--

*$p < .05$

Correlational analyses revealed significant correlations between the STS scale and individuals who had problem-focused or avoidant coping styles. Individuals who used a problem focused coping style scored lower on the STS scale, $t(68) = -.28$, $p < .01$. Individuals who used an avoidant coping style scored higher on the STS scale, $t(68) = .55$, $p < .01$. Individuals who had not experienced abuse in the past had lower scores on the STS scale, $t(68) = -.43$, $p < .01$.

There were also several significant correlations between independent variables. However, the correlations were weak. Individuals who used an emotion focused coping style also reported higher use of problem focused coping strategies, $t(68) = .67$, $p < .01$. Also, individuals who used an emotion focused coping style reported higher use of avoidant coping strategies, $t(68) = .23$, $p < .05$. Individuals who had not experienced abuse used less avoidant coping strategies, $t(68) = -.26$, $p < .05$. Those who had experienced abuse reported a higher level of compassion satisfaction, $t(68) = .23$, $p < .05$. Expectedly, individuals with higher scores on the STS scale scored lower on the Compassion Satisfaction scale, $t(68) = -.57$, $p < .01$. Individuals who reported higher

Compassion Satisfaction scores also reported using less avoidant coping strategies, t (68) = -.54, $p < .01$.

Related to an inspection of correlations to test for the violation of the assumption of multicollinearity is the variance inflation factor (VIF), which measures whether or not a predictor has a strong linear relationship with other predictors. This model does not violate the assumption of multicollinearity because each of the predictor VIF values ranged between 1.61 and 2.79. The Durbin-Watson test, 1.65, revealed that the residual terms were not correlated.

A multiple regression was conducted to test the hypothesis that coping style, as measured by the Brief COPE and compassion satisfaction, as measured by the ProQOL-5, can predict levels of secondary traumatic stress, as measured by the ProQOL-5. The results are displayed in Table 6. Forty-nine percent of the variance of the dependent variable was explained through the predictor variables, $R^2 = .49$, F (5, 62) = 11.76, $p < .01$.

Table 6
Multiple Regression Analysis Summary for the Independent Variables Predicted
Secondary Traumatic Stress (N = 68)

Variable	B	SEB	β
Emotion Focused	-.08	.21	-.06
Problem Focused	-.07	.25	-.04
Avoidant	.54	.20	.33*
Compassion Satisfaction	-.31	.13	-.31*
Abuse History	-4.72	1.76	-.27*

Note: $R^2 = .49$, F (5, 66) = 11.76, $p < .01$
*$p < .05$

Three predictor variables were found to be significant predictors of STS scores on the ProQOL-5: avoidant coping style, compassion satisfaction, and abuse history. These results suggest that participants who utilize avoidant coping styles reported low levels of

compassion satisfaction, and those who have experienced abuse in the past will

experience higher levels of secondary traumatic stress.

Hypothesis Four

To test the hypothesis that coping style, number of hours worked per week over

the previous month, and number of restraints in the previous month will predict burnout

scores, as measured by the ProQOL-5, a multiple regression analysis was conducted. In

order to do so, the analyzed variables were inspected to assess if any were highly

correlated. The intercorrelations among all variable in the analysis to test hypothesis three

can be found in Table 7.

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Table 7
Intercorrelations Among Predictor Variables and Burnout Scale (N = 68)

Variable	1	2	3	4	5
Burnout Scale	.28*	-.01	.15	.46*	.21*
Independent Variables					
1. Emotion Focused	--	.67*	.23*	.05	-.07
2. Problem Focused		--	-.14	-.05	-.45*
3. Avoidant			--	.11	-.46*
4. Hours Worked				--	.28*
5. Restraints					--

$*p < .05$

Correlational analyses revealed significant correlations between the Burnout scale

and individuals who had emotion-focused coping styles, who worked a high number of

hours per week, and who had been in several restraints during the previous month.

However, the correlations were weak. Individuals who used an emotion focused coping

style scored higher on the burnout scale, $t (68) = .28, p < .05$. Individuals who worked a

higher number of hours per week also scored higher on the burnout scale, $t (68) = .46, p <$

.01. Furthermore, individuals who had been in more restraints over the previous month scored higher on the burnout scale, t (68) = .21, p < .05.

As previously mentioned, there were several significant correlations between independent variables. However, the correlations were weak. Individuals who used an emotion focused coping style also reported higher use of problem focused coping strategies, t (68) = .67, p < .01. Also, individuals who used an emotion focused coping style reported higher use of avoidant coping strategies, t (68) = .23, p < .05. Individuals who used more problem focused coping styles were involved in less restraints, t (68) = -.45, p <.01. Individuals who used more avoidant coping styles were involved in less restraints, t (68) = -.46, p < .01. However, individuals who worked higher numbers of hours were involved in more restraints, t (68) = .28, p < .05.

Related to an inspection of correlations to test for the violation of the assumption of multicollinearity is the variance inflation factor (VIF), which measures whether or not a predictor has a strong linear relationship with other predictors. This model does not violate the assumption of multicollinearity because each of the predictor VIF values ranged between 1.01 and 2.62. The Durbin-Watson test, 2.10, revealed that the residual terms were not correlated.

A multiple regression was conducted to test the hypothesis that coping style, as measured by the Brief COPE, burnout, as measured by the ProQOL-5, number of hours worked per week, and number of restraints in the previous month can predict levels of burnout, as measured by the ProQOL-5. The results are displayed in Table 8; 53% of the variance of the dependent variable was explained through the predictor variables, $R^2 =$ .53, F (5, 62) = 4.77, p < .01.

Table 8

Multiple Regression Analysis Summary for the Independent Variables Predicted Burnout (N = 68)

Variable	B	SEB	β
Emotion Focused	.20	.10	.33*
Problem Focused	-.13	.11	-.20
Avoidant	-.01	.09	-.01
Hours Worked	.17	.05	.43*
Restraints	.06	.37	.02

Note: $R^2 = .53$, $F (5, 62) = 4.77$, $p < .01$

*$p < .05$

Two predictor variables were found to be significant predictors of Burnout scores on the ProQOL-5: emotion focused coping style and number of hours worked per week. These results suggest that participants who utilize emotion focused coping styles and work a high number of hours per week will experience higher levels of burnout.

Additional Findings

To assess if employees' levels of burnout or secondary trauma differed by their actual, physical place of employment, a one-way ANOVA was conducted across two campuses. Levene's test for equality of variances was not significant either for burnout, *p* = .96, or for secondary traumatic stress, *p* = .66, indicating that equal variances can be assumed. There was not a significant difference between campuses for either burnout, *F* = .01, *p* = .76, or secondary traumatic stress, *F* = .04, *p* = .84. These results indicate that employees at both campuses experienced similar levels of burnout and secondary traumatic stress, as shown in Table 9.

Table 9

Descriptive Statistics for Burnout and STS by Campus (N = 68)

Location	n	M	SD	Range
Burnout				
Campus 1	44	34.00	3.40	27 – 43
Campus 2	24	33.88	2.88	30 – 39
STS				
Campus 1	44	22.91	8.32	11 – 50
Campus 2	24	23.54	7.64	10 – 39

Correlational analyses revealed significant correlations between the STS scale, the burnout scale, those individuals who had access to supervision, and those who thought that supervision was effective. Individuals who experienced high levels of STS also experienced higher levels of burnout. Individuals who had access to supervision had lower scores on the STS scale, r (68) = -.44, $p < .01$. Individuals who thought that the supervision they had experienced was effective also had lower score on the STS scale, r (68) = -.33, $p < .01$. Furthermore, individuals who had experienced more frequent access to supervision tended to think that the supervision they received was more effective, r (68) = .67, $p < .01$. These results are shown in Table 10.

Table 10

Intercorrelations Between Supervision, STS, and Burnout Scales (N = 68)

Variable	1	2	3	4
1. STS Scale	--	.29*	-.44**	-.33**
2. Burnout Scale		--	-.23	-.19
3. Access to Supervision			--	.67**
4. Effectiveness of Supervision				--

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

Chapter 5: Discussion

This study was conducted to examine the experiences of compassion fatigue and coping styles in employees working in a pediatric residential treatment center. The goal of this study was to identify a coping profile that may be beneficial in the process of hiring new employees or in helping current employees manage the daily stressors of working in a RTC. Such a coping profile may be used to screen current employees for symptoms of burnout and compassion fatigue. If employees are found to have an ineffective coping style, education and training may be employed to improve their abilities to cope with the ramifications of working with traumatized children.

Another goal of this study was to increase the understanding of the effects of STS and burnout on employees. Although some information is known about the effects of STS and burnout on RTC workers, little is known about the effects on workers who are employed in a RTC treating children with trauma (Seti, 2007).

Summary of Findings

A series of statistical analyses were conducted to test each of the hypotheses. Findings supported hypothesis one and indicated that employees who utilize different coping styles differ in their levels of burnout and secondary traumatic stress. In particular, employees who utilize a primarily emotion-focused or problem-focused coping style are less likely to experience burnout than those who utilize an avoidant coping style. These results support emotion-focused or problem-focused coping as a protective factor for burnout and are consistent with previous literature (Anderson, 2000; Devereux, et al., 2009).

Hypothesis two was focused on identifying whether or not the constructs of burnout and secondary traumatic stress could be differentiated from each other based on exposure to the traumatic memories/events of others. Statistical analyses showed that individuals who worked directly with children who had experienced trauma reported higher levels of STS than those who worked primarily in an administrative role. However, there was not a statistically significant difference in reporting of burnout. These findings are consistent with previous literature that highlights the risk for secondary traumatic stress in residential care workers (Eastwood & Ecklund, 2008; Figley, 1995; Figley, 2002; Seti, 2007), and suggests differentiating between the constructs of secondary traumatic stress and burnout.

A multiple regression analysis was calculated to determine if a group of predictors could identify an employee's level of secondary traumatic stress. The results of this analysis for hypothesis three did not delineate a protective coping profile, but did find several factors that increase an employee's risk for developing secondary traumatic stress. In particular, employees who rely predominantly on avoidant coping techniques, experience a low level of compassion satisfaction, and those who have experienced abuse of their own in the past are more at risk for developing secondary traumatic stress. These findings expand upon the previous literature, which focused primarily on burnout in employees working in residential treatment settings (Eastwood & Ecklund, 2008; Moran & Figley, 2002; Pearlman & Saakvitne, 1995). It also adds to the literature by looking at broader patterns of coping or coping styles, as opposed to specific coping strategies or self-care techniques.

Another multiple regression analysis was calculated to determine if a group of predictors could identify an employee's level of burnout. The strongest predictor of burnout was the number of hours an employee worked per week; this is consistent with most of the literature on burnout (Leiter & Maslach, 1998; Maslach, 2003; Maslach & Jackson, 1981). However, utilizing an emotion-focused coping style was also a predictor of high levels of burnout. This finding is also consistent with previous research that suggests emotion-oriented approaches to solving problems in a work environment lead to increased levels of burnout (Etzion & Pines, 1984; Lazzarus & Folkman, 1984; Leiter & Maslach, 1998). These findings appear to contradict the results of hypothesis one. However, the statistical limitations of the previous hypothesis, namely the small sample size and low power suggest a finding with greater credibility: that an emotion-focused coping style is a risk factor rather than a protective factor for burnout. The contradictory results of how an emotion-focused coping style impacts burnout remains consistent with previous studies (Anderson, 2000; Etzion & Pines, 1984; Devereux, et al., 2009; Hastings & Brown, 2002; Lazzarus & Folkman, 1984; Letier & Maslcah, 1998).

Additional findings indicated that levels of burnout and secondary traumatic stress were consistent across the campuses where this study was conducted. Also, individuals who had access to supervision experienced lower levels both of STS and of burnout. When supervision was available, employees found that it was effective in helping them cope with the stress of their jobs. This finding regarding supervision is consistent with the literature suggesting that effective supervision is both a protective factor and an effective means of coping with compassion fatigue (Pearlman & Saakvitne, 1995).

Limitations

This study included some inherent limitations. First, the sample size for the study was limited to RTCs within a specific mental health treatment agency which treats children suffering from trauma symptoms. The small sample size led to limited power and effect size when evaluating the effect of coping style and comparisons between coping styles. Additionally, because the sample size was small, the number of predictor variables included in the analysis of coping style was limited. There may be additional predictive factors, which inform an employee's experience of burnout or secondary traumatic stress. These may include differences in disposition, in activities in which employees may have recently engaged in order to improve their self-care, in how recently their training may have occurred, and/or in additional stressors that they may have been experiencing in the time around their participation in this study (Eastwood & Ecklund, 2008; Moran, 2002; Moran & Figley, 2002; Pearlman & Saakvitne, 1995; van Wyk, Pillay-van Wyk, & Zarenstein, 2010).

Another limitation of this study was the ratio of individuals who reported using a predominantly emotion-focused coping style. This led to limited statistical power because those who use predominantly avoidant or problem-focused coping styles were not equally represented. Although this artifact was a confound for statistical analysis, it is promising to know that those working in a RTC with children who have, themselves, experienced trauma are not only aware of their emotions but also use that emotional awareness and connectivity to cope with their daily experiences.

The third limitation to this study is that the sample is a sample of convenience. The sample is limited to a specific organization and any results may be relevant only to

this organization. These results may not be generalizable to other organizations that have different employee cultures. Additionally, the employees in the sample underwent training relative to working with traumatized children. This may have led to a response bias in employees who may have answered in a way that they perceived was expected by the organization. Also, when asked to report dysfunctional coping styles, employees may not have answered truthfully because they may have wanted to appear competent and effective. Reporting in this manner may also have led to inaccurate reporting. Additionally, limited self-awareness may also skew employee responses because they may not be cognizant of the manner in which they cope.

Implications and Future Directions

Although the findings of this study were mixed and the predictive power was relatively low, the findings suggest a profile of risk factors for developing both secondary traumatic stress and burnout. However, a profile of protective factors was not conclusively identified in this study.

Also, results of this study differentiate between secondary traumatic stress and burnout in a setting in which the difference should be apparent: between those working with individuals who have experienced trauma and those who have not. However, there was not a significant difference in reported levels of burnout. These findings imply that the corporate culture in residential care for traumatized youth can have a draining effect on all of its employees. However, those working directly with individuals that have experienced trauma are at an increased risk for developing secondary traumatic stress symptoms. The differentiation between burnout and secondary traumatic stress is consistent with the findings of Stamm and Figley (2009) regarding burnout and

secondary traumatic stress, which suggests that burnout and secondary traumatic stress

may co-occur; however, working directly with individuals who have experienced trauma

also presents unique complications for employees (Stamm & Figley, 2009).

If a profile for coping with compassion fatigue can be identified, future

applications may include identifying whether or not these findings are valid and can be

generalized to other RTC organizations. If the identification of a coping style that leads to

improved coping with STS and burnout, several potential benefits may be present.

Primarily, a decreased sense of STS and burnout may lead to a more functional

employee. Employees may have a better sense of connectedness and satisfaction from

their jobs, which may lead to higher retention and a more active engagement in their

duties. Secondarily, employees who are functioning at a higher level may interact in a

more therapeutic manner with their clients. This may lead to improved implementation of

therapeutic strategies, to fewer alleged incidents of abuse and, ultimately, to improved

treatment outcomes for clients.

Employees who rely on avoidant coping mechanism and have experienced abuse

are at risk for developing secondary traumatic stress symptoms. This presents

implications for teaching staff: avoidance and distraction do not lead to long-term well

being when working with traumatized youth; instead, actively processing information

with colleagues and/or supervisors may be more beneficial. Furthermore, it will be

important to provide additional education about how a staff member's own abuse history

may manifest itself in interactions with clients and personal reactions to trauma material.

Effective supervision, which includes time to process the emotional strain of

working with children who have experienced trauma, and addressing not only

administrative issues, will be very important in reducing levels both of burnout and of secondary traumatic stress in individuals working in an RTC with this population. Such supervision should be limited not only to staff who serve in a therapist role, but should also be made available on a regular basis to all employees who have a direct care role.

Finally, a training program to remediate ineffective coping and to bolster functional coping strategies may be developed following this study. A pre-test/post-test analysis may be utilized to determine if such a training program could be helpful in shaping employees' coping strategies into a more adaptive coping style for working with traumatized children in a RTC. If an effective training program could be developed, employees may be more successful in their jobs; may report higher levels of satisfaction, and the RTCs may see a higher retention rate in their employees. Retaining employees will decrease the costs of training, improve the continuity of care for clients, and foster a better sense of cohesion amongst the individuals preforming the difficult work of caring for children who are showing post-traumatic symptoms.

Conclusion

This study aimed to identify a coping profile for individuals who work in RTCs with children who have experienced trauma. The findings of this study revealed that emotion-focused and problem-focused coping are protective factors from developing burnout. Individuals who have worked a high number of hours per week and who have utilized an emotion-focused coping style were most likely to develop symptoms of burnout. However, individuals who have utilized an avoidant coping style, have experienced a low level of compassion satisfaction, and have had a personal history of experiencing abuse were most likely to develop symptoms of secondary traumatic stress.

This finding provides information regarding risk factors for developing secondary traumatic stress; it may also serve in helping to enhance the training process and to inform individuals who choose to work with traumatized youth about their risk factors for developing traumatic stress symptoms secondary to the exposure from their work. It may lead to an improved atmosphere in which individuals may have access to additional support from their colleagues and supervisors in order to process the events they have experienced while at work. It may also increase the possibility of teaching coping strategies that are more adaptive to their environments. which may decrease their likelihood of experiencing negative emotional states related to their work.

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Appendix A

RTC Staff Experience Questionnaire

Please fill out the following questions as truthfully and accurately as possible.

1. What campus do you work at?

    Brandywine   Mapleton

2. What role are you employed in?

    Direct Care   Indirect Care

3. On average, how many hours have you worked per week over the last month?

4. How many restraints have you been involved in over the last month?

5. Have you experienced abuse or neglect in your past?

    Yes   No

6. Do you have access to supervision when you feel it is necessary?

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

7. How helpful is supervision when you utilize it?

1	2	3	4	5
Not Helpful	Barely Helpful	Somewhat Helpful	Helpful	Very Helpful