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Compassion Fatigue and Organizational Factors among Paraprofessionals in Inpatient Psychiatric Centers

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Walden University

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Sephiratu Wahab

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Walden University

2020

Abstract

Compassion Fatigue and Organizational Factors among Paraprofessionals in Inpatient

Psychiatric Centers

by

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MSW, Binghamton University, Binghamton, NY, 2010

B.Ed., Cape Coast University, Ghana, W/A, 2003

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Psychology

Walden University

February 2020

Abstract

Compassion fatigue negatively affects the emotional and professional lives of human service workers; however, limited research has examined the underlying factors contributing to compassion fatigue among mental health paraprofessionals in inpatient psychiatric settings. This study applied the constructivist self-development theory and etiological model to examine three organizational factors including work demand, work organization and content, and interpersonal relations and leadership as predictors of compassion fatigue among 153 paraprofessionals working at inpatient psychiatric centers in Upstate New York. A cross-sectional design involved convenience sampling was employed to recruit 153 paraprofessionals to complete the Compassion Fatigue Short-Scale and Copenhagen Psychosocial Questionnaire, and multiple regression analyses of the results were conducted to draw statistical inferences regarding the relationship between compassion fatigue and organizational factors. The results confirmed that all 3 combined organizational factors of work demand were significant predictors of compassion fatigue, and work organization and content were identified as the greatest and most significant predictor of compassion fatigue. The findings strongly align with theoretical literature relating compassion fatigue to unfavorable organizational factors. It is critical that psychiatric and other healthcare settings address these issues in order to create a better working environment, which in turn will improve staff members' ability to care for their clients. Educational programs are needed to teach paraprofessionals to recognize negative signs and symptoms of compassion fatigue, as well as peer mentoring, self-reflection, and mindfulness training.

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Dedication

I dedicate this study to my God, the father of all flesh who enabled me began and completed this study. I can do all things through Christ, who is my strength. Next, I want to dedicate this work to my loving children, Haneefa, Fareed Wahab, and my husband, Al-Wahab for your understanding and support during this doctoral program. I also dedicate this study to the late Dr. London, who accepted the initial assignment to be my chairperson. Even though you have passed on, you will always be remembered by me; your support, guidance and encouragement can never be forgotten. Rest in peace, rest in Heaven.

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First, I would like to thank God for giving me His divine grace, wisdom, knowledge, understanding, strength, and enablement, and who helped me to persevere and pursue this degree to the end. There were times during my studies and in the writing process when I felt overwhelmed with work, family and my full-time job responsibilities, which made me to want to give up. Had it not been for God's mercy and grace, I would not be finishing this degree and dissertation. For this, I thank Him. I also want to thank the paraprofessionals who volunteered their time and energy to participate in this study. The work that you do is very important and cannot be overemphasized.

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Chapter 1: Introduction to the Study

Overview of the Study

Compassion fatigue has been receiving an increasing amount of attention among academics and healthcare practitioners, and a range of literature has considered the factors predicting the onset of this condition. Previous research has examined the roles of both individual and organizational factors as predictors of compassion fatigue. Examples of individual factors that have been examined in literature include personal history of trauma, education, age, gender differences, and level of experience (Andreotta, Giambra, & Kinstler, 2013), whereas organizational factors include high workload, inadequate supervision, and a lack of training (Bakker et al., 2015). Interventions targeting both individual and organizational factors have a longer-lasting effect on compassion fatigue prevention than those focusing solely on enhancing individuals' capacities (Awa, Plaumann, & Walter, 2010).

Figley (1995) described compassion fatigue as encompassing emotional, mental, and physical exhaustion, and its effects include an increase in clinical errors, rising rates of turnover, depression and anxiety among workers, and a deflated workplace climate. Healthcare professionals are continuously exposed to their clients' traumatic experiences, which can cause them to become desensitized and careless, develop a negative attitude, and lack empathy towards their clients (Mathieu, 2012; Zeidner, Hadar, Matthews, & Roberts, 2013). Thus, compassion fatigue is a work-related hazard associated with many clinical settings (Adams, Boscarino, & Figley, 2006). Kulkarni, Bell, Hartman, and

Herman-Smith (2013) proposed that compassion fatigue and burnout are jointly experienced due to prolonged exposure to demanding interpersonal situations.

Paraprofessionals comprise a major segment of the behavioral and mental health professional workforce, amounting to over 200,000 individuals (Dailey, Morris, & Hoge, 2015). Despite their limited training, knowledge, and skills, paraprofessionals are often assigned to support clients with whom they have prolonged interactions, and consequently, they are the first to witness and address clients' crises (Eastwood & Ecklund, 2008). This population of workers is generally less experienced and receives fewer supports than degreed professionals such as nurses, physicians, or psychiatrists, and consequently may be more prone to compassion fatigue (Dawson & Surpin, 2001a).

However, relatively little attention has been devoted toward determining precisely how organizational factors may predict the onset of compassion fatigue among healthcare workers, and although compassion fatigue has been broadly studied among multiple disciplines, very limited emphasis has been placed on healthcare aides or paraprofessional worker. Consequently, recommended measures for intervention and prevention have been primarily targeted toward enhancing individual staff members' capacities (such as developing coping skills) rather than strengthening the ability of organizations to address underlying factors (Kulkarni et al., 2013).

This study attempts to address this issue by investigating organizational factors underlying the development of compassion fatigue among paraprofessionals working at inpatient psychiatric hospitals. The present study aims to fill a gap in literature by adding to limited information on the role that organizational factors play in predicting the onset

of compassion fatigue among paraprofessionals in inpatient psychiatric centers. It is the hope of this researcher that the information gained from this study will be used to advocate for improved organizational and curriculum development in such workplaces. Information sessions facilitated by this study may enable leaders to understand the need for compassion fatigue prevention programs and inform approaches toward establishing activities that promote and improve the organizational environments for staff development.

This chapter attempts to define the problem of compassion fatigue and provides an overview of the study. After providing an overview of the condition and its associated organizational and individual impacts, the chapter discusses the relationship between compassion fatigue and organizational factors, followed by an outline of the problem statement, the purpose of the study, research questions and hypotheses, and theoretical constructs used in the study. Further, the chapter explains the nature of the study and its definitions, assumptions, scope, limitations, and significance to the field.

Background

Kulkarni et al. (2013) asserted that the multiple challenges faced by human service professionals encompass not only individual factors, but also unmet organizational needs, such that employees often operate with minimal training, poor supervision, and high demands, which results in role ambiguity and confusion, thus engendering a sense of powerlessness in the work environment that in turn can contribute to compassion fatigue and burnout.

The ability of health services agencies to address the problem of unmet organizational needs is hindered by the lack of consensus and clarity in the literature investigating the relationship between organizational factors and compassion fatigue (Kulkarni et al., 2013), which has left managers with inadequate information to justify funds for improvements in those resources that would assist in preventing the development of compassion fatigue (Ahanchian, Meshkinyazd, & Soudman, 2015; Kulkarni et al., 2013).

A significant gap in the extant literature can be attributed to incomplete perspectives available from various types of human services professionals. Most research on compassion fatigue has investigated the phenomenon among professionals with graduate degrees such as social workers, child protective workers, doctors, nurses, firefighters, and police officers, who are traditionally thought of as helping professionals. These employees are required to complete advanced levels of education and possess professional qualifications and licenses (Dailey et al., 2015), which often includes regular trainings and institutional supports that equip them with knowledge and competencies that greatly enhance their ability to cope with work-related stress (Andreotta et al., 2013; Bakker et al., 2015; Dailey et al., 2015; Eastwood & Ecklund, 2008; Mathieu, 2012).

Paraprofessionals and Compassion Fatigue

In contrast to professionals, Healthcare paraprofessionals provide direct care services to victims of trauma 24 hours a day and 7 days a week in multiple settings, including hospitals, health clinics, schools, physician offices, nursing care facilities, patient homes, and inpatient psychiatric centers (Bakker et al., 2015). Although they are

critical elements in the functioning of the healthcare system, paraprofessionals receive less education and training than other professionals and are for the most part classified among the pool of entry level healthcare workers. Depending on their respective organizational duties and responsibilities, paraprofessionals are referred to by different names such as direct service workers, mental health therapy aides, personal care workers, direct support professionals, paraprofessionals, or technicians (Dailey, 2015; Dawson & Surpin, 2001a, 2001b). The term paraprofessional will be used throughout this study.

Mental health paraprofessionals provide routine and essential services to patients on a regular basis (Eastwood & Ecklund, 2008). They form the foundation of staffing in inpatient psychiatric centers and deliver services ranging from supervising patients regarding their high-risk status to attending to patients' physical and emotional needs (Bakker et al., 2015). Since paraprofessionals spend more time with clients than any other group of professionals, these healthcare workers are often highly vulnerable to compassion fatigue (Adams et al., 2010). Armed with limited training and education, paraprofessionals are expected to perform a wide range of duties and responsibilities, including handling issues with clients who exhibit intense and emotionally reactive behaviors (Bakker et al., 2015; Dailey et al., 2015). The ongoing potential for volatility can leave paraprofessionals feeling inadequate and stressed, particularly when they lack adequate peer or supervisor support. Since paraprofessionals are not required to possess advanced qualifications or skills to be hired in the field, most experience some degree of incapacitation while performing their roles, which engenders a sense of inadequacy, cynicism, and exhaustion, which can be detrimental to their mental and emotional health

(Kulkarni et al., 2013). These issues then result in declines in job performance, which can in turn impact their interactions with clients and the quality of the services provided, thus affecting patient outcomes.

Most paraprofessionals, particularly new hires, do not possess the required qualifications, competencies, and experience to handle such highly demanding work and stressful situations without extra support, training, and guidance (Edwards, Page, Vella, & Wands, 2014; Fotaki, 2015; Giambra & Kinstely, 2013). Fotaki (2015) proposed that caring is an activity that can be learned, and workers are more caring robust, creative, open, and less stressed when they feel adequately supported. An inadequate skillset combined with poor organizational support might contribute to emotional distress for anyone, including paraprofessionals who work with emotionally challenged clients in an inpatient psychiatric setting.

During a study conducted among mental health providers including social workers, nurses, and psychiatrist as well as paraprofessionals, who work in a long term-residential treatment facility, Hyatt-Burkhart (2014) and Zeidner et al. (2013) reported that participants in the study reported becoming more sensitive to their clients' stories due to regular exposure, however, staff members demonstrated ability to cope with the resulting stress. Despite the differences in the settings and roles of the paraprofessionals who participated in these studies and the subjects of the current study, their findings have direct relevance regarding the current case, particularly their exploration of strategies that workers employ to deal with their work-related fatigue, such as emotional management and using maladaptive measures such as drugs, or suppressing emotions to avoid coping

or dealing with their distress. Chen et al. (2015) argue that employing avoidance coping, however, can be maladaptive and could perpetuate emotional distress in the work environment. Chen et al. (2015) maintained that a healthy work environment that includes management support is associated with increased staff retention and reduction in staff turnover. Hyatt-Burkhart (2014) proposed that vulnerable professionals might benefit from educational and prevention programs geared toward developing problem-solving skills by improving their knowledge about adaptive coping and therefore, improve their ability to handle difficult situations on the units.

Paraprofessionals' experiences of compassion fatigue are secondary to their daily interpersonal involvements and interactions with their clients, and there is a likelihood of the condition going unnoticed. Very few studies have examined the relationship between organizational factors and compassion fatigue development among paraprofessionals. I chose to conduct this study of paraprofessionals in inpatient psychiatric centers because of serious individualized and organizational problems due to their propensity to develop compassion fatigue and a range of factors, including highly demanding workloads, work environment, and prolonged contact with clients, combined with poor social and professional supports, inadequate training, limited resources, and role conflicts typical of many types of organizations.

Organizational Factors in Compassion Fatigue

Organizations and individuals mutually impact one another, and well-functioning organizational systems promote healthy employees (Tilcsik, 2014). Organizational factors affecting compassion fatigue have been defined according to a number of

variables, including organizational values, role expectations, conflict, and ambiguity, high work demand or workload combined with low job autonomy, inadequate remuneration, incentives, and organizational supports, inflexible policies, and mismatches between tasks and workers (Ahanchian, et al., 2015; Kim, 2011; Kulkarni et al., 2013; Ruotsalainen et al., 2015). In this study, organizational factors focused on were work demands, work organization and content, and interpersonal relations and leadership. Meyer, Li, Klaristenfeld, and Gold (2015) reported that most healthcare professionals experience stress due to a lack of competence and confidence during their first year in their roles. Such difficulties are compounded by high workloads, thus leaving worker in a disadvantaged position to perform in an often poorly staffed environment. Assisting staff in understanding the effects of compassion fatigue may help improve job retention (Meyer et al., 2015).

Although compassion fatigue affects all healthcare professionals, Kulkarni et al. (2013) noted that the condition is particularly prevalent among paraprofessionals due to feelings of powerlessness stemming from paraprofessionals have little to no control over their work schedules (Kim, 2011). Paraprofessionals are frequently mandated to take on further duties due to staff shortages, and most come to work not knowing when their shifts will actually end, and such a constant sense of uncertainty can leave them feeling powerless. While one might argue that this problem is merely work-related and may not affect paraprofessionals' personal lives, the impacts of work-related stress extend beyond the workplace and ultimately challenge paraprofessionals' abilities to effectively function or deliver services to clients (Kulkarni et al., 2013).

The Copenhagen Psychosocial Questionnaire III (COPSOQ III) was used to examine the organizational factors under consideration in this research. This section provides an overview of several variables related to organizational factors as described in the COPSOQ III.

Work demand. This refers to the size of a paraprofessional's workload and whether or not they have sufficient guidance, teaching, supervision, time, and any other resources needed to complete their assigned tasks (Burr et al., 2018). Work demands can be categorized in terms of physical workload and emotional exhaustion (Bergsten, Mathiassen, & Vingard, 2015; Green, Miller, & Aarons, 2011). According to Bitenc et al. (2015), negative effects of high workload could contribute to workers feeling uneasy, irritable, and unable to relax, concentrate, think logically, or make decisions. Moreover, Li, Early, Mahrer, Klaristenfeld, and Gold (2014) found that overwhelming workloads can trigger fatigue and affect emotional health, making it difficult for organizational leaders to retain experienced staff, as even experienced workers tend to respond to stressful situations simply by resigning.

Work organization and content. This variable encompasses the work environment, including working conditions, possibilities for development, and the level of work and commitment to the workplace. Slatten, Carson, and Carson (2011) found that compassion fatigue can lead to poor self-care and physical illness, while staff members who work in highly intense environments often feel that they have less input regarding their overtime hours and consequently experience a relatively greater incidence of gastrointestinal problems, tiredness, and changes in mood (Bitenc et al., 2015). Whether

or not an individual is able to make decisions regarding his or her break time or whether to work overtime can influence the development of compassion fatigue.

Bitenc et al. (2015) identified organizational commitment as an important protective factor against compassion fatigue; however, due to ongoing levels of stress, paraprofessionals may find it challenging to maintain a commitment toward their employers. Often, the intensiveness of work demand does not permit workers to remain in position for a sufficient time to build the kind of cohesive and supportive work environment needed to engender organizational loyalty (Li et al., 2014).

Interpersonal relations and leadership. This variable concerns supervisor support for staff in addition to staff support for each other. Compassion fatigue can be experienced as a sense of helplessness, hopelessness, or isolation (Eastwood & Ecklund, 2008; Mathieu, 2012). Staff who work with patients in inpatient psychiatric centers need a high degree of interpersonal support from each other as well as guidance and support from their leaders. However, due to the emotionally-charged atmosphere of inpatient psychiatric settings, most supervisors and leaders have insufficient time to educate and coach their paraprofessional staff. After few days of training, most paraprofessionals are left on their own and are expected to know, understand, and navigate the system, relate to clients therapeutically, and figure out their routines (Li et al., 2014), as well as empathize with and skillfully manage clients' emotional distress (Mathieu, 2012). A lack of support and guidance for paraprofessionals can leave them not only overwhelmed, but also anxious and even frightened, particularly during interactions with patients exhibiting volatile emotions or behaviors associated with trauma (Li et al., 2014). Consequently,

paraprofessionals can become gradually desensitized to patients' suffering (Sprang, Clark, & Whitt-Wooseley, 2007).

Problem Statement

Paraprofessionals face a high level of challenging situations and work-related stress (Amaddeo et al., 2012), and staff complaints involving tiredness, feeling overwhelmed, and exhaustion are among ongoing problems that have been identified at most inpatient psychiatric centers. Such issues may stem from organizational related factors, including long hours and excessive overtime, isolation, inadequate staff-client ratios, and a lack of supervisory support and guidance for staff. Amaddeo et al. (2012) argued that persistently high staff turnover coupled with work demand increases paraprofessionals' levels of stress. Leaders will often seek temporary solutions to fill constantly vacant positions by redeploying staff from different areas of their agencies (Lamson, Meadors, Sira, Swanson, & White, 2010).

Unfortunately, organizational leaders may fail to recognize that such solutions are merely short-term remedies to a lasting problem. For example, Meadors and Lamson (2008) argued that direct care

staff suffer compassion fatigue than any other group of healthcare workers. Results of a study conducted among group of nursing staff to evaluate the effect of coping and support group intervention to reduce stress indicated that participants with stress levels exhibited negative behaviors more than their counterparts, which in turn made them unable to provide quality care to patients (Meadors & Lamson, 2008). According to the study, high stress level participants gained notable increases in their knowledge and self-awareness after engaging in a seminar on stress management, which helped in improving their ability to manage feelings of emotional and mental exhaustion (Meadors & Lamson, 2008).

Such findings support the argument for an association between organizational factors and the development of compassion fatigue. However, there are insufficient studies on organizational factors and interventions, and thus consistent evidence to fully validate such assertions is insufficient. As a result, most compassion fatigue intervention programs are focused on individual paraprofessionals independently of their working contexts, and usually emphasize the development of self-care and coping skills such as mindfulness. Rather than advocating a broadening in focus to incorporate measures to address unsustainable factors in organizational environments such as large caseloads and extended working hours, these person-centered approaches often blame employees for continued failures, asserting that the worker who is unable to effectively implement such skills is lacking appropriate professional boundaries (Kulkarni et al., 2013).

In summary, the problem is that the literature available on compassion fatigue has not fully examined the role of organizational factors in the development of compassion

fatigue. Stamm (2010) associated burnout with factors associated with high workloads and nonsupportive work environments, among others, whereas Turgoose and Maddox (2017) argued that this condition derives from psychological and emotional processes. Thus, attention focused on such inconsistencies in the literature appears to have detracted from efforts to more fully understand the relationship between compassion fatigue and organizational stressors.

Purpose of the Study

Kern, Waters, and Williams (2017) asserted that organizational support influences staff wellbeing. Similarly, Boyd, Pignata, Provis, and Winefield (2016) suggested that unhealthy work environments and high job demands may lead to exhaustion and consequently contribute to compassion fatigue. This study seeks to clarify how organizational environment may predict compassion fatigue. The purpose of this quantitative cross-sectional research study is to examine the relationship between organizational factors as independent variables or predictors and compassion fatigue as the dependent variable or the outcome. For the purposes of this study, organizational factors are work demand, work organization and content, and staff members' interpersonal relations and relations with leadership.

Study participants consisted of paraprofessionals who work in three inpatient psychiatric centers in upstate New York. A total of 153 participants consisting of 51 participants from each psychiatric hospital center were recruited from each site. The first task was to determine the extent to which work demand, work organization and content, and interpersonal and leadership relations significantly predict the development of

compassion fatigue. The second task was to determine which of these factors are the greatest predictors of compassion fatigue. In principle, other questions related to participants' gender, duration of experience, and education could potentially be addressed in this study; however, for the sake of consistency, clarity, and focus on the purpose of this study, the scope of the investigation was confined to organizational factors in relation to aforementioned variables. The study aims to engender further exploration through future studies and make recommendations regarding possible variations in methodology that include such variables in relation to organizational factors among paraprofessionals. Future studies and recommendations would warrant exploration of variables which are not the focus of this study, including gender, education, experience in relation to compassion fatigue, and organizational factors among paraprofessionals who work in inpatient settings.

Research Questions and Hypotheses

RQ1: Are work demand, work organization and content, and interpersonal and leadership relations significant predictors of compassion fatigue among paraprofessionals in inpatient psychiatric centers? *H₀₁:* Work demand, work organization and content, and interpersonal and leadership relations are significant predictors of compassion fatigue among paraprofessionals in inpatient psychiatric centers.

H_{a1}: Work demand, work organization and content, and interpersonal and leadership relations are not significant predictors of compassion fatigue among paraprofessionals in inpatient psychiatric centers.

RQ2: Which of the following organizational factors work demand, work organization and content, and interpersonal and leadership relations is the most significant and greatest predictor of compassion fatigue among paraprofessionals in inpatient psychiatric centers?

RQ3: Is work demand the most significant and greatest predictor of compassion fatigue among paraprofessionals in inpatient psychiatric centers? *H₀₃:* Work demand is the most significant and greatest predictor of compassion fatigue among paraprofessionals in inpatient psychiatric centers.

H_{a3}: Work demand is not the most significant and greatest predictor of compassion fatigue among paraprofessionals in inpatient psychiatric centers.

RQ4: Is work organization and content the most significant and greatest predictor of compassion fatigue among paraprofessionals in inpatient psychiatric centers?

H₀₄: Work organization and content is the most significant and greatest predictor of compassion fatigue among paraprofessionals in inpatient psychiatric centers.

H_{a4}: Work organization and content is not the most significant and greatest predictor of compassion fatigue among paraprofessionals in inpatient psychiatric centers.

RQ5: Are leadership and interpersonal relations the most significant and greatest predictors of compassion fatigue among paraprofessionals in inpatient psychiatric centers?

H₀₅: Leadership and interpersonal relations are the most significant and greatest predictor of compassion fatigue among paraprofessionals in inpatient psychiatric centers.

H_{a5}: Leadership and interpersonal relation are not the most significant and greatest predictors of compassion fatigue among paraprofessionals in inpatient psychiatric centers.

Theoretical and Conceptual Framework for the Study

The constructivist self-development theory (CSDT) has been highly influential in shaping the framework of compassion fatigue, and it was accordingly selected as the theoretical framework for this study. The historical context and foundations of the concept of compassion fatigue derive from the CSDT, and studies employing this theory have done much to enhance my understanding of the contributing factors in the development of emotional issues.

Founded upon a constructivist view of trauma, the CDST perceives that the individual's unique history shapes his or her experience of traumatic events and defines adaptation to trauma. The CDST emerged as a conceptual framework for treating trauma in the early 1990s, as an increasing number of helping workers were desensitized to their clients' stories, which was attributed to caregivers and other helping workers being exposed and vulnerable to being directly impacted by the symptoms of their clients.

As applied specifically to trauma theory, individuals develop negative thoughts and perceptions as a result of being exposed to negative experiences in their environments (McCann & Pearlman, 1990b). Individuals may experience distortions in thought, memory, and perception as a result of their regular exposure to negative traumatic experiences in their environment, which negatively affect their interpretations and anticipation of future life events (McCann & Pearlman, 1990a, 1990b, 1992).

Overall, the perspective of the CSDT clearly aligns closely with symptoms and causes associated with burnout and compassion fatigue and are accordingly expected to help explain many issues in the current study relating to how traumatic experiences at work settings may affect paraprofessionals' thoughts and feelings.

Nature of the Study

A cross-sectional approach was deemed appropriate for the current study for the reason that I seek to collect data for analysis among groups of paraprofessionals in an inpatient psychiatric center in upstate New York. Multiple regression analysis was used to draw statistical inferences related to the relationship between compassion fatigue and organizational variables. Demographic data were collected describing participants' basic characteristics, including age, sex, number of years of experience, and number of years they have been employed at an inpatient psychiatric hospital. Demographic data helped to determine eligibility or quality measures in this study.

No secondary data were used during this study. The two main online survey questionnaires were CFSS and COPSOQ III. Participants were adults aged 18 and above who work directly with patients in the inpatient psychiatric center. I have obtained written permission from the authors of the questionnaires as appropriate to use their instruments for data collection during this study. Walden University IRB approval was secured before data collection. I have completed all the necessary documentations and training requirements for Nathan Kline Institute IRB, which oversees research studies at each research site, and obtained written approval to conduct the study from Nathan Kline Institute IRB and the executive directors of each site. Data were transformed into numeric

form to enable quantitative analysis of results. Recruitment flyers detailing the study were posted on designated bulletin boards and front desks at each site as well as this researcher's social media page for disseminating information about the study.

The CFSS was employed to measure paraprofessional self-reports of compassion fatigue during this study. The CFSS is a 13-item instrument using a 10-point visual analog-type Likert scale (Adams et al., 2006). Respondents are given instructions to indicate how frequently or rarely (rarely/never = 1 to very often = 10) a particular characteristic is true for them.

Organizational factors including work demand, work organization and content, and interpersonal and leadership relations were measured using the COPSOQ III. This instrument covers a wide variety of dimensions and includes long, medium, and short versions, of which the latter was employed during the study. The long and medium versions respectively consist of 141 and 95 questions and are focused on the cognitive and quantitative demands of work. Participants responded to the short version that consists of 44 items with response options ranging from always (4), often (3), sometimes (2), seldom (1), and never/hardly ever (0; Borg et al., 2005). The short version allows for using clusters of scales organized according to the themes of work demand, work organization and content, and interpersonal and leadership relations, and it was chosen due to its use of those three main clusters to measure the specific psychosocial factors at workplaces that might predict emotional distress. In addition, the reduction in the number of items for the short version makes it simple for paraprofessionals to complete. The instrument involved a representative sampling of 1858 participants, and questions were

tested using factor analyses with an established construct validity and reliability.

Statistical Software Package (SPSS) version 25.0 was employed during the data analysis phase of this study.

Definitions

Burnout: Psychological and emotional exhaustion associated with feelings of hopelessness, depersonalization, and diminished personal accomplishments (Stamm, 2010).

Compassion Fatigue: A work-related condition associated with helping professions that results from exposure to severe client problems that lead to trauma and is characterized by emotional, mental, and physical exhaustion and a pronounced reduction in the ability to empathize and feel compassion for others.

Compassion Satisfaction: Pleasure derived from helping, affection for colleagues, and good feelings resulting from the ability to help and contribute to others' wellbeing (Turgoose & Maddox, 2017).

CSDT: An integrative theory founded in constructivism that postulates that individuals construct their personal realities based on complex cognitive schemas used to interpret and make sense of life experiences (McCann & Pearlman, 1990a, 1990b, 1992; Saakvitne, Tennen, & Affleck, 1998; Williams, Helm, & Clements, 2012).

Etiology: The study of causation, or origination, and an etiological model provides the historical context and origin of a concept.

Organization: As used in this study, the term denotes the work environment or facility in which paraprofessionals work, in this case inpatient psychiatric hospitals.

Organizational Factors: Elements in the work environment that impact employee stress and wellbeing, including work demands, work organization and content, interpersonal relations, and leadership relations.

Paraprofessional: A direct care staff person who is delegated particular aspects of a professional task but is not licensed to practice as a fully-qualified professional.

Professionals: Workers who provide clinical interventions such as social workers, nurses, and doctors. Professionals have advanced and/or specialized degrees and are often licensed.

Secondary Traumatization: The emotional, cognitive, and at times physical and psychological negative consequences of being exposed to traumatic events, situations, and stories of victims of trauma (Garland, Katz, & Shah, 2007).

Vicarious Traumatization: The profound and negative shift in worldview that can occur when repeatedly engaging empathically with traumatized clients (Turgoose & Maddox, 2017).

Assumptions

There are several underlying assumptions in this study. It was also assumed that participants had little to no previous exposure to supervision, training, or stress management skills. It was assumed that participants provided honest responses to the survey questionnaires, and their responses reflected true and genuine stressors as experienced while working. Participants were not coerced to participate in any manner;

however, measures were taken to avoid bias in the study. Participants possessed diverse backgrounds and characteristics, including a range of ages and experiences.

These assumptions were necessary and useful during data analysis. For example, novice paraprofessionals may not have experienced the negative effects of compassion fatigue if they have not been repeatedly exposed to their roles over a long period of time. In addition, in some cases, it is possible that participants and organizational leaders would have intervened if they had been aware or knowledgeable of compassion fatigue and the effects of organizational factors. Such cases may threaten the validity of data if it is determined that a large proportion of these individuals were indeed aware of the organizational elements contributing to compassion fatigue, and somehow were chosen yet did not implement measures to prevent it or mitigate its effects.

Scope and Delimitations

The scope of this study is limited to analysis of self-reports involving compassion fatigue among paraprofessionals who work in inpatient psychiatric hospitals. A plethora of studies have examined the concept of compassion fatigue; however, most of this research has neglected to comprehensively investigate the role of organizational factors in the development of this problem and their potential to prevent or mitigate its effects and promote more positive outcomes among employees. This study seeks to determine whether work demand, work organization and content, or interpersonal and leadership relations are the greatest or most significant predictors of compassion fatigue. However, this study did not focus on defining the roles that organizational factors play in predicting or triggering compassion fatigue among paraprofessionals. Factors such as participants'

history of trauma, individual personality factors, and past experiences of trauma were not addressed in this study. There is no control variable in this study. The scope of the study is limited to paraprofessionals working in 3 different inpatient psychiatric hospitals in upstate New York. Thus, paraprofessionals working within other settings are outside the focus/scope of this study. The theoretical frameworks applied to guide this study were the CSDT and etiological model as applied to compassion fatigue. The etiological model as applied to compassion fatigue was used as a theoretical construct to better understand the etiology of compassion fatigue, whereas the CSDT was employed to explain how professionals working with trauma clients perceive their thoughts and feelings in relation to their daily interactions and decisions in their organizations.

Limitations of the Study

A few limitations were identified for this study. For one, only three hospitals in upstate New York were selected, which limits the results from representing the wider population of paraprofessionals in inpatient psychiatric hospitals. The sample frame and the response rate determine how well results can be generalized to the population as a whole. In addition, the use of a cross-sectional design made it difficult to determine any causal relationships, which left some questions unanswered, such as how compassion fatigue is developed and how it is related to coping skills. A further limitation is that the use of a convenience sampling design contributed to selection and social desirability bias, which further hinders generalizability. The survey relies on self-reported data that might not be consistent across individuals, and it is possible that some individuals who have experienced compassion fatigue might not have responded satisfactorily to the

questionnaire. Also, other demographic variables that are unmeasured in this study might impact compassion fatigue. Some paraprofessionals effectively use adaptive coping skills to prevent compassion fatigue or mitigate its effects, which could contribute to response bias. A longitudinal study or further qualitative studies might facilitate greater accuracy in terms of data collection regarding how compassion fatigue develops among mental health paraprofessionals.

Significance

Paraprofessionals experience cumulative stress due to direct and indirect exposure to trauma victims, which is referred to as compassion fatigue (Graves, Sansbury, & Scott, 2015). Although such individualized coping strategies have helped some workers, their effects are often temporary, as many paraprofessionals continue to regularly experience the negative impacts of stress deriving from unaddressed issues resulting in inadequate organizational supports (Graves et al., 2015). The lack of examination of organizational factors in the development of compassion fatigue appears to have contributed to organizational leaders minimizing or denying paraprofessionals' compassion fatigue (Graves et al., 2015). Supervisors and organizational leaders persistently blame stress or compassion fatigue on poor self-care, and some tend to express judgmental attitudes that have the effect of undermining individuals (Graves et al., 2015). As a result, limited resources are available to paraprofessionals to address issues related to compassion fatigue.

The current study aims to determine the extent to which organizational factors predict the development of compassion fatigue among paraprofessionals. I chose to study

paraprofessionals because they are not required to have professional certifications, advanced degree specialization, specific skills or competencies, or prior knowledge to perform their job responsibilities. However, by virtue of their job responsibilities, paraprofessionals spend the most time with clients out of all healthcare professionals. Without adequate supports, it can be difficult for paraprofessionals to know what to do when faced with difficult situations, and it is to be expected that this group would be the most likely among healthcare workers to suffer compassion fatigue.

The findings from this study could inform efforts to educate and create awareness among organizational leaders regarding the presence and effects of compassion fatigue among paraprofessionals, as well as identify and address issues in organizational systems that contribute to worker stress and fatigue, such as overlong working hours and limited professional guidance. Consequently, measures could be undertaken to ensure that these issues are improved. For example, funds could be made available to establish compassion fatigue training programs not only for individual workers, but also supervisors to help with methods to provide better oversight and support for paraprofessionals. This may promote more collaborative interpersonal relationships among staff, build teamwork, reduce staff turnover, and promote the overall effectiveness of staff, which can in turn potentially improve patient services and outcomes. The study could also help to clarify or validate findings in existing literature, promote positive patient-staff relationships, and ultimately foster the ability of staff to develop more adaptive coping strategies.

Positive social changes could occur as paraprofessionals recognize the external factors that have a negative impact on them at work and learn about how to meet their

needs, which might improve their professional self-image and empower them to advocate for additional resources and supports. The information gained from this study could help improve communication between leaders and employees as both parties recognize ways to support each other. Additionally, study findings could be employed to develop educational and training curricula for paraprofessionals. Students and future psychiatric workers in addition to paraprofessionals could benefit from learning ways to better regulate their stress. Such measures could enhance paraprofessionals' readiness toward future work expectations and coping skills. Finally, the study will add to the existing literature related to compassion fatigue and its impact among paraprofessionals at inpatient psychiatric centers.

Summary

Excessive work demands combined with low qualifications and inadequate supports leave paraprofessionals particularly vulnerable to compassion fatigue. Compassion fatigue and its contributing factors have been extensively studied. However, most previous studies have focused on crisis workers or other medical professionals and very few researchers have examined the impact of compassion fatigue on paraprofessionals. A further predicament is that the relationship between compassion fatigue and organizational factors is rarely studied. Research is usually focused on examining terms used to define or characterize compassion fatigue and establish a consensus regarding consistent and clear definitions for terms such as burnout, compassion fatigue, secondary traumatization, and vicarious traumatization.

Chapter 2 provides a complete overview of literature on compassion fatigue and organizational factors. The review describes how the concept of compassion fatigue has developed and provides an overview of approaches to studying its manifestations and effects among professionals. Chapter 2 also presents a review of the underlying theories employed during this study and the means of measuring variables under study as well as an overview of related terms that helped to clarify understanding the variables under study. Chapter 3 describes the research designs and procedures used during data collection and the recruitment of participants, followed by the plan for data analysis and an outline of threats to validity and ethical issues related to the study. Chapter 4 presents the findings of the data collection and analysis, and Chapter 5 concludes the study with a discussion of the significance of the findings, including ways that the results validate or diverge from the existing literature, recommendations for practice, a description of the study's limitations, and prospects for further investigation.

Chapter 2: Literature Review

Introduction and Overview

According to the American Psychiatric Nursing Association (APNA, 2012), up to two million clients who present with a myriad of social and psychological problems are admitted to general hospitals each year. Most of these clients are transferred to psychiatric hospitals for further evaluation and stabilization, and paraprofessionals maintain 24-hour direct care responsibilities and services for them in inpatient hospital settings. During their service delivery, paraprofessionals often attempt to empathize with and understand their clients' suffering. During this process, paraprofessionals may eventually suffer fatigue, which can take a toll on their wellbeing (Cole, Craigen, & Cowan, 2014).

Inadequate training and lack of supervision to guide newly trained staff or support older staff are among the factors contributing to emotional distress among paraprofessionals in inpatient psychiatric clinics (Freshwater & Winship, 2012). Freshwater and Winship (2012) attributed some of the emotional distress that paraprofessionals working at inpatient psychiatric hospitals suffer while working with clients to poor organizational factors.

Inpatient psychiatric hospital units are facilities structured to provide an intense level of supervision 24 hours a day and 7 days a week for persons deemed unsafe to themselves or others and are unable to reside in communities (Edwards et al., 2014). Paraprofessionals at inpatient psychiatric hospitals provide varieties of rehabilitation, nursing, and mental health therapeutic services to their patients (Edwards et al., 2014).

Paraprofessionals are direct work service providers and are immersed in patients' suffering and loss on a daily basis. As Bokhari, Khan, and Khan (2016) argued, "the expectation that we can be immersed in suffering and loss daily and not be touched by it is as unrealistic as expecting to be able to walk through water without getting wet" (p. 143). Unfortunately, paraprofessionals often lack sufficient training and skills to handle the stress they experience at work (Didion, Holohan, Voss, Horrell, & Todd-Vance, 2011; Graves et al., 2015; Mathieu, 2012).

Such conditions render paraprofessionals vulnerable to developing compassion fatigue and/or seemingly persistent and unending emotional and mental distress (Didion et al., 2011; Graves et al., 2015; Mathieu, 2012). Joinson (1992) was the first to label this distress as compassion fatigue, which she used to describe the significant distress she observed among nursing staff. Figley (2002) defined compassion fatigue as a state of tension, distress, or preoccupation due to exposure to the suffering of traumatized patients.

Compassion fatigue manifests itself in many ways, including becoming disparaging at work, lacking enthusiasm, having anxiety or depression, and feeling isolated, all of which may lead the professional to detach from the suffering of others (Bokhari et al., 2016; Eastwood & Ecklund, 2008; Mathieu, 2012). Intense involvement in the caring of others has strong implications for staff wellness, and compassion fatigue can decrease attention span and increase exhaustion and physical illness, leading to apathy and anger (Slatten et al., 2011).

Professionals face a high level of challenging situations and work-related stress (Blumberg, Stricklan, Newacheck, & Weissman, 2004), and are even more vulnerable to stress and compassion fatigue than other practitioners (Sprang et al., 2007). However, the needs of paraprofessionals are the least attended to at most organizations, and this group is less researched in the literature (Geraghty, Lauva, & Oliver, 2016; Tilcsik, 2014).

Compounding issues stemming from paraprofessionals' vulnerability and exposure to stress are inadequate organizational factors, particularly lack of support and resources. Paraprofessionals suffer emotional distress due to clients' volatility and trauma, which is exacerbated by inadequate supports from organizational leaders for managing work-related stress. Meanwhile, they are also expected to possess the ability to empathize and skillfully manage clients' emotional distress (Mathieu, 2012); however, most paraprofessionals do not possess the appropriate qualifications, training, competencies, and experiences to work therapeutically with people in inpatient settings (Edwards et al., 2014; Fotaki, 2015; Giambra & Kinstely, 2013). Other issues that present ongoing problems at most inpatient psychiatric hospitals include low pay, excessive overtime, and long working hours (Lamson et al., 2010).

Organizational leaders often recognize these issues but are unsure how to resolve them, which might be at least partly due to the lack of research on ways to identify and address the structural factors which lead to compassion fatigue. As a result, leaders apply short-term or individually-targeted interventions such as redeploying staff from different areas of the agency to fill vacant positions or encouraging mindfulness or other self-care

behaviors among paraprofessionals (Baum et al., 2014; Lamson et al., 2010). Though clearly well-intentioned, without supervisor and peer supports and commitments toward organizational change, such measures offer only temporary and inappropriate solutions for a lasting and serious problem. Lack of awareness about effects of compassion fatigue coupled with inadequate availability of information could impact organizational leaders' ability to consider the extent to which organizational factors may predict compassion fatigue development.

Li et al. (2014) argued that the combined efforts of educators and administrators toward the promotion of organizational commitment featuring staff supports could be a critical step toward reducing or preventing compassion fatigue experiences.

Organizational factors such as shorter work schedules and improved communication have led to success in terms of reducing workplace stress (Ruotsalainen et al., 2015). However, the links between organizational factors and compassion fatigue remain unsubstantiated due to a lack of consistent evidence. This presents a gap in the literature regarding the relationship between organizational factors and development of compassion fatigue among healthcare professionals generally, which becomes more extreme when considering paraprofessionals who work in the inpatient settings. Higher caseloads and inadequate supervision are associated with the development of compassion fatigue. However, most interventions involve targeting individual skills or behaviors, and there is little information available on measures to prevent compassion fatigue on an interpersonal or organizational basis. Paraprofessionals continue to suffer compassion fatigue despite gaining coping skills. As Fotaki (2015) observed, people are more robust,

creative, open, and less stressed when they feel adequately supported by their organization, and anyone can become stressed when faced with high work demand with little to no training and supervision. Such considerations clearly demonstrate the need for leaders to provide additional support and supervision. Ruotsalainen et al. (2015) observed that studies of organizational interventions for stress and burnout often neglect to identify and address specific contributing factors. Hence, there is a need for studies to make valid information available to organizational leaders addressing predicting factors involving compassion fatigue that derive from their own systems and resource distributions. The current study represents an effort to provide such information through an investigation of organizational factors as predictive variables of compassion fatigue among paraprofessionals.

The remaining sections of this chapter are structured as follows. I first describe the process of conducting the literature review, including the numerous strategies and search engines employed to locate the literature. Second, I explore the theoretical frameworks that form the foundations of this study and present further discussion on the extant literature. Finally, the chapter defines and discusses further terms related to compassion fatigue.

Literature Search Strategy

Most of the peer-reviewed articles used during this literature review were accessed through the Walden University online library. The databases were: SocINDEX, ProQuest, PsycARTICLES, PsycTESTS, PsycEXTRA, Google Scholar, Education Resources Information Center (ERIC), Education Research Complete, PsycINFO,

Psychology: A SAGE Knowledge Full-Text Collection, PsycCRITIQUES, EBSCOHost, and the National Institute of Health National Library of Medicine (NIH/NLM) online. The main keywords used during the literature search include *compassion fatigue*, *compassion satisfaction*, *burnout*, *secondary traumatization*, *organizational factors*, *the prevalence of compassion fatigue*, *compassion fatigue and paraprofessionals*, *compassion satisfaction*, *empathy*, *compassion*, and *mental health workers in psychiatric settings*. Further terms included *quality of life*, *work demands*, *work organizations*, *work-related stress*, *etiology of compassion fatigue*, and *trauma theory*. The Boolean indicators AND and OR were used to select studies that were relevant to pediatric paraprofessionals at inpatient psychiatric hospital centers.

The search for instruments using the MMY yielded no results. Hence, an instrument to measure compassion fatigue was searched using the PsycTESTS database, which yielded four instruments, including the Compassion Fatigue Short Scale (CFSS), the Citizenship Fatigue Scale (CFS) and barriers to psychologists seeking psychotherapy questionnaires. A search emphasis limited literature to that published within the last five years to ensure that the most current literature was used in the research. Dissertations that described the phenomenon under study were also reviewed, and these were useful in providing an adequate survey of areas of search and gaps in the literature. A collection of several questions served as a guide during this literature review in considering relevant facts regarding the studies reviewed: First, where and in what setting was the research conducted? Second, what is the population of the study? and third, what theoretical frameworks were employed during the study?

Theoretical Foundations

The conceptual framework that informed this study was the CSDT, and the etiological model as applied to compassion fatigue (Figley, 1995; Kulkarni et al., 2013; McCann & Pearlman, 1990a, 1990b, 1992). The CDST informed the study's assessment of how traumatic experiences at work settings affected the worker's thoughts and feelings, consequently impacted their ability to cope.

Etiological Model

As mentioned in the introduction to this chapter, the term compassion fatigue became popularized in the literature after Joinson's (1992) study of the impact of work-stressors on nurses. Joinson (1992) distinguished compassion fatigue from burnout by suggesting that whereas the former derives from workload and related stressors, the latter is the cumulative outcome of repeated exposure to others' trauma. In the decades since, numerous researchers have used the term to advance compelling arguments demonstrating that health- and human service professionals, including crisis workers, social workers and nurses, among others, were being negatively affected by work-related stress.

The etiological model of compassion fatigue was proposed by Figley (1995, 2002, 2014), who identified a range of factors that appear to interrelate in the development of this condition. The validity of this model has been widely demonstrated, particularly its ability to facilitate and understanding of the contributing factors related to the development of compassion fatigue. Figure 1 depicts Figley's (2014) conceptualization of the interaction of variables that predicted the onset of compassion fatigue. This model

aids in understanding the underlying issues and the ongoing processes involved in the construct, and as this study will show, most of the variables can be related to organizations as well as employees.

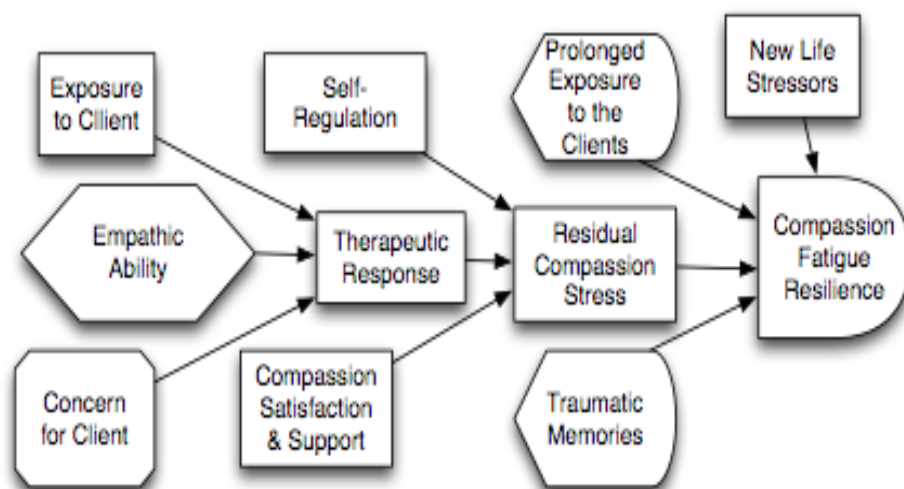


Figure 1. Generic model of compassion fatigue (Figley, 2014, p. 1)

The CSDT combines psychoanalytic, constructivist thinking, social learning and cognitive development theories to understand how individuals develop negative thoughts and perceptions as a result of their exposure to negative experiences in their environments (McCann & Pearlman, 1990a, 1990b, 1992). CSDT is among the main trauma-based approaches employed in examining conditions such as compassion fatigue, and its derivative treatments have been widely employed in helping traumatized individuals reconstruct maladaptive meanings that contribute to negative emotions (Flores, Miller, & Pitcher, 2010). This framework was developed by Laurie-Ann

Pearlman, I. Lisa McCann, and other colleagues in the 1990s (Frazier, 1992; McCann & Pearlman, 1990a, 1990b, 1992; Pearlman, 2013; Pearlman & Saakvitne, 1995). CSDT postulates that individuals create and attach positive and negative meanings to stressful life situations, such as during traumatic events and experiences. The underlying assumption is that individuals construct their own beliefs, meanings, and realities based on their traumatic experiences, which shape their perceptions and experiences to form a worldview (Saakvitne, Tennen, & Affleck, 1998).

CSDT outlines specific components of self that are most affected by trauma, encompassing frame of reference, self-capacities, ego-resources, central psychological needs, and perceptual memory systems (Saakvitne et al., 1998). Frame of reference denotes a person's usual way of understanding self and the environment in which they live, and self-capacity is defined as the individual's capacities to recognize, tolerate and integrate affect so as to maintain a benevolent inner connection with self and others (Saakvitne et al., 1998). Ego resources include an individual's ability to self-observe and use cognitive and social skills to maintain relationships and to self-protect. Finally, perceptual and memory systems, including biological, adaptive, and sensory experiences, can be disrupted by exposure to traumatic events (Saakvitne et al., 1998).

Compassion and Compassion Fatigue

It may be worthwhile to first review the term "compassion" before approaching the narrower topic of compassion fatigue. Batson, Fultz, and Schoenrade (1987) defined compassion as an emotional experience that stems from perceiving or witnessing and being moved by another person's suffering. Oveis, Horberg, and Keltner (2010)

examined the social cognitive consequences of compassion and how it may influence judgment and proposed that compassion enhances self-perceived similarities that link the individual to the weak and vulnerable. Compassion can bring satisfaction and joy, but also engenders anguish, tiredness, emotional exhaustion, and fatigue (Bitenc, Masten, Pastirk, & Tabaj, 2015). According to van der Cingel (2011), the concept of compassion is derived from virtue and justice. However, Fotaki (2015) argued that compassion in organizations is more closely related to interpersonal practice, finding that workers demonstrated more commitment when they perceived that their organization treated them with compassion and functioned in ways consistent with their sense of justice.

Compassion is considered a core attribute of the helping professions; however, compassion fatigue impedes or obstructs the professional's ability to have compassion, which exacerbates ongoing work-related stress and anxiety (Ledoux, 2015). An individual can experience compassion fatigue associated with work when he or she perceives themselves as unable to discharge their moral responsibilities or as not adequately delivering the care they believe to be necessary (Ledoux, 2015). For many workers, the effects of compassion fatigue can vary from fear, anxiety, apathy, grief and sadness, to anger, rage, and confusion, among a long list of emotional disturbances (Ledoux, 2015). Individuals who are not well equipped to deal with these emotions tend to resort to unhealthy behaviors to cope. For example, some withdraw from the caregiving responsibilities to protect themselves from feeling hurt (Ledoux, 2015). Others may lose enjoyment in their profession and experience a decreased sense of personal accomplishments (Figley, 2002, Ledoux, 2015), or self-medicate through alcohol- or drug

abuse. According to Ledoux, the symptoms of compassion fatigue can get progressively worse when left untreated, and consequently affect the professional's overall quality of life. Moreover, the effects of compassion fatigue reduce the worker's ability to provide quality services, resulting in negative client interactions and outcomes.

CDST and the Effects of Trauma

The trauma associated with compassion fatigue extends beyond the individual professional to impact the ability to care for patients and other interpersonal relationships in the organizational system (Cole et al., 2014). The organizational system in turn becomes traumatized as a result of workers projecting the negative feelings of their clients in ways that obstruct its functioning. Compassion fatigue leads to high turnover rates, which destabilize the unit and prevent the establishment of a high-functioning, supportive, and cohesive workforce (Conrad and Kellar-Guenther, 2006). This phenomenon commonly occurs in inpatient psychiatric units, where paraprofessionals are often mandated to work beyond their usual hours and consequently experience physical exhaustion at high rates (Tyler, 2012). The unavoidable result of the rapidly changing environment is not only detrimental to the effectiveness of the worker, but also impacts the functioning of the organization as a whole (Cooper, 1998; Corace & Endler, 2001).

Evidently, changes in an individual's neurobiological and psychological processes can occur in association with continuous exposure to primary or secondary traumas (Tyler, 2012). One of the psychological effects of a destabilized organizational unit is the inability of staff to think efficiently, which further contributes to each individual's disorganized state of mind. Workers develop different defenses such as dissociation,

consisting of avoidance, distraction, numbness, daydreaming and splitting to cope with the negative emotional distress (Tyler, 2012). Splitting is a dominant organizational defense that creates negative emotions, thoughts and perceptions among staff, which in turn creates a rigid culture that inhibits organizational growth and staff development.

Mental health professionals are bombarded with multiple clients' unprocessed feelings of rage, shame, dissociation, and fear, and those raw emotions are transferred onto the professionals (Tyler, 2012). The worker ultimately suffers emotional dysregulation if these emotions are not processed via supervision, and over time can begin to experience the same trauma symptoms as the client, consequently suffering psychological distress and higher impairment in daily functioning. The worker begins to develop defenses to cope; however, lack of support or supervision coupled with high work demands increases the risk of reoccurrences (Tyler, 2012).

A worker with a high level of compassion fatigue may feel temporarily restored after a few weeks' break, "only to find himself or herself flooded with emotional and physical exhaustion upon returning to work" (Figley, 2015, p. 6). Some workers are not able to cope or function appropriately at work and, consequently either leave the organization, request more days off, or go on sick-leave, which puts pressure on the remaining staff members such that a cycle of high staff turnover is created, thus leading to further organizational dysfunction (Cole et al., 2014; Tyler, 2012). Those employees who end up staying develop ways to cope with the system that often offer only short-term solutions and may even be unhealthy, such as substance abuse. Workers develop compassion fatigue as a result of continuously absorbing the projected emotions of anger,

rage, fear, and anxiety from clients without adequate space to process such feelings. Due to the concurrent difficulties in processing information, staff members might continue to overlook emerging problems and ongoing issues, or have problems remembering and reflecting on thoughts and feelings, thus limiting their ability to emotionally process their experiences.

Interpersonal Effects of Compassion Fatigue

According to the theory of CSDT, professionals who work with trauma victims may find their cognitive schemas and imaginary systems disrupted as a result of long-term exposure to traumatic events (McCann & Pearlman, 1990b, 1992). According to McCann and Pearlman (1990b), such disruptions can have a profound psychological effect that can last for months and even years. Compassion fatigue can bring about a disturbance in individuals' cognitive schemas or mental frameworks (Flores, Miller, & Pitcher, 2010), which can involve disruptions to the professional's perspective of trust, rendering them suspicious of others' motives and engendering the development of a sense of disorientation and cynicism (McCann & Pearlman, 1990b, 1992). Professionals affected in this way might question the trustworthiness and motivations of their organizational leaders and coworkers. McCann and Pearlman (1990a, 1990b) elucidated how exposure to traumatic situations evokes concerns regarding the professional's sense of power and efficacy, which can evoke a sense of vulnerability and powerlessness. The professional whose power needs are threatened may find themselves becoming more dominant in social situations and settings, which creates further work tensions.

Ultimately, the worker becomes unhappy and stressed, and might quit their job if their power needs are left unmet.

Most paraprofessionals have no control over their schedules, which, coupled with a lack of supervision and training, may leave them powerless, helpless, and diminished in personal autonomy, which can be particularly stressful for workers who have more urgent needs for independence and autonomy (McCann & Pearlman, 1990b). Furthermore, working overtime with high work demands may cause staff to develop a profound sense of alienation and become separated from their family and friends (Bokhari et al., 2016), which in turn negatively impacts the professionals' intimacy, sense of belonging, and community connection (Mucedola, 2015). Some paraprofessionals experience depression, despair, and loneliness from the disconnect (Mucedola, 2015). Disruptions in psychological functioning can affect the staff member's ability to maintain a healthy interpersonal relationship at work with other team members as well as clients, thus creating frustration, distress, and confusion.

Applications of CSDT in Mental Health Settings

This study applied CSDT on the basis of several previous uses of the theory among workers in mental health settings. Williams, Helm, and Clemens (2012) underscored the utility of CSDT as an analytical framework for understanding compassion fatigue through their employment of the theory to examine the relationship between organizational factors and work-related stress among community mental health counselors. Variables examined during the study include participants' personal wellness, organizational factors, and secondary trauma (Williams et al., 2012). CSDT was also

used to educate participants about how their traumatic experiences contributed to their reconstruction and recreation of reality, negative perceptions and worldview (Williams et al., 2012). Many staff members had resigned their positions as a result of their cynical interaction experiences, and a particular focus was placed on the explanatory mechanisms of the framework, which helped participants understand why some workers were becoming skeptical, pessimistic, untrusting, paranoid, and at times predicting the worse of their future clients. During study delineation, CSDT would be used to help this researcher educate and foster participants' understanding, self-awareness and development related to the effect of compassion fatigue development and prevention.

Furthermore, Pearlman and Mac Ian, (1995) used CSDT to examine the effects of vicarious trauma on 188 therapist-participants, finding that those who had most recently began their roles were experiencing the most psychological difficulties of the effect of trauma on their own wellbeing. The study also revealed that participants with a personal history of trauma were most affected in the area of self-capacity, as indicated by CSDT (Pearlman & Mac Ian, 1995). The study suggests the importance of training and supervision in support for both the early-career professionals and those with a personal history of trauma.

Rationale for Choosing the CSDT

CSDT is employed in the current study as a theoretical framework to assist in interpreting the effects of poor organizational factors on the development of compassion fatigue among paraprofessionals in inpatient psychiatric hospital settings. CSDT provided

a comprehensive structure in understanding the impact of trauma on survivors (Flores et al., 2010).

According to Flores et al. (2010), CSDT proposes that stressful and traumatic events can interfere with the individual's cognitive schemas. It is these schemas that shape the individual's views, perceptions, beliefs, and expectations of the self and others. An individual's cognitive schemas develop through past experiences, as they are associated with specific emotions (Flores et al., 2010). These emotions can be used to deal with subsequent future events (Flores., 2010).

CSDT proposes that every individual response to trauma is unique and can be affected by the individual's history. Therefore, when long-term exposure to traumatic events causes distortions in the professional's schemas, those distortions may differ based on the individual's psychological needs (Flores et al., 2010). CSDT was chosen as a theoretical framework for this study because it has proven to be the most appropriate technique to measure changes that result from long-term trauma exposure to an ongoing trauma (Flores et al., 2010). CSDT entails the notion that people rely on their past experiences to cope with their current trauma. Such experience can be either positive or negative, and the individual's ability to cope adaptively depends on their level of cognitive and psychological disruptions.

CSDT provides information on various ways that individuals cope with traumatic events, including maladaptive measures such as avoidance, fighting, and freezing. These coping styles can be useful in understanding why some staff who experience a high level of distress and stressful conditions at work might decide to resign while others in the

same role will remain. According to the theory, stress can render one susceptible to compassion fatigue and ultimately have an impact on the ability to cope (Flores et al., 2010). Professionals who go through a loss of identity as a result of trauma often experience overwhelming emotions characterized by depression and anxiety, and difficulties regulating these emotions may contribute to a loss of self-assertiveness, confidence and the questioning of self-capacities. Professionals who have experienced a disruption in their schema may have difficulties functioning in an intensive inpatient psychiatric unit.

Paraprofessionals are the first to witness traumatic events on a unit; thus, they face a high level of challenging situations and work-related stress (Blumberg et al., 2004). Cheng, Decety, and Yang (2010) observed that paraprofessionals spend more time with patients (most of whom are victims of trauma) than any other professionals. While the stress experienced by the paraprofessionals in inpatient psychiatric centers may differ in its intensity, the same psychological effects and emotional disturbances are experienced. CSST helps people understand trauma and woundedness, and it promotes resilience and reengagement with organizational leaders. Based on these attributes, CSST enables the promotion of collective recovery, using platforms such as education and community forums that can be used during study delineations and educating organizational leaders (Mangassarian, 2016; Pearlman, 2013). This framework emphasizes a perspective that focuses on the individual's early development as central to the current ways of experiencing and interacting with self and others (Pearlman, 2013).

How the Research Questions Relate to, Challenge, or Build upon Existing Theory

The research questions in the current study bear a close resemblance to those used in Williams et al. (2012), in terms of a shared appeal to CSDT in examining the traumatic effects of compassion fatigue on professionals. Unlike other professionals, paraprofessionals are most vulnerable to developing maladaptive coping strategies, which may be due to their lack of extensive professional training and competencies (Lamson et al., 2010). As a result, they are more likely to lack emotional regulation skills when it comes to knowing how to process traumatic experiences. Boyd, Pignata, Provis, and Winefield's (2016) study of academic and non-academic staff at a university found that the less-skilled non-academic workers struggle with maladaptive coping, less trusting of organizational leaders, and consequently experience high levels of stress and job turnover. Some elements of this study could be transferred to the inpatient psychiatric setting, particularly the comparison between more educated staff and those with less training and skills.

Definition of Concepts Related to the Current Study

Compassion fatigue. The term compassion fatigue was coined by Joinson (1992) after the author conducted a study on nurses and discovered chronic distress suffered by participants as a result of prolonged and continuous exposure to the suffering of clients. Compassion fatigue denotes the emphatic strain and general exhaustion that results from caregiving tasks over a period of time (Turgoose & Maddox, 2017). Recently, the term has been used to describe work-related emotional disorders among a diverse range of mental health professionals, and the concept has been employed more globally among an

array of helping professionals to describe their overall experiences as resulting from the emotional and psychological effects of exposure to the suffering of traumatized patients.

Research has demonstrated that empathic connections with clients are essential for self-development (McCann & Pearl, 1990b; Williams et al., 2012). However, working with traumatized clients can be intense and can leave professionals vulnerable, leading them to develop symptoms similar to those exhibited by their clients (Williams et al., 2012), such as anxiety, helplessness, fear, depression, and powerlessness. Figley (1995) labeled these symptoms as compassion fatigue.

There is a considerable overlap between varying terms and definitions used to describe work-related stress, including compassion fatigue, burnout, secondary traumatization, and vicarious traumatization. Compassion fatigue has been variously characterized as vicarious trauma and secondary trauma syndrome (Figley, 1995); however, unlike secondary trauma and other related conditions, compassion fatigue is an exclusively work-related issue that derives directly from interpersonal contact (Ledoux, 2015). The individual who suffers compassion fatigue can become emotionally drained and depressed, and symptoms can manifest in impaired judgement, low morale, increased absenteeism, poor interpersonal relationships and high turnover, and individuals who suffer these symptoms may change jobs, move to unrelated jobs or even leave professional life entirely (Jahrami, 2009).

Researchers have provided diverse views and explanations of compassion fatigue. Some studies have proposed that compassion fatigue arises from unresolved symptoms of burnout and secondary traumatic stress, whereas others have used burnout, vicarious

trauma and secondary trauma interchangeably to describe compassion fatigue (Mathieu, 2012; Sheppard, 2015). The resulting lack of consensus on how to define and characterize work-related stress disorders has hindered the ability to understand these concepts and their underlying causes (Turgoose & Maddox, 2017).

Many researchers differentiate compassion fatigue from work-related stress issues such as burnout. Whereas burnout is an exhaustion that can occur in response to chronic tedium and dissatisfaction in the general work environment (Beck, 2011), Figley (1995) posited that compassion fatigue tends to prevail among helpers who have been exposed to trauma, such as in the case of paraprofessionals. Tyler (2012) also described compassion fatigue as a psychological symptom that derives from working with trauma victims, such that psychological and physiological changes can be transferred from the victim of trauma to the person working with the traumatized clients.

As Williams et al. (2012) maintained, compassion fatigue creates difficulties in both intra- and interpersonal relationships, which can ultimately undermine the professionals' sense of safety and control over situations. Compassion fatigue may lead to loss of energy, pessimism, and a lack of commitment, and staff who are emotionally numbed, tired, and exhausted at work, may not be able to pay sufficient attention to their own emotional needs.

Compassion satisfaction. The concept of compassion satisfaction is directly contrary to compassion fatigue—it refers to the positive feelings associated with helping others, as opposed to the negative feelings engendered by being unable to heal their traumas. Meyer et al. (2015) described compassion satisfaction as the pleasure one feels

from being able to help others effectively. These feelings consist of feeling supported by colleagues, feeling useful, and needed. Compassion satisfaction often mitigates the negative effects of working with acutely ill or traumatized persons, and its enhancement has been correlated with reducing staff turnover and improving staff retention (Hooper, Craig, Janvrin, Wetsel, & Reimels, 2010).

Costs of compassion fatigue. The costs of compassion fatigue and associated disorders such as depression impact at the individual and group levels, and their forms range from emotional and behavioral problems to financial costs and other forms of damage to organizational functioning and survival. The negative effects of compassion fatigue on caregivers and organizations have been established through numerous studies. Researchers assert that if compassion fatigue is not quickly detected and treated, it can lead to other acute and destructive symptoms, such as unemployment, chronic physical ailments such as gastrointestinal problems, high blood pressure and recurrent colds, substance abuse and severe mental health issues (Ledoux, 2015; McCann & Pearlman, 1990b, 1992). Figley (1995) described such effects as the “cost of caring”. In addition to personal costs, compassion fatigue negatively impacts the environment in which the providers deliver their services, and ultimately, clients, colleagues and other people around the caregiver can suffer from a contagion effect of the professional’s compassion fatigue experiences (Cooper, 1998; Corace & Endler, 2001). The organizational costs of compassion fatigue include higher rates of physical illness, greater use of sick time and personal days, friction among staff and between employees and managers, greater

workers' comp costs, an inability to complete work tasks, higher turnover rates and reduced morale and productivity (Heaslip, Ray, & Wrong 2013).

Organizational factors. As noted in Chapter 1, this term refers to those characteristics of the professional's work environment that might contribute to employee stress and predict the onset of compassion fatigue. The work environment can have significant impacts on an individual's physical and mental health, particularly when that environment becomes toxic and traumatizing for professionals (Lanctot & Guay, 2014). As a condition that derives directly from prolonged exposure to patient's suffering, compassion fatigue is inherently rooted in organizational factors, leading some to question whether the inability to provide appropriate care might be attributable to and predicted by poor organizational resources and structuring (Ledoux, 2015). Service providers face multiple challenges due to inadequate organizational resources, including minimal training for their staff, lack of supervision, and higher staff-client ratios, which negatively impact the providers' work environment and consequently lead to staff to experience symptoms of compassion fatigue (Kulkarni et al., 2003).

Green, Miller and Aarons (2013) pointed out that inpatient psychiatric care providers are at high risk for developing compassion fatigue due to enormous work demands coupled with low resources and lack of supervision. Chen, Heaston, Hunsaker, and Maughan (2014) argued that compassion fatigue can be prevented by improving staff self-awareness of emotional exhaustion. However, this strategy requires prior knowledge of the mechanisms involved in conditions such as emotional exhaustion compassion fatigue.

Paraprofessionals and Professionals. Paraprofessionals, also known as direct care staff or mental health therapy aides, are a group of workers who work directly with clients or patients providing a range of direct-care tasks, such as supervising, taking patient's vital signs, transporting, socializing, counseling, and watching clients. Paraprofessional workers are a critical part of the mental health delivery system, forming an estimated 25% of the mental health workforce and up to 60% of the staffing in psychiatric institutions (Buchbinder, 2003); however, they are subject to fewer regulations than other caregiving positions and receive less pay and supportive resources than professional healthcare workers. Unlike professionals, paraprofessionals do not require certifications or licensure to qualify for their positions, they tend to receive unstandardized trainings in specific work-related skills, rather than the more holistic, comprehensively researched professional development programs often made available to professionals.

Secondary traumatic stress (STS). Unlike vicarious traumatization, Figley (1995) introduced the term secondary traumatization to describe the distress that results from hearing about a client's trauma and not seeing desirable outcomes for suffering clients. Individuals experiencing secondary traumatization manifest PTSD symptoms that mirror those of direct trauma survivors, such that the worker experiences the client's trauma without being exposed to the event that originally caused the psychological turmoil (Tyler, 2012).

Garland, Katz, and Shah (2007) defined STS as the emotional, cognitive, and at times physical and psychological negative consequences of being exposed to the

traumatic events, situations; and stories of victims of trauma. As noted, this definition resembles compassion fatigue, which is why Beck-Coon et al. (2009) argued that a lack of conceptual clarity has hindered the useful measurement and empirical study of these concepts. Figley (1995) initially defined compassion fatigue as being virtually synonymous with secondary traumatic stress; however, whereas compassion fatigue is a distinctly work-related phenomenon, STS can also impact individuals in the context of family and social relationships as well as in professional contexts (Bride, 2012).

Vicarious traumatization. According to McCann and Pearlman (1990a, 1990b), empathic engagement with others' trauma-related experiences and behaviors has the potential to trigger negative changes to a professional's fundamental beliefs about themselves, the world and others. The majority of researchers understand vicarious traumatization to be another name for compassion fatigue (Ledoux, 2015), Meyer et al., (2015) defined vicarious traumatization as the adverse effects of empathic engagement with the trauma victim, and like secondary traumatization, it can emerge through both personal and professional interactions. Yet, consideration of the meaning of the term vicarious traumatization suggests that the phenomenon may stem from a feature of the therapeutic relationship between the client and the therapist known as countertransference (Tosone, 2012).

Tosone (2012) described the countertransference reaction as stemming from the therapist's own life experiences, which are aroused through conscious or unconscious neurotic reactions to the client's transferences. Reliving these experiences can activate the therapist's unresolved conflicts of concerns, which can affect professionals' work

with their clients as well as their interpersonal relationships. However, it is noted that counter-transference occurs only in a therapeutic relationship. Hence, this may not be a problem that concerns caregivers, or paraprofessionals' experience of traumatized clients (Tosone, 2012).

Literature Review Related to Key Variables and Concepts

There is growing empirical research supporting the view that the indirect exposure to traumatic experiences has an inherent risk of creating significant emotional, cognitive and behavioral changes in the caring professional (Higuchi, Koyama, Sendo, Uchitomi & Yamada, 2016). This study will focus on such changes as they impact paraprofessionals in inpatient psychiatric hospitals. The current literature review will be geared toward the two main constructs under study: compassion fatigue and organizational factors in relation to paraprofessional's stress management and coping.

Studies on Compassion Fatigue

Lamson et al. (2010) conducted an online survey study using a survey monkey questionnaire among various groups of medical and mental health professionals and staff. Participants consisted of 167 healthcare providers located nationwide and employed in intensive care units, and the study employed correlational design and linear regression analysis to examine how compassion fatigue impacts on different types of healthcare providers. The study determined that the prevalence of compassion fatigue was higher among nurses and physicians and lower among other staff (Lamson et al., 2010). However, among other issues that undermine the reliability of the findings, the authors used the terms compassion fatigue, burnout and secondary traumatic stress

interchangeably, and the ProQOL subscale used during data collection involved three different concepts, including compassion satisfaction, compassion fatigue, and burnout. A further problem in considering the import of the findings stems from the diversity of direct-care services provided by participants whose educational and training levels also varied. Each participant may vary in their capacity to tolerate stress depending on education and skills. Therefore, although this study is informative on the high incidence of compassion fatigue among inpatient mental healthcare staff, the results may not accurately reflect the levels of stress suffered by direct-care paraprofessionals in an inpatient health care setting.

Meyer et al. (2015) used a longitudinal study conducted over six months of a registered nurse (RN) residency program to examine the relationship between the development of compassion fatigue, burnout, compassion satisfaction, job satisfaction, and stress exposure. Participants were novices (new graduates), who likely lacked adaptive coping skills and experience in working in acute settings, and due to their lack of knowledge, it is possible that these participants might have developed a certain level of anxiety regarding the acute inpatient setting. Paraprofessionals have been demonstrated to be more vulnerable, susceptible, and at a higher risk of developing compassion fatigue than any other group of mental health professionals (Meyer et al., 2015).

The generalizability of the study remains questionable due to the multiple variables it examined (Meyer et al., 2015); nonetheless, Meyer et al.'s (2015) research relates to the current study in many ways. Unlike retrospective studies, the authors employed the compassion fatigue self-test (CFST): a 66 item self-report questionnaire

(Figley, 1995; Figley & Stamm, 1996; Meyer et al., 2015), which facilitated the accurate measurement of compassion fatigue. The most significant finding for the purposes of the current study was that participants who bore witness to clients' trauma on a regular basis suffered compassion fatigue, which had a lasting effect on their emotional states, cognitive abilities, and ultimately job satisfaction (Gold et al., 2015). These findings are significant as they indicate the need for ongoing study and development of supporting programs to enable healthy coping skills for the workers especially the new hires.

Common weaknesses that researchers on chronic fatigue have acknowledged include a lack of representative sampling due to the particular sampling strategies implemented, small sample sizes, and conceptual confusion. Heaslip et al. (2013) proposed that future research should focus solely on direct care professionals (or paraprofessionals) (Heaslip et al., 2013), while Lamson et al. (2010) suggested that future research should apply an etiological process of compassion fatigue.

Studies on the Organizational Environment

A positive work environment facilitates the retention of competent, caring and hardworking healthcare professionals (Branch & Klingenberg, 2015; Edwards, Page, Vella, & Wand, 2014). Acute inpatient psychiatric hospitals do not merely aim at containment, but also involve therapeutic engagement. It is for the need for a therapeutic engagement in an acute inpatient environment that researchers argued that all acute care inpatient psychiatric staff require general psychotherapeutic skills sets, such as engagement, empathy, and unconditional positive regard (Branch & Klingenberg, 2012; Hughes, Brown, & Tumme, 2012). For staff to be well-equipped with these skills, they

need some degree of flexibility in their shift rotations so that they can participate in the staff-development training. However, the high rate of staff turnover and the economic state of most organizations make it challenging to find substitutes to cover staff while they complete trainings.

Research conducted by Hughes et al. (2012) found that most acute care staff had not obtained the psychosocial training available through the participating agency's websites, whereas those staff members who had completed training lacked supervision and the necessary support to use the acquired skills in practice. Furthermore, an assessment of education and training revealed that staff members were only accessing the mandatory training. Overall, it was evident that most of these professionals did not have adequate training or support for their work with patients with mental and emotional disturbances. The absence of clinical supervision was found to have a significant impact on the employees' sense of hopelessness, despondent, and stress level (Hughes et al., 2012).

The role that stress plays in staff turnover and tenure seems to be well understood across all disciplines in the helping professions. In recent years, an increasing number of studies have examined the role that the work environment plays in stress development. Several studies have found that full-time workers report a higher level of emotional exhaustion than part-time and casual workers (Bitenc et al., 2015; Heaslip et al., 2013), and a positive correlation has been found between compassion fatigue and working overtime hours, such that longer working times are a predictor of the latter (Lamson et al., 2010; Yoder, 2010). Other researchers have found reducing working hours to be a

positive and significant influence in mitigating the stress that contributes to compassion fatigue (Ruotsalainen et al., 2015). The joint outcome of these studies is that high work demands, including quantity of allocated administrative tasks may, render workers prone to developing compassion fatigue. However, despite the vital importance of paraprofessional in inpatient psychiatric settings, this group often receives the least amount of training and supports.

The Australian Primary Health Care Nurses Association (APNA, 2012) identified multiple factors that contribute to poor organization, including multi-morbid unit acuity-admission and discharge. The APNA (2012) described the findings of a retrospective observational study in which patient flow had a negative impact on staff effectiveness in an inpatient psychiatric setting. It follows that the costs associated with recruiting new staff could be saved through improvements in organizational factors and the prevention of compassion fatigue (APNA, 2012).

Turgoose and Maddox (2017) conducted a narrative review of 32 studies and found no consensus on which psychosocial factors were the greatest predictors of compassion fatigue. Methodological consistency was undermined, as only nine of the reviewed studies had used the compassion fatigue self-test (CFST) (Figley, 1995; Figley & Stamm, 1996). Eighteen of these studies were conducted in the USA, three in Israel, two each in Germany and Canada, and one each from Lithuania, the UK, Australia, Switzerland, Norway, South Africa, and Italy (Turgoose & Maddox, 2017). Despite variations in the studies, some common factors were identified as contribute to

compassion fatigue, including high caseload, empathy, and personal factors (Turgoose & Maddox, 2017).

Boyd et al. (2016) said that stress and psychological risk among employees can be attributed to an imbalance between work demands and inadequate or poor organizational resources. Perceived organizational support was identified as a factor that contributes to overall satisfaction among workers in a study of 969 participants conducted on academic and nonacademic staff at 13 Australian public universities (Boyd et al., 2016). Variables examined during this study include job satisfaction, affective organizational commitment, trust in senior management, and procedural justice (Boyd et al., 2016). These variables and findings provide a precedent for the current study concerning how organizational factors may influence stress development.

Summary and Conclusion

Major Themes in the Literature

One conclusion that was gleaned from a review of the literature is that the utility of a study might be severely limited when the terms compassion fatigue and burnout are used interchangeably. Such inconsistencies in the terminology relating to compassion fatigue have ultimately led to a lack of consensus that poses difficulties in reviewing the literature, thus limiting our understanding of the etiology, the role of organizational factors, and predictors in the development of compassion fatigue (Figley, 2015; Sheppard, 2015). A variety of terms are used interchangeably in the existing literature to describe work-related stress, including burnout, compassion fatigue, and secondary

traumatization, and many researchers have encouraged the establishment of a standardized term for sake of clarity and consistency.

Studies have examined factors that contribute to the development of compassion fatigue in human service organizations; however, the majority were conducted on medical staff and other mental health disciplines, and very little research has specifically examined the impacts on paraprofessionals, particularly those working in inpatient psychiatric hospital settings. Paraprofessionals are the least studied professionals in the compassion fatigue literature, and inpatient psychiatric care centers appear to be the least-studied settings, despite being highly traumatic work environments. Part of the problem may be the extreme diversity of the work performed by paraprofessionals, who work with people of all age groups and whose responsibilities vary according to setting, which can range from home health programs and community-based outpatient facilities to private juvenile treatment facilities, or day care or homecare for the elderly (Buchbinder, 2003). Such duties can include mundane tasks such as food preparation, bathing or feeding, but can also extend to the provision of informal counseling such as alcohol and drug counseling, socialization, setting up appointments and meetings, facilitating support groups or mediating arguments between residents (Buchbinder, 2003). Such diversity makes it difficult to study paraprofessionals as a single population, and the limited findings that have been achieved might not be generalizable across all settings.

In addition, the review identified multiple organizational factors and personal factors that might increase the risk of developing compassion fatigue, although few studies have comprehensively investigated organizational factors as predictors of that

condition. Ruotsalainen et al. (2015) proposed that interventions aimed at improving organizational issues have not focused on the specific factors that contribute to stress among staff, thus limiting their effectiveness. While personalized measures such as coping strategies may be a helpful prevention, there is a risk that if organizations do not address the structural and systemic issues that impact on staff stress levels, many employees might choose to avoid dealing with organizational stressors simply by resigning their positions. Such issues highlight the need to find better methods of addressing the problem of compassion fatigue. This study is premised on the view that a way forward in this regard is to understand how organizational factors may predict the development of this problem and to promote awareness of the factors that contribute to it. However, such improvements in organizational culture present a difficult challenge.

How the Present Study Explores Gaps to Further Current Knowledge

A preliminary distinction that can be drawn between the present research and many previous studies is that it used the compassion fatigue short scale instrument to collect data as opposed to ProQOL, in which compassion fatigue is one of a range of emotional or psychological issues that are assessed. I determined that as a measure specifically designed to assess compassion fatigue, the CFSS best facilitated the collection of accurate data related to the workers' symptoms of compassion fatigue. A further, related, distinction is that compassion fatigue was the sole concept focused on in this study, which should avoid issues of inconsistency and the interchangeable use of terms that have been found in the literature. As a result, more consistent data on the problem of compassion fatigue will be made available. Additionally, the current study

used the etiological model and CSDT as a guiding theoretical framework. However, the most significant divergences of the current study from previous research are the focus on paraprofessionals in inpatient mental health settings and the emphasis on identifying specific organizational factors contributing to the development of compassion fatigue among that group of workers. Jointly, these differences present major ways that this study addressed an inadequately understood area in literature, thus furthering extant knowledge in this field.

Chapter 3: Research Method

The purpose of the current study was to examine the relationship between organizational factors and compassion fatigue among paraprofessionals in inpatient psychiatric hospitals. This chapter describes the study's research design and rationale, followed by a review of the setting, recruitment strategies, and sampling procedures. An outline of data collection strategies was provided, together with a discussion of the validity and reliability of the data collection instrument, survey questionnaires. Operational definitions of variables are detailed as well as data analysis method, and ethical considerations. The purpose of the current study was to examine the relationship between organizational factors and compassion fatigue among paraprofessionals in inpatient psychiatric hospitals.

Research Design and Rationale

The proposed study employed a quantitative cross-sectional approach. The variables studied were organizational factors and compassion fatigue, whereby the organizational factors of work demand, work organization and content, interpersonal and

leadership relations were the independent variables and compassion fatigue was the dependent variable. The primary goal was to determine the extent to which these organizational factors predict the development of compassion fatigue, and the secondary goal was to determine which factor was the most significant and greatest predictor of compassion fatigue. According to Levin (2006), cross-sectional studies are usually conducted at one time or over a short period to estimate the prevalence of the outcome of a variable of interest for a given population. The variables of interest in this study are compassion fatigue and organizational factors, and the given population is 153 paraprofessionals employed in three different inpatient psychiatric hospital in upstate New York.

Cross-sectional studies are conducted primarily to determine the prevalence of a problem and explore ways to solve it (Mann, 2003). In this instance, knowledge gain from the study related to how compassion fatigue might contribute to turnover among paraprofessionals could ultimately help foster coping skills development among staff. An additional characteristic of cross-sectional studies is that there is no requirement to provide or deny treatment to participants, which reduced the ethical difficulties often inherent in working with human subjects.

Research Questions and Hypotheses

The research questions involve whether there is a positive relationship between organizational factors and the development of compassion fatigue among paraprofessionals who work in 3 inpatient psychiatric settings in upstate New York area.

Data analysis was based on the research questions and hypotheses, which are reiterated as follows.

RQ1: Are work demand, work organization and content, and interpersonal and leadership relations significant predictors of compassion fatigue among paraprofessionals in inpatient psychiatric centers?

H₀₁: Work demand, work organization and content, and interpersonal and leadership relations are significant predictors of compassion fatigue among paraprofessionals in inpatient psychiatric centers.

H_{a1}: Work demand, work organization and content, and interpersonal and leadership relations are not significant predictors of compassion fatigue among paraprofessionals in inpatient psychiatric centers.

RQ2: Which of the following organizational factors work demand, work organization and content, and interpersonal and leadership relations is the most significant and greatest predictor of compassion fatigue among paraprofessionals in inpatient psychiatric centers?

RQ3: Is work demand the most significant and greatest predictor of compassion fatigue among paraprofessionals in inpatient psychiatric centers?

H₀₃: Work demand is the most significant and greatest predictor of compassion fatigue among paraprofessionals in inpatient psychiatric centers.

H_{a3}: Work demand is not the most significant and greatest predictor of compassion fatigue among paraprofessionals in inpatient psychiatric centers.

RQ4: Is work organization and content the most significant and greatest predictor of compassion fatigue among paraprofessionals in inpatient psychiatric centers?

H₀₄: Work organization and content is the most significant and greatest predictor of compassion fatigue among paraprofessionals in inpatient psychiatric centers.

H_{a4}: Work organization and content is not the most significant and greatest predictor of compassion fatigue among paraprofessionals in inpatient psychiatric centers.

RQ5: Are leadership and interpersonal relations the most significant and greatest predictors of compassion fatigue among paraprofessionals in inpatient psychiatric centers?

H₀₅: Leadership and interpersonal relations are the most significant and greatest predictor of compassion fatigue among paraprofessionals in inpatient psychiatric centers.

H_{a5}: Leadership and interpersonal relation are not the most significant and greatest predictors of compassion fatigue among paraprofessionals in inpatient psychiatric centers.

Methodology

This section provided an overview of the setting, the size and general composition of the target population, sampling, and sampling procedures. Also, the procedure for data collection, analysis, and operational definition of variables are outlined and discussed in this section.

Setting

The setting for this study were three inpatient psychiatric hospitals in Upstate New York. Inpatient hospitals are licensed 24-hour inpatient treatment programs jointly

licensed by The Office of Mental Health (OMH) and the New York State Department of Health (New York State Office of Mental Health, 2016). In general, there are an estimated 100 psychiatric inpatient units (also called Article 28 hospitals) operating over 5000 beds throughout the state (New York State Office of Mental Health, 2016). There are also 864 beds across six Article 31 hospitals, which are 24-hour inpatient treatment programs that are licensed by OMH and operate in private hospitals that focus on behavioral health services (New York State Office of Mental Health, 2016). In addition, New York State's Residential Treatment Facilities (RTF) provide mental health treatment services to seriously disturbed children and youth between five and 21 years of age at fourteen 61 bed facilities (New York State Office of Mental Health, 2016). This study was conducted in an inpatient psychiatric setting.

The statewide ratio of residents to psychiatrists does not meet the standard of one per 30,000 (or one per 20,000 in high need settings) established by the Health Resources and Services Administration (HRSA) health professional shortage areas (HPSA), which the New York Office of Mental Health (2016) has attributed to the poor salaries and high demands of mental health settings. In 2016, psychiatrists comprised only 7.5% of licensed mental health workers in New York, and psychiatric nurse practitioners were limited to under 2% of licensed staff. This leaves the bulk of the burden for working with patients to the paraprofessionals.

Target Population

The target population for this study was paraprofessionals who work in three inpatient psychiatric centers in Upstate New York area. A total of 153 participants were expected to be recruited in this study.

Sampling and Sampling Procedure

Nonprobability purposive/convenience sampling was employed to recruit the expected 153 participants. This recruitment strategy is deemed suitable because convenience sampling may assist in achieving an adequate number, which could yield crucial information about critical cases that stand to enrich the study. Frankfort-Nehmias and Nachmias (2008) observed that social researchers have employed purposive/convenience sampling procedures to select samples that appear to be representative of a small population. Nonetheless, a disadvantage of purposive/convenience sampling is that it lowers the credibility of the research results (Creswell, 2014; Frankfort-Nachmias & Nachmias, 2008).

The inclusion criteria for the current study are as follows: a) paraprofessionals who work in 3 inpatient psychiatric hospitals in upstate New York; b) interact directly with inpatient psychiatric patients; and c) they must have at least one year of experience in the inpatient psychiatric setting. These criteria increased the likelihood that participants are being exposed to a considerable level of emotional distress on their respective units and have experienced traumatic events with sufficient frequency to contribute to the development of compassion fatigue.

Exclusion criteria include that participants may not be formally employed in a capacity that does not involve inpatient paraprofessional, and work outside their

respective inpatient psychiatric hospital. Staff occupying clinical or non-clinical, administrative positions such as coordinators, supervisors, directors, human resource personnel, and admission coordinators within their organization were excluded from participating in this study. Demographic data was utilized as a quality measure.

Anticipated recruitment demographics include 80% females, 18% males, 2% transgender. Population age ranges between 18-65, anticipated ethnicity include Hispanic or Latino, no Hispanic or Latino, and race including American Indian or Alaska Native, Asian, Black or African American, White, and Native Hawaiian/other Pacific Islander are anticipated to participate in this study (United States Census Bureau, 2019). Based on the educational requirements and lower salaries of mental health paraprofessionals, it is expected that the bulk of the sample comprised individuals with educational levels ranging from high-school to associate's degrees, with very few, if any respondents having higher than a bachelor's degree.

Sample Size

To determine the appropriate sample for this study, a power analysis was conducted using GPower software based on the standard practice of a predetermined alpha value of .05, and a power level set at .95. It was predicted that a sample size of 153 would be required to achieve 95% power and a moderate effect size of (.15) at alpha = .05 (Heaslip et al., 2013; Youssef, 2011). This indicates that, if such a sample can be studied, there will be only a 5% chance to arrive at a wrong conclusion (Hallahan & Rosenthal, 1996).

Recruitment Procedure

A clustering procedure was employed to select three hospital sites where data was collected. A convenience sampling procedure was used to recruit participants. I obtained written permission from the Executive Directors of each of these organizations through Nathan Kline Institute IRB. Subsequently, I obtained approval from the institutional review board (IRB) of Walden University to allow me to conduct the study. I obtained approval from the Nathan Kline Institute IRB overseeing research conducted at each site. Data collection followed as soon as the Walden University IRB approved the study.

Following Walden University IRB's approval, I created and submitted a recruitment flyer posted on the employees' bulletin boards, front desks at each study site as well as this researcher social media page intended for disseminating staff information as a way to recruiting volunteers to participate in this study. Recruitment and follow up reminder emails which contain a link to the survey items were then sent out to designated persons at each site to be forwarded to participants on this researcher's behalf. Once the individual access or log onto the survey on Qualtrics where the questionnaires were posted, each participant was first presented with the consent form, followed by the demographic questionnaires, and the two scales (CFSS and COPSOQ-3) related to the study. Participants were asked to read the consent form before they start to fill out the 3 questionnaires. The survey questionnaires were via a secure website named Qualtrics and the questionnaires took 20-30 minutes to complete. Follow-up recruitment reminder e-mails were sent out to the designated persons at each site to be forwarded to participants on two separate occasions after the initial recruitment email. The first follow

up reminder email was sent a week after the initial email and then second was sent out a week before the survey expires.

Contact information for the research department, including phone number was included in the survey questionnaires. Participants who did not meet the quality measures listed on the recruitment flyer, and/or answer “no” to all the questions listed on the recruitment flyer were not eligible to participate in the study. Participants were not withdrawn or terminated, however. Participation was voluntary, and participants could terminate at any time if they choose to do so. Participants were asked to utilize their personal and/or non-work computer in an effort to protect their privacy and confidentiality. Participants were informed that all attempts were made to keep their participation private, confidential, and anonymous. No identifying information was collected in this study. Data was numerically coded. This researcher and committee members were the only individuals who had access to data collected.

Informed consent was written in a clear language that participants could understand. Demographic information obtained included age, gender, education, type of shifts, and the number of years in the position. Age was measured ranging from age 18 and over, and the gender of participants was recorded as either male or female. Education was assessed as the level of education completed, with the following categories: no high school diploma; high school diploma; bachelor’s degree; and other forms of certification. Education was also divided into completed education or not completed education. The average number of years working in the position in the inpatient unit ranged from 1–5, 5–10, 10–15 years. Finally, the type of shift worked recorded as falling

into the following categories: days, evenings, worked all day shifts, worked days and nights, worked days and evenings, and worked all nights.

Kern et al. (2017) maintained that organizational support influences staff wellbeing. Similarly, Boyd et al. (2016) proposed that unhealthy organizational environments with high job demands can lead to exhaustion and consequently might contribute to compassion fatigue. The goals of this study were to add to existing research and, further, to make data available that would clarify the importance of providing specialized training to paraprofessionals that would enhance skills and reduce compassion fatigue, where present. Participants were provided with phone number of the Research Center for support or to report any concerns that they may have. Since this study is not an experimental study, there will no need for a follow-up debriefing process.

Instrumentation and Operationalization of Constructs

A number of standardized measurement instruments have been developed to assess aspects of compassion fatigue, and other trauma assessment scales have also been utilized to study its effects. The CFST was the first and remains among the most widely used tools to measure the self-reported impact of compassion fatigue on health professionals (Figley, 1995; Figley & Stamm, 1996; Stamm, 1996). The CFST was revised to produce the ProQOL model and has also been employed to describe and measure the risk of compassion fatigue and assess its effects on mental health workers. However, the ProQOL does not contain specific measurements for compassion fatigue, but rather addresses a broad range of work-related stress, including burnout, secondary traumatic stress and loss of compassion satisfaction (Sheppard, 2015).

The STSS assesses three sub-scales of intrusion, avoidance, and arousal symptoms to measure the impact of indirect exposure to traumatic events in the work environment. This instrument was designed in alignment with definitions of post-traumatic stress disorder; thus, like the ProQOL, is not specifically targeted toward evaluating the impacts of compassion fatigue.

There has been a lack of conceptual clarity about what constitutes compassion fatigue and how it differs from other adverse work outcomes, such as burnout (Adams, Boscarino, & Figley, 2006). The reason for this confusion may be due to the extensive use of the ProQOL instrument to measure compassion fatigue (Adams et al., 2006, Stamm, 2010). ProQOL instruments measure multiple concepts, which leads to a lack of clarity in the results of the construct. Since it has been noted that the ProQOL model does not adequately measure compassion fatigue (Sheppard, 2015), the proposed study employed the compassion fatigue short-scale instrument, which enabled consistent use of and focus on the concept (Adams et al., 2006).

The CFSS. For the sake of clarity and consistency, the CFSS was employed to measure paraprofessional self-reports of compassion fatigue. The CFSS is a 13-item instrument with several subscales that can be combined to give a total score for compassion fatigue. I obtained written permission from these authors via email to use their scale during data collection. According to the authors, each item on the scale is scored on a 10-point Likert scale ranging from rarely or never (= 1) to very often (= 10) (Adams et al., 2006, Urban, 2017).

The CFSS is one of the first instruments originally developed principally to measure compassion fatigue (Bride, Figley, & Radey, 2007). A review of the literature indicates that CFSS shows excellent construct validity and good internal consistency (Hu, Lou, Sun, Jiang, & Yu, 2016; Urban, 2017). Overall, CFSS has a Cronbach's α coefficients of the subscales range from 0.80 to 0.90, demonstrating adequate internal reliability and validity (Bride et al., 2007; Hu et al., 2016; Urban, 2017). Examples of items in the scale include but are not limited to flashbacks connected to clients, troubling dreams similar to clients, intrusive thoughts after working with clients (Adams et al., 2006). Studies have demonstrated that CFSS has good psychometric properties and can be applied to participants who work in environments such as the acute inpatient psychiatric hospital setting where workers experience high levels of stress secondary to their service delivery (Hu et al., 2016).

COPSOQ III. Organizational factors were measured using COPSOQ III short version. This is a comprehensive questionnaire that includes numerous dimensions based on an eclectic set of theories on psychosocial working conditions. The instrument consists of long, medium, and short versions. The short version was constructed after a new factor analysis on the medium version, and it shows clusters of scales that address the three themes of work demands, work organization and content, and interpersonal and leadership relations which used during this study (Bjorner, Borg, Pejtersen, & Kristensen, 2010; Kristensen et al., 2005). The version of COPSOQ III used in the current study also included 22 scales, which are scored on a range from 4-0 according to always, often, sometimes, seldom, and never/hardly ever, respectively (Bjorner et al., 2010).

The development of the COPSOQ III questionnaire was based on a survey of a representative sample of 1858 Danish employees aged 20–59 years and has been translated into more than 25 different languages (Azevedo et al, 2017). Azevedo et al. (2017) described how internal consistency and test-retest reliability and validity tests were performed on COPSOQ III. Cronbach's alpha of test and retest was found above conventional threshold of 0.70 (Azevedo et al., 2017). Cronbach alpha of internal consistency and reliability was found high and above 0.7 for most of the scales (Bjorner et al., 2010). The questionnaire showed good internal reliability and validity (Pournick, Ghalichi, TehraniYazdi, Tabatbaee, Ghaffari & Vingard, 2014). Content validity of the questionnaire was established of Cronbach's α ranging between 0.75–0.89 (Pournick et al., 2014). It was concluded that COPSOQ III is a reliable and valid instrument for assessing psychosocial risks factors in the workplace (Azevedo et al., 2017). I obtained written permission from the developers of COPSOQ III via email.

Data Analysis Plan

This researcher used multiple regression analysis to draw statistical inferences regarding the relationship between compassion fatigue and organizational factors during data analysis. The Statistical Software Package (SPSS) version 25.0 was employed during data analysis, and data was prescreened and cleaned using SPSS data screening and cleaning features. This process helped detect, correct, and increase the reliability of data used in the analysis (Chen et al., 2015). Heteroscedasticity was tested using the Breusch-Pagan test, and the presence of outliers, skewness, kurtosis, and normality was explored by using the analyze-descriptive statistic-explore option. This researcher first

input in SPSS descriptive frequency tables for each variable that has been coded and recorded. Then, means, standard deviations, medians, and percentages of the descriptive statistics were computed for the level of compassion fatigue and organizational factors. The alpha level was set at .05 for statistical significance. Next, multiple regression was employed to find out how well all the organizational factors predicted compassion fatigue among paraprofessionals in inpatient psychiatric hospital. Further, multiple regression was used to examine how significantly each organizational factor predicts compassion fatigue. Lastly, multiple regression was used to find out which one of the organizational factors (work demand, work organization, content, and interpersonal relations and leadership) is the greatest predictor of compassion fatigue. Multiple regression was conducted to examine relations between the organizational factors and the entire CFSS as well as the BST subscales. Missing data were handled using the function of replace missing data value in SPSS. Handling missing data during data analysis enables the researcher to minimize negative effects of missing data during the interpretation of the research (Creswell, 2014).

Issues of Trustworthiness

Validity and Reliability of Predictors

Work demands. This variable is operationalized as quantitative demands, workplace, cognitive demands, emotional demands and demands involved in hiding emotions (Bjorner et al., 2010). Work demand has a Cronbach's alpha range of 0.82–0.88 and Green retest alpha range of 0.77–0.85 showing good validity and reliability.

Work organization and job content. Work organization and job content has been operationalized as influence, possibilities for development, variation, meaning of work, and commitment to the workplace (Bjorner et al., 2010). This factor has a Cronbach alpha range of 0.67–0.80.

Interpersonal and leadership relations. Interpersonal and leadership relations is operationalized and consists of predictability, recognition (reward), role clarity, quality of leadership, social support from supervisor, colleagues and the community at work. (Bjorner & Pejtersen, 2010). The factor of interpersonal and leadership relations has a Cronbach's alpha range of 0.71–0.82 (Bjorner & Pejtersen, 2010).

Threats to Validity

Anticipated threats to internal and external validity was considered during the interpretation of the research findings. Examples of possible internal and external threats to the validity to this study might include the history, or time at which the study was conducted, as events could occur at or around the time of the study that might influence research outcomes. The relative maturity of respondents is another threat that influenced the validity and reliability of this study, as mature participants may have progressed in their ability to handle stress differently from the time of their recruitment to the time of data collection, which might trigger a change of mind, attitude, and consequently the participant's responses to the research questions. Participants who have a history of trauma may be more susceptible to developing compassion fatigue. Since this study was not designed to control for personal history of trauma, the selection process influenced the results of the study. To ensure accurate representation of paraprofessionals, future

studies may employ a random sampling selection. Random sampling may ensure that the characteristics have equal chances of being selected, which may contribute to representative sampling. Including participants with the same range years of experience and who are similar in age could help resolve the threats of history.

Ethical Procedures

The only known risk to participants is the possible loss of confidentiality, which guarded against by not collecting any identifying information. In addition, limited access personnel (this researcher and research committee members were the only ones who had access to data collected). Limited access area, and researcher's personal computer, which was password protected was utilized during data collection and analysis in this study.

This study is an online survey that utilizes survey questionnaires that is computer based, and participants advanced in participating in the study by clicking the survey link provided after reading the online survey consent form located at the end of the consent. In addition, participants had the option to print a copy of the consent before continuing with the survey if they would like a copy. Finally, this study is noninterventional and thus did not require participants to be provided an information session. However, participants were provided with IRB's contact information.

There are no monetary rewards, financial compensation or incentives provided for participating in the study. Participants and the executive directors from the sites were informed about the appropriate dissemination of the findings of the study following data analysis and its conclusion. Participants were informed that being in this type of study involved some risk of the minor discomfort that can be encountered in daily life such as

becoming upset, fatigue, or stressed. The study did not pose risk to the participants safety or wellbeing. Finally, participants were informed that the raw data collected was kept for a reasonable period (at least 5 years) after which point it will be shredded.

One problem in this study was that it did not allow for a differentiation of cause and effect from simple association. For example, if it is found that there is a relationship between compassion fatigue and organizational factors, then it does not follow that organizational factors predispose the development of compassion fatigue; rather, the opposite might be the case. Since cross-sectional studies are limited by the fact that they do not indicate the sequence of events, it was difficult to infer causality. Since this current study did not control for individual risk factors, it was difficult to draw statistical inferences. Nonetheless, cross-sectional studies indicated associations that existed, and were therefore useful in generating hypotheses for future research studies. The information can be used in public health policy planning and in the development of targeting prevention strategies.

Although no identifying information was collected in this study, since this researcher is a social worker at one of the sites where data was collected, adequate measure was taken to ensure that participants prohibited disclosure of their identity such as the name or age of participants. This researcher ensured to enforce adequate professional boundaries to prevent occurrences of a dual relationship. For example, recruitment emails were sent via a designated person, who is not a paraprofessional, at each site. Data were protected by storing it in a secured drive with a protected password.

Summary

The current study aims to examine the relationship between organizational factors and compassion fatigue. The target population for this study involved paraprofessionals, and the setting for this study was 3 inpatient psychiatric hospitals in Upstate New York area. Three hospitals under the auspices of the New York State Office of Mental Health located in Upstate New York were selected. The use of the CFSS short scale enabled consistent and accurate report on the construct. A cross-sectional design was employed during this study, and participants were recruited using a convenience sampling design. Data were collected using survey questionnaires via a secure website named Qualtrics. Data were inputted and analyzed using SPSS statistical software. Descriptive statistics were computed to examine demographic characteristics, mean, standard deviation, mode, and median. Demographic questionnaires were used as a quality measure to determine participants' eligibility for participating in this study. Further, multiple regression was computed to determine the relationship between organizational factors and compassion fatigue among paraprofessionals who work in inpatient psychiatric settings.

Chapter 4: Results

Introduction

The purpose of this study was to examine the role that organizational factors play in predicting compassion fatigue among paraprofessionals working in inpatient psychiatric centers. Adams et al (2004) proposed that compassion fatigue is a unique feature of the workplace environment and not merely an effect of negative life events, personal trauma, or lack of social supports. In the current study, this researcher sought to examine the relationship between organizational factors and compassion fatigue development among paraprofessionals working in inpatient psychiatric centers using quantitative cross-sectional research. This study considered how working in psychiatric center organizational environment affected paraprofessionals' emotions and experiences of compassion fatigue.

Organizational factors were defined as staff members' work demands, work organization and content, and interpersonal relations and relations with leadership. The following are the research questions that guided the study.

RQ1: Are work demand, work organization and content, and interpersonal and leadership relations significant predictors of compassion fatigue among paraprofessionals in inpatient psychiatric centers?

H₀₁: Work demand, work organization and content, and interpersonal and leadership relations are significant predictors of compassion fatigue among paraprofessionals in inpatient psychiatric centers.

H_{a1}: Work demand, work organization and content, and interpersonal and leadership relations are not significant predictors of compassion fatigue among paraprofessionals in inpatient psychiatric centers.

RQ2: Which of the following organizational factors work demand, work organization and content, and interpersonal and leadership relations is the most significant and greatest predictor of compassion fatigue among paraprofessionals in inpatient psychiatric centers?

RQ3: Is work demand the most significant and greatest predictor of compassion fatigue among paraprofessionals in inpatient psychiatric centers?

H₀₃: Work demand is the most significant and greatest predictor of compassion fatigue among paraprofessionals in inpatient psychiatric centers.

H_{a3}: Work demand is not the most significant and greatest predictor of compassion fatigue among paraprofessionals in inpatient psychiatric centers.

RQ4: Is work organization and content the most significant and greatest predictor of compassion fatigue among paraprofessionals in inpatient psychiatric centers?

H₀₄: Work organization and content is the most significant and greatest predictor of compassion fatigue among paraprofessionals in inpatient psychiatric centers.

H_{a4}: Work organization and content is not the most significant and greatest predictor of compassion fatigue among paraprofessionals in inpatient psychiatric centers.

RQ5: Are leadership and interpersonal relations the most significant and greatest predictors of compassion fatigue among paraprofessionals in inpatient psychiatric centers?

H₀₅: Leadership and interpersonal relations are the most significant and greatest predictor of compassion fatigue among paraprofessionals in inpatient psychiatric centers.

H_{a5}: Leadership and interpersonal relation are not the most significant and greatest predictors of compassion fatigue among paraprofessionals in inpatient psychiatric centers.

This chapter presents the results of the data collection process, which includes the timeframe, recruitment strategies, and questionnaire response rates. A description of the sample and any discrepancies in the data collection is discussed in this chapter. Other sections included in this chapter include a report on the baseline descriptive and demographic characteristics of the sample and a description of how representative the sample was of the population of interest, (i.e., how proportional it was to the larger population). In addition, the chapter provides the results of data analysis, including related statistics and findings of the statistical analyses.

Data Collection

Time Frame/Data Collection Procedures

This study measured participants' responses to three types of questionnaires, including demographic items, the CFSS, and COPSOQ-3. These three questionnaires were uploaded on Qualtrics. After uploading the questionnaires, this researcher obtained a distribution link for participants to click to complete the questionnaire items and then copied and pasted the link onto my recruitment/invitational flyer. As indicated in Chapter 3, this researcher immediately posted the flyer and survey link to access the survey via Qualtrics on social media page. Next, to obtain organizational leaders' approval to

distribute the invitational flyers, recruitment/invitational flyers together with IRB approval letters and documents were emailed to the director of nursing, treatment team leaders, and program directors in charge of each of the three inpatient psychiatric centers.

The designees in charge of research at the hospital settings responded to email, which enabled to begin data collection and visit to the respective sites to distribute survey flyers accordingly. This researcher posted invitational flyers on staff bulletin boards at the sites, and some were left at front desks. Upon accessing the survey on Qualtrics where the questionnaires were posted, each participant was first presented with the consent form to read. A next icon was provided at the end of the informed consent form for those participants who wished to advance and complete the survey.

To determine the appropriate sample for this study, a power analysis was conducted using GPower software. Based on a standard practice, a predetermined alpha value of .05, and a power level set at .95, it was predicted that a sample size of 153 would be required to achieve 95% power and a moderate effect size of (.15) at $\alpha = .05$. This essentially means that there is only a 5% chance to arrive at a wrong conclusion with the appropriately sized sample. However, the use of the initial recruitment flyer posted at front desks at each site and on my social media page did not yield adequate a response rate within the anticipated data collection time frame. As a result, after some time experiencing delays and an inadequate response rate, this researcher was compelled to process an amendment to the original recruitment protocol by having individual designees at each recruitment site sent the survey link out to participants via email on this researcher's behalf.

As part of the email amendment-recruitment process, participants were informed that completing the survey was not part of their job requirements and that the designees sending the link via email were independent from the study. The individual designees sent out group/mass emails to their respective distribution lists, which comprised all paraprofessional/MHTA staff at each site, and blind copied the emails so that others could not identify other recipients. Participants were provided with the contact information of this researcher's dissertation chair in the event that participants have any questions or concerns regarding the study. Email recipients were informed that the individuals sending the email had no connection with this study and that all questions or concerns should be directed to the aforementioned contact phone numbers.

This researcher sent out reminder emails to the designees on two separate occasions after the initial email. The first reminder email was sent a week after the initial email and then the same reminder email was sent out the second time a week before the survey expired. This researcher has no knowledge of when the emails were sent, and was not copied on any emails. Emails were discarded at the end of data collection.

Data collection took longer than anticipated. This could be partly because, as later discovered, the survey link was too lengthy for participants who might be in haste to accurately type all of the letters to access the survey site. This factor might have impacted the low response rate and consequently created the discrepancies in the data collection from the plan presented in chapter 3. In addition, since part of the recruitment protocol entailed that participants completed the questionnaires outside of working hours, participants would be required to forward the study to their private emails and or find

time outside of working hours to complete the items, which might have posed a challenge for the paraprofessionals to access the survey and consequently delayed data collection. In addition, this researcher did not receive a response from a staff member at one of the sites when requested if she would be willing to be a designee. As a result, only the flyer was posted there and no recruitment email was sent to that site. These factors appeared to have contributed to the slow, gradual data collection and low response rate.

Response Rate

The data collection process began very slowly, such that only nine participants completed the surveys during the first two weeks after the initial flyers were distributed to the sites and posted on social media page. However, the response rate progressively increased over time to 50 participants over the course of three months. A year license was granted for the duration of data collection, and the online survey was closed approximately three months after the recruitment email process was completed. The results were downloaded from the Qualtrics web site. At the end of the recruitment and data collection process, a total of 61 participants of the sample had completed the survey, and 23 of the 61 items were not sufficiently completed and were therefore discarded.

Summary of Discrepancies from Study Plan in Data Collection

This researcher followed the plan as described in Chapter 3, including the need to obtain permission from organizational leaders before beginning data collection. However, this researcher did not specify by which method organizational leaders were going to be

contacted. Hence, emails with the IRB approval letters, documents to show proof of data collection eligibility were sent out, and follow-up phone calls were placed to various sites. These activities were conducted in order to ensure that permission is obtained from the leaders before visiting their sites to distribute flyers. Unfortunately, the plan did not go as smoothly as initially anticipated. First, the leaders of two of the sites did not respond quickly. Despite all attempts to follow up via emails and phone calls, when I finally heard back from one of the site's leaders, I was informed that I would have to wait until my study was brought to leaders attention and approved by the site's executive director before they could distribute my flyers. While I believe that these steps were necessarily taken to ensure study eligibility; nonetheless, it negatively impacted the data collection process by delaying the response rate, which in turn contributed to a smaller sample than expected.

Descriptive and Demographic Characteristics of the Sample

The study sites consisted of three inpatient psychiatric centers in Upstate New York area. Sample description and characteristics for this study consist of the following inclusion criteria: employment in inpatient psychiatric hospitals, history of direct interactions with inpatient psychiatric patients, and at least one year of experience in an inpatient psychiatric setting. These criteria made it more likely that participants had been exposed to a considerable level of emotional distress on the unit and had experienced the traumatic events frequent enough that may contribute to the development of compassion fatigue. Exclusion criteria included that participants who were formally employed outside of the organization in a capacity that did not include inpatient paraprofessional duties. In

addition, staff occupying clinical or non-clinical positions including coordinators, supervisors, directors, administrators, human resource personnel, or admission coordinators within the organization were excluded from participation. It is likely that these eligibility criteria might have limited the number of participants who would have been interested to participate in the study.

As stated above, among the 61 respondents, 23 did not complete any of the questions; therefore, descriptive statistics cannot be provided for them. Ultimately, 38 participants completed sufficient portions of the survey to allow for analysis, including 36 respondents who completed the entire survey and two respondents who left one item blank on the COPSOQ-III and CFSS, respectively. To compensate for the two missing values, I applied the *replace with mean function* under the missing Item option of SPSS when conducting the multiple regression analyses. Among the 38 respondents, five individuals indicated that they did not work in an inpatient setting and were therefore excluded from the analysis.

Table 1 presents descriptive and socio-demographic statistics for the 33 respondents who indicated that they were employed as paraprofessionals/MHTAs in inpatient settings. The majority of participants were female (61%) and white (88%). Just over 24% of these MHTA workers had only completed a high school degree, approximately 39% had attended college without obtaining a degree, whereas the remainder had associates (21%) and bachelor's degrees (15%). Individuals aged 18-30 formed the largest group, comprising just over 30% of participants, followed by those aged 41-50, whereas those aged 31-40 formed just under a quarter of respondents and

those aged 51-60 formed the smallest group. As might be expected, the largest group of respondents had only worked as paraprofessionals for 1-2 years (30.3%), whereas approximately 21% of participants had 3-5 years of experience and the remaining 48.4% of respondents were divided evenly between those with 6-10 years and 11-20 years of experience. Approximately 88% of the participants worked over 40 hours a week.

Table 1

Sociodemographic Characteristics of the Study Sample (N = 33)

Characteristic	Value	N	%
Gender	male	13	39.4
	female	20	60.6
Age	18-30	10	30.3
	31-40	8	24.2
	41-50	9	27.3
	51-60	6	18.2
Working hours	21-40	4	12.1
	≥41	29	87.9
	1-2	10	30.3
Years of work	3-5	7	21.2
	6-10	8	24.2
	11-20	8	24.2
Education level	high school	8	24.2
	some college	13	39.4
	Associate	7	21.2
	Bachelor's	5	15.2
Race/Ethnicity	Black	4	12.1
	White	29	87.9
MHTA work outside of primary site	no	30	90.9
	yes	3	9.1

Representativeness of the Sample

It was expected that the population would comprise 75% White, 13.3% Black or African American, 0.4% Native American, 4.6% Asian, 0.04% Pacific Islander, 1.8% from other races, 4.9% from two or more races, and 7.1% Hispanic or Latino of any race (United States Census Bureau, 2019). It was noted that the overall size of the sample is much smaller than anticipated; thus, the sample cannot be considered representative of

the overall population. Males were over-represented based on my expectations, as were White MHTAs, whereas African-Americans were slightly under-represented and the lack of other racial and ethnic groups does not reflect the city's population or the expected composition. As expected, the bulk of the workers had an associate's degree or less.

Reliability

Reliability analyses were conducted using SPSS for both the COPSOQ questionnaire and the CFSS, as well as on their respective subscales to ensure the reliability of the questions based on the received answers. The Cronbach's alpha for the entire survey was 0.870, which indicates high internal consistency. Both scales were found to have relatively high internal consistency, with Cronbach's alpha values of 0.829 and 0.937 for the COPSOQ and CFSS, respectively. When the responses of only inpatient paraprofessionals were considered, the Cronbach's alpha values were 0.828 and 0.937 for the COPSOQ and CFSS, respectively. However, whereas the secondary trauma and burnout subscales of the CFSS were both found to be reliable ($\alpha = 0.890$ and 0.911 , respectively), on the COPSOQ, only the interpersonal relations and leadership subscale has acceptable reliability (Cronbach's alpha = 0.869); alpha values for work demands ($\alpha = 0.601$) and work organization and content ($\alpha = 0.643$) were both below 0.7. When the responses of only inpatient paraprofessionals were considered, the Cronbach's alpha values were 0.890 and 0.911 for the secondary trauma and burnout subscales of the CFSS, respectively, and the main organizational factors sub-scales of analysis, namely work demands, work organization and content, and interpersonal relations and leadership were 0.600, 0.609, and .882, respectively. These values differ from the Cronbach's alpha

range of 0.82–0.88 for work demands, 0.67–0.80 for work organization and content, and 0.71–0.82 for interpersonal relations and leadership found by Bjorner et al. (2010) and Bjorner and Pejtersen (2010). However, chi square tests indicated good between-item reliability for the latter sub-scales, with Cochran's Q values of 57.848, $p = .00$ for work demands, 73.314, $p = .00$ and for work organization and job content.

Results

The study focused on two main variables: compassion fatigue and organizational factors. Compassion fatigue was measured using the 13-item compassion fatigue scale. Respondents were asked to rate stress related to work using a 10-point Likert scale (1=rarely/never to very often=10). Unlike previous studies, the 13-item compassion fatigue scale contains fewer items while remaining highly correlated with the original 30-item scale.

Tests of Assumptions

Heteroscedasticity and the presence of outliers, multicollinearity, skewness, kurtosis, and normality were tested using SPSS. Multicollinearity refers to similarities between independent variables, which can bias correlation results. A perfect linear relationship among the predictors hinders the computation of estimates for a regression model; as the degree of multicollinearity increases, the coefficient estimates become unstable and the standard errors for the coefficients can be inflated (UCLA Institute for Digital Research and Education, 2019). In this study, multicollinearity was measured using the variance inflation factor (VIF), which assesses how much the variance of an estimated regression coefficient increases if the predictors are correlated. The ideal VIF

value is one, meaning that the predictors are not correlated. Values below one and over 10 are problematic and indicate multicollinearity, and tolerance values should exceed 0.1 (UCLA Institute for Digital Research and Education, 2019).

Table 2 presents the multicollinearity results for the four subscales of the COPSOQ and the CFSS. As the table shows, all of the tolerance values exceed 0.1 and all VIF values are within the acceptable range, and the coefficients for work demands and work organization and job content are significant at the 95% level; however, those for interpersonal relationships and leadership and work-individual interface are not statistically significant.

Table 2

Multicollinearity Test Results: CFSS and COPSOQ-III Subscales

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
Work Demands	-2.893	1.257	-.365	-2.301	.029	.807	1.239
Work Organization and Job Content	3.614	1.472	.447	2.455	.021	.614	1.628
Interpersonal Relations and Leadership	-.537	.663	-.177	-.809	.425	.426	2.345
Work-Individual Interface	.643	.816	.156	.788	.437	.519	1.925

Heteroscedasticity refers to a circumstance in which the variability of a dependent variable is unequal across the range of values of a predictor variable (Fox, 1997). Thus, heteroscedasticity indicates that the variance of the errors is not constant across observations due to unequal variabilities across the independent variables, which would invalidate the statistical tests of significance in the regression analyses. The results of the Breusch-Pagan test for heteroskedasticity resulted in a small chi-square value of 1.789

with an insignificant p value of .181, which indicates homogeneity of variance (Fox, 1997).

Total scores on the COPSOQ ranged from 95-161, whereas those on the CFSS ranged from 12-107. Table 3 presents the results of assumptions testing for the COPSOQ. The skewness for a normal distribution is zero, and symmetric data should have a skewness near zero; similarly, the standard normal distribution has a kurtosis of zero (NIST/SEMATECH, 2012). For the total scale as well as the interpersonal relations and leadership and work-individual interface subscales, both skewness and kurtosis have negative values of less than one, which indicates a slightly left-ward, light tailed distribution within acceptable bounds. The other two subscales have positive skewness and negative kurtosis with values of less than one, which indicates a slightly right-ward, light tailed distribution.

Table 3

Skewness and Kurtosis Test Results for the COPSOQ-III and Subscales

		Total COPSOQ	Work demands	Work organization and job content	Interpersonal relations and leadership	Work-individual interface
N	Valid	32	32	33	33	33
	Missing	1	1	0	0	0
Mean		133.3125	14.9063	16.3030	38.7576	45.1212
Std. Deviation		18.55669	3.76194	3.68684	9.72121	7.12284
Skewness		-.505	.225	.313	-.369	-.341
Kurtosis		-.689	-.228	-.742	-.826	-.308

Table 4 presents skewness and kurtosis results for the CFSS and its subscales. The whole scale and the burnout subscale have a positive skewness and negative kurtosis of less than one, which indicates a slightly right leaning, light-tailed distribution; however, the secondary trauma subscale has a positive skewness slightly more than one and a positive kurtosis of less than one, which indicates a nearly balanced, slightly heavy-tailed distribution.

Table 4

Skewness and Kurtosis Test results for the CFSS and Subscales

		Total CFSS	Secondary Trauma	Burnout
N	Valid	32	32	33
	Missing	1	1	0
Mean		47.8750	16.5313	30.6970
Std. Deviation		28.36826	12.82886	16.93274
Skewness		.670	1.073	.537
Kurtosis		-.785	.153	-.759

Table 5 presents the results for Cook's distance tests to detect outliers for each of the four subscales of the COPSOQ. Variables with a Cook's distance value over one can be discerned as having an unnecessarily large influence on the analysis (Cook, 1977, 1979). As Table 5 shows, all of the Cook's distance values are lower than one. As shown below, the analysis of Cook's distance values for all of the questionnaire items shows that none of the values exceeds 0.5.

Table 5

Cook's Distance Results for the COPSOQ-III Subscales with CFSS as the Dependent Variable

	Minimum	Maximum	Mean	Std. Deviation	N
Work Demands	.000	.103	.028	.029	33
Work Organization and Job Content	.000	.178	.031	.046	33
Interpersonal Relations and Leadership	.000	.175	.029	.035	33
Work-Individual Interface	.000	.175	.029	.035	33

Results of Descriptive Statistical Analyses

Table 6 presents descriptive statistics for the mean scores of inpatient paraprofessionals for organizational factors as measured by the COPSOQ-III and each of its component subscales. Full versions of the descriptive statistics, including frequencies and percentages, missing values ($n = 1$ for each scale) and skewness and kurtosis, are included in Appendix M. Before describing the results of the descriptive statistics, it is important to explain that based on the data entry system used, there is an inverse relationship whereby the higher mean values correspond to unfavorable conditions associated with the items. Specifically, a reverse coding system was used, such that lower values in the work demands subscale corresponds to less favorable experiences (Holst, Paarup, & Baelum, 2011).

The work demands subscale contains questions that are negatively worded; therefore, lower mean values indicate more negative responses. In contrast, items on the work organization and job content subscale are worded positively, such that negative answers are indicated by higher scores. The interpersonal relations and leadership and

work-individual interface subscales contain a combination of negatively and positively worded questions, such that higher scores can indicate either positive or negative answers. For example, the lowest means on the work-individual interface subscale were associated with items pertaining to conflicts between work and energy, home and family life, thus indicating that these were considered of greater concern to participants, whereas much higher mean values were associated with questions concerning job insecurity, which indicates that these issues were of less concern. The interpersonal relations subscale received the second highest grand mean; this subscale contains a number of items for which higher scores indicated more positive work experiences, which indicates that many elements of work atmosphere and relations with coworkers and supervisors were of less concern for participants. Overall, higher scores on the work demands, interpersonal relations, and work-individual interface indicate more positive responses, in contrast to the work organization and job content subscale, in which the opposite pattern holds.

Table 6

Mean Scores and Standard Deviations for the COPSOQ-III

		Total COPSOQ		Work Demands		Work Organization and Content		Interpersonal Relations and Leadership		Work-Individual Interface	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Gender	Male	129.08	21.82	16.00	4.80	14.92	3.70	34.58	11.27	43.58	7.68
	Female	136.45	15.54	14.25	3.13	16.95	3.55	40.95	8.22	45.95	6.99
Years of experience	1-2	124.10	24.96	15.40	4.47	16.30	16.30	33.00	12.05	41.70	8.91
	3-5	142.00	11.43	13.57	2.82	17.86	3.29	45.71	5.99	47.70	6.63
	6-10	138.25	15.21	14.50	3.78	15.75	4.68	40.00	7.96	48.13	7.32
	11-20	133.25	12.84	16.00	3.79	14.86	2.48	37.71	7.41	44.43	2.88
Work hours	21-40	147.50	2.89	16.25	4.50	18.00	4.55	43.75	4.50	50.25	3.20
	41 or more	131.62	18.73	14.71	3.70	15.93	3.57	37.82	10.18	44.32	7.37
Education level	High school degree	142.50	14.42	13.50	3.38	18.25	3.37	43.25	6.45	47.25	4.06
	Some college	133.85	15.58	14.25	3.67	15.83	3.38	40.00	9.50	45.67	6.13
	Associate degree	121.14	16.31	17.00	4.55	14.14	2.41	31.29	6.95	40.29	8.94
	Bachelor's degree	135.80	27.49	15.80	2.78	16.60	5.37	37.80	14.46	46.80	9.94
Age	18-30	140.70	16.01	12.70	3.06	19.20	3.23	41.60	9.36	47.00	5.60
	31-40	125.63	21.82	16.63	4.34	14.00	2.67	34.88	12.22	42.00	9.26
	41-50	134.22	12.98	15.75	3.01	14.50	2.33	39.25	8.12	46.63	6.28
Race/ethnicity	51-60	131.17	23.22	15.17	4.02	16.33	4.18	37.50	9.77	43.83	8.01
	White	137.62	15.00	14.57	3.49	16.39	3.69	40.54	8.40	46.75	5.95
	Black	104.00	12.36	17.25	5.32	14.75	3.86	24.75	8.34	33.25	2.99

As Table 6 shows, there was some variation across demographic categories on both the total COPSOQ-III scores and the subscales. For example, in the years of experience category, those with 3-5 years of experience had the highest overall scores, followed by those with 6-10 years, and those with only 1-2 years of experience had by far the lowest overall scores. Those with 1-2 and 11-20 years of experience tended to experience lower work demands (higher scores) than the other groups; those in the latter category also had more positive responses concerning work organization and content

(lower scores), whereas those with only 1-2 or 3-5 years had more negative views regarding these issues. Similarly, the youngest age group (18-30) and those with less than an associate's degree had more negative views of work organization and job content than older and more educated workers and both groups also experienced more pressures from job demands.

Those with only 1-2 years of work experience and associate degree holders tended to have less positive experiences with interpersonal relations and leadership (lower scores); however, those with 3-5 years and only high school degrees had the most positive experiences. Similarly, those with associate's degrees and 1-2 years of experience had the least positive views of work-individual interface issues, whereas other groups had more positive responses.

When post-hoc t-tests and one-way analyses of variance (ANOVA) were conducted to identify significant differences in COPSOQ III results based on demographic factors, no significant differences were initially found in total COPSOQ scores; however significant differences in interpersonal relationship and leadership were identified between participants with high school and associate's degrees, such that the former reported scores that were 11.96 points higher than the latter ($p = .026$). As a result, an independent samples t-test was performed to conduct further analyses on the difference between these two education levels, and the results confirmed that there were significant differences between the two groups' total COPSOQ-III scores ($t(13) = 2.693$, $p = .018$) as well as their scores on the work organization and content ($t(13) = 2.676$, $p = .0190$) and interpersonal relations and leadership subscales ($t(13) = 3.458$, $p = .004$).

ANOVA results indicated that age was a significant factor in differences in work organization and job content scores ($F(3,29) = 4.547, p = .01$), such that there was a significant difference between the 18-30 and 31-40 age groups.

Table 7 presents descriptive statistics for the mean scores of inpatient paraprofessionals for compassion fatigue measured by the CFSS, along with each of its component subscales. Among the different ages, the 18-20-year-old group was identified as having the highest mean CFSS results, and mean results for women were higher than those for men. In the experience category, those who had worked for 3-5 years had the highest mean CFSS results as well as the highest scores for burnout, whereas those who had worked for 11-20 years had the lowest mean scores for both the overall scale and burnout, followed by those with 1-2 years of experience. Among education levels, participants with bachelor's degrees had the highest mean results, whereas those with associate's degrees had the lowest mean scores. The category of working hours shows an interesting pattern whereby although those who worked 40 or fewer hours had a higher overall mean score, they had lower scores on each of the subscales compared with those who worked over 40 hours a week. This could be explained by the very wide range between scores among respondents in the groups. Indeed, fairly large standard deviations characterized the scores in all of the socio-demographic groups, which indicates that whereas some participants experienced little compassion fatigue, others experienced it to a relatively high degree.

Table 7

Mean Scores and Standard Deviations for the CFSS

Variable		Total CFSS		Secondary Trauma		Burnout	
		Mean	SD	Mean	SD	Mean	SD
Gender	Male	43.54	28.51	11.92	9.85	31.62	19.12
	Female	53.65	30.59	13.15	10.44	36.35	20.01
Years of experience	1-2	46.20	36.57	13.20	*14.34	33.00	23.40
	3-5	56.86	26.52	15.71	10.00	41.14	19.79
	6-10	53.88	36.35	10.50	8.14	33.00	22.51
	11-20	43.50	16.50	11.50	5.61	32.00	11.61
Work hours	21-40	61.75	41.60	10.00	8.98	31.00	22.08
	41 or more	48.00	28.34	13.03	10.31	34.97	19.50
Education level	High school degree	54.13	28.34	9.88	6.66	33.88	13.85
	Some college	53.15	31.52	14.31	10.03	38.85	21.95
	Associate degree	33.14	25.02	10.86	10.82	22.29	14.60
Age	Bachelor's degree	56.60	33.78	15.40	14.76	41.20	23.70
	18-30	58.60	32.58	15.50	13.32	43.10	20.63
	31-40	50.75	27.48	15.13	9.86	35.63	19.23
	41-50	37.44	25.09	8.11	6.17	29.33	19.62
Race/ethnicity	51-60	51.67	35.46	11.50	8.29	26.33	16.02
	White	49.31	39.61	11.93	9.46	34.52	19.60
	Black	52.25	35.40	18.00	14.33	34.25	21.65

* Scores ranged from 4.00 to 40.00

Bivariate Correlation Analysis

The Pearson correlation coefficient is a measure of the strength of the linear relationship between two variables. The correlation coefficient is measured on a scale that ranges from + 1 through 0 to -1, such that values closer to 1 or -1 indicate complete positive and negative correlations between variables, respectively. A correlation coefficient between 1/-1 and .7/- .7 is considered strong, a value between .7/- .7 and .3/- .3

is considered moderate, and a value between $-.3/.3$ and 0 is considered weak (Ratner, 2009). As presented in Table 8, Pearson's correlation tests indicated that there was a significant moderate negative correlation between total CFSS scores and work demands ($r = -.550, p < .01$) and a significant moderate positive correlation between CFSS scores and work organization and content ($r = .578, p < .001$) among paraprofessionals working at inpatient facilities. No significant correlation was identified between interpersonal relations and overall compassion fatigue. Secondary trauma was significantly (moderate) correlated only with work demands ($r = -.413, p = .014$); however, burnout was significantly and moderately correlated with work demands ($r = -.486, p = .005$), work organization and job content ($r = .526, p = .002$), and interpersonal relations and leadership ($r = .363, p < .038$). Thus, whereas work demands had the greatest correlation with burnout, work organization and content had the greatest correlation with overall compassion fatigue as well as the burnout subscale, and work organization and content was also significantly and moderately correlated with the other two tested organizational factors. Notably, work demands were negatively correlated with both of the other COPSOQ-III subscales as well as with the CFSS.

Table 8

Pearson Correlation Results for Organizational Factors and Compassion Fatigue

	A	B	C	D
A	--			
B	-.429*	--		
C	-.241	.545**	--	
D	-.550**	.578***	.273	--

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

Hypothesis Testing

The results of the multiple regression analyses that were conducted to test the hypotheses related to the two major research questions are presented below.

RQ1: Are all organizational factors combined, namely work demand, work organization and content, and interpersonal and leadership relations, significant predictors of compassion fatigue among paraprofessionals in inpatient psychiatric centers?

Table 9 presents the model summary for the multiple regression analysis of the effects of the three major organizational factors on the entire CFSS. The results of multiple regression confirmed that the combined organizational factors of work demand, work organization and content, and interpersonal and leadership relations were significant predictors of compassion fatigue among paraprofessionals in inpatient psychiatric centers. The results indicated that the model explained 44.5% of the variance, thus indicating a medium effect. The combined organizational factor predictors accounted for a significant amount of variance in compassion fatigue scores, ($F(3, 29) = 7.743, p = .001, R^2 = .445$) and the data met the assumption of independent errors (Durbin-Watson value = 2.123; Field, 2009). Table 10 below shows the individual beta weights. Compassion fatigue scores were equal to $40.381 - 2.92$ (work demands) + 3.710 (work organization and job content) - $.198$ (interpersonal relations and leadership).

Table 9

Multiple Regression Results Summary: COPSOQ Subscales and CFSS Total Scores

R	R ²	Adjusted R ²	Std. Error of the Estimate	R ² Change	F	df1	df2	Sig. F	Durbin-Watson
.667 ^a	.445	.387	23.29275	.445	7.743	3	29	.001	2.123

RQ2: Which of the organizational factors, namely work demand, work organization and content, and interpersonal and leadership relations, is the most significant and greatest predictor of compassion fatigue among paraprofessionals in inpatient psychiatric centers?

RQ3: Is work demand the most significant and greatest predictor of compassion fatigue among paraprofessionals in inpatient psychiatric centers?

RQ4: Is work organization and content the most significant and greatest predictor of compassion fatigue among paraprofessionals in inpatient psychiatric centers?

RQ5: Is interpersonal relations and leadership the most significant and greatest predictor of compassion fatigue among paraprofessionals in inpatient psychiatric centers?

Table 10 presents the coefficients for the three organizational factors. The results of multiple regression confirmed that work organization and content was the most significant and greatest predictor of compassion fatigue ($b = 3.71$; $t(32) = 2.599$, $p = .015$). The confidence interval associated with the regression analysis does not contain 0; thus, the null hypothesis can be rejected. Unsurprisingly, work organization and content had a significant positive effect on compassion fatigue such that higher scores on this

subscale predicted higher overall compassion fatigue. However, there was a significant negative effect of work demands on compassion fatigue ($b = -2.92$; $t(32) = -2.380$, $p = .024$); thus, the null hypothesis was rejected. There was no significant effect of interpersonal and leadership relations. The unstandardized regression equation was therefore: compassion fatigue = $40.381 - 2.92$ (work demands scores) + 3.710 (work organization and job content scores).

The reverse scoring impacts these results such that what appears to be a negative relationship between work demands and compassion fatigue is in fact a positive relationship. As a reminder, the work demands subscale contains questions that are negatively worded; therefore, lower mean values indicate more negative responses. Lower values on the interpersonal relations and leadership also indicate more negative responses. In contrast, items on the work organization and job content subscale are worded positively, such that negative answers are indicated by higher scores. This is why the results show negative relationships between compassion fatigue and interpersonal relations and leadership and work demands scores and positive relationship with the work organization-job content score. Thus, the regression results indicate that as work demands increase, so does compassion fatigue.

Table 10

Coefficients of Organizational Factors and Compassion Fatigue

Organizational Factor	Unstandardized Coefficients	Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B
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	B	Std. Error	Beta			Lower Bound	Upper Bound
Work demands	-2.920	1.227	-.363	-2.380	.024	-5.429	-.411
Work organization and job content	3.710	1.427	.460	2.599	.015	.791	6.629
Interpersonal relations and leadership	-.198	.505	-.065	-.392	.698	-1.232	.836

Post Hoc Observed Power Analysis

Given the relatively small sample size of 33 participants, inflated Type II error rate was a concern. As such, a post hoc power analysis was conducted in G*Power to calculate observed power. With parameters set to an adjusted *R*-square effect size of .387, alpha of .05, sample size of 33, and number of predictors set to 3, G*Power estimated achieved power was .81 for this data set, which is a conventional level of power (i.e., around .80) to avoid inflated Type II error rates.

Further Analyses

Tables 11 and 12 present the results of more nuanced multiple regression analyses that were conducted to analyze the role of organizational factors in predicting the subscale conditions of secondary trauma and burnout. As presented in Table 11, the results of the analyses indicated that the combined organizational factors did not significantly predict secondary trauma ($R^2 = .195$, $F(3,29) = 2.896$, $p = .94$, R), nor did any individual factors. However, multiple regression analyses showed that the combined organizational factors explained 36.3% of the variance and were significant predictors of burnout ($R^2 = .363$, $F(3, 29) = 5.512$, $p < .01$), although again, coefficient tests indicated that none of the individual factors was a significant predictor of this variable. It is speculated that this could be due to lack of sufficient power. The Durbin Watson test

results shown in Table 11 indicate slight negative autocorrelation; however, it is within the acceptable range (less than 2.5; Field, 2009).

Table 11

Multiple Regression Summary Results for Organizational Factors and CFSS Subscales

Subscale	R	R ²	Adjusted R ²	Std. Error of the Estimate	R Change	F	df1	df2	Sig. F	Durbin-Watson
ST	.441	.195	.112	9.49830	.195	2.339	3	29	.094	2.275
Burnout	.603	.363	.297	16.34712	.363	5.512	3	29	.004	2.075

Note. ST = secondary trauma

Table 12

Coefficients of Organizational Factors and CFSS Subscales

Subscale	Organizational factor	Unstandardized Coefficients		Standardized Coefficients		95.0% Confidence Interval for B		
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
ST	Work demands	-.945	.500	-.347	-1.890	.069	-1.969	.078
	Work organization and job content	.588	.582	.215	1.011	.320	-.602	1.779
	Interpersonal relations and leadership	-.136	.206	-.131	-.660	.515	-.557	.286
Burnout	Work demands	-1.624	.861	-.308	-1.886	.069	-3.384	.137
	Work organization and job content	1.790	1.002	.338	1.787	.084	-.258	3.839
	Interpersonal relations and leadership	.211	.355	.105	.595	.556	-.514	.936

Note. ST = secondary trauma

Summary

This chapter presented the results of the three-part questionnaire and the related statistical analyses used to test the hypotheses and answer the research questions. Among

a total sample of 38 respondents who answered the questionnaire items, 33 participants met the inclusion criteria of working as a mental health paraprofessional in an inpatient psychiatric facility. The results of multiple regression confirmed the hypothesis associated with RQ1 that combined, all three organizational factors of work demand, work organization and content, and interpersonal relations and leadership were significant predictors of compassion fatigue. Further analyses showed that together, all three organizational factors were also significant predictors of secondary trauma and burnout.

Among the three factors, the multiple regression results confirmed the hypothesis associated with that work organization and content was the greatest and most significant predictor of compassion fatigue, although work demands were also a significant predictor. Further analyses showed that work demand was the greatest and most significant predictor of burnout; however, no individual organizational factor had a significant effect on secondary trauma. Pearson correlation results indicated significant moderate negative and positive correlations between overall compassion fatigue and work demands and work organization and job content, respectively, as well as significant correlations between all three organizational factors and the burnout subscale.

Chapter 5 will present a discussion and interpretation of the results, including possible explanations for the significant impact of organizational factors, particularly work organization and content and work demands on compassion fatigue, as well as

findings that appear to indicate the organizational factors as being a greater predictor of burnout than secondary trauma among paraprofessionals.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this cross-sectional study was to examine the relationship between compassion fatigue and organizational factors among paraprofessionals who work in three inpatient psychiatric centers. Three inpatient psychiatric centers were chosen for data collection and recruitment sites. Compassion fatigue has been described as a phenomenon that contributes to caregivers' overwhelming experiences, anxiety, depression that contributes to a reduced interest in caregiving duties, lacking empathy as a result of repeatedly listening to the stories of their clients, or witnessing clients' traumatic events (Adams, Boscarino, & Figley, 2004). Adams et al. (2014) revealed that professionals who work with clients experiencing mental health and emotional problems are at risk for compassion fatigue. The most important variables in predicting compassion fatigue include the degree of exposure to stressful situation, support for staff, and organizational environmental factors (Adams et al., 2004).

The goal of this current study was to better understand the extent to which organizational environmental factors predict compassion fatigue among paraprofessionals in inpatient psychiatric settings. The literature review indicated that most previous studies on compassion fatigue were focused on individuals who were traditionally thought of as in helping professions, including but not limited to social workers, psychologist, nurses, doctors, teachers, firefighters, and law enforcement officers. Limited research has been conducted on the topic of compassion fatigue development

among paraprofessionals, who spend the most time with clients in inpatient psychiatric settings and therefore are prone to developing compassion fatigue.

In this study, the independent or predicting variable is the organizational factors and the dependent or outcome variable is compassion fatigue. There are three cluster items consisting organizational factors and these include work demand, work organization and content, interpersonal and leadership relations. The CFSS instrument was used to collect data related to compassion fatigue while the COPSOQ-3 was used to collect data related to organizational factors.

Summary of Key Findings

The questionnaire identified that emotional demands were a moderate-to-large concern for a large majority of the respondents, and over half felt that they worked fast and the pace of their work was fast. However, home and family life were of concern to the participants, which indicate paraprofessionals spend majority of their time away from home and their family. Consequently, alienating paraprofessionals from community and family connections. Job insecurity was a relatively low concern and participants generally felt that their work was important and meaningful and they were supported by their colleagues and supervisors, which explain paraprofessionals less concern for emotional demands. Large proportions of respondents reported not feeling empowered to influence decisions or trust information from management, and felt that work conflicts were handled fairly.

The multiple regression analysis confirmed that three combined organizational factors, namely work demand, work organization and content, and interpersonal and

leadership relations were significant predictors of compassion fatigue among paraprofessionals in inpatient psychiatric centers. Among these factors, work organization and content were demonstrated as having the greatest and most significant effect; however, work demands were also a significant predictor of compassion fatigue. Significant correlations were also identified between compassion fatigue and these factors in Pearson correlation tests. Notably, no significant correlations were identified between secondary trauma and organizational factors, whether combined or individual; however, burnout was significantly and moderately correlated with all three factors. In addition, although no significant correlation was found between interpersonal relations and overall compassion fatigue, this factor was moderately correlated with burnout.

The COPSOQ-3 identified symptoms of burnout such as irritability, feelings of stress and being worn out, and emotional exhaustion as being highly prevalent among participants, and the multiple regression indicated that the three combined organizational factors of work demand, interpersonal relationships and leadership, work organization and content have effect on the CFSS and the burnout subscale. However, multiple regression found no significant effect of any of the three individual organizational factors tested in the hypotheses on burnout. This could indicate that although burnout is clearly and significantly correlated with organizational factors, there is no single factor that contributes to burnout; rather, all of the factors combined do so.

Interpretation of the Findings

Previous studies have confirmed the prevalence of compassion fatigue among mental health providers, particularly direct care workers. Studies have not consistently

examined and documented organizational factors in relation to the development of compassion fatigue among paraprofessionals in inpatient psychiatric centers. While there has been a plethora of studies on compassion fatigue in the existing literature, the majority of such research has been focused on individuals who were traditionally thought of as being in the helping professions, including nursing staff, social workers, doctors, and therapists. Although paraprofessionals have contact with clients on a 24/7 basis and experience client's intense emotions on daily basis, very few studies of compassion fatigue have examined its impacts on these workers. In addition, although the majority of compassion fatigue literature has considered the effects of organizational factors such as high workload, poor supervision, training, and inadequate interpersonal support, among others, they have neglected to examine how these factors predicted compassion fatigue. Those few studies that have discussed factors that contributed to compassion fatigue have lacked consistency in their use of terminologies. as they have tended to use the terms burnout and compassion fatigue interchangeably, thus rendering their findings confusing and not providing sufficient clarity to support their evidence. As a result, organizational leaders lack awareness of the influencing factors in the organizational environment that predicted compassion fatigue development.

Geraghty et al. (2016) said that compassion fatigue results from continuing stress due to providing patients with care and empathy, and the organizational environment plays a significant role in compassion fatigue development. The results appear to reflect findings of other studies linking compassion fatigue with poor organizational resources.

Participants' high work demands may well be impacted by low staff-client ratios and long working hours.

Alsop (2012) found that graduate nursing students, regardless of their age, gender, or educational level demonstrated signs of compassion fatigue during their first year of practice; however, t-test and ANOVA results identified no significant differences in CFSS results based on years of experience or any other sociodemographic factors, although those with 3-5 years of experience notably had higher CFSS mean results than those who had worked for fewer or more years.

Tyler (2012) linked secondary trauma to a disorganized organizational unit and suggested that emotional dysregulation can occur if negative emotions related to working with clients are not processed via supervision. In this context, the lower mean values for secondary trauma and multiple regression and Pearson correlation results indicating no significant relationship between interpersonal relations and leadership and the CFSS secondary trauma subscale appear to support Tyler's findings in that the participants generally felt emotionally supported and listened to by their supervisors.

The current study's findings indicated positive relationship between organizational factors and burnout. Stamm (2010) associated burnout with factors related to high workloads and non-supportive work environments, among others. Similarly, Kulkarni et al. (2013) asserted that operating with minimal training, poor supervision, and high demands, results in role ambiguity and confusion that contributes to compassion fatigue and burnout. The significant (moderate) positive correlation coefficients between burnout and work organization and content correspond with such conclusions. Most

participants reported positive correlation between interpersonal relations and burnout is notable; however, the implications are mixed. Although the participants reported feeling emotionally supported by coworkers and supervisors, they also indicated that they lacked role clarity, did not feel trusted by management, and were not informed in advance of organizational decisions. The negative effect of work demands on burnout requires further examination. Ilić, Arandjelović, Jovanović, and Nešić (2017) applied the COPSOQ-3 to investigate burnout among emergency room physicians and nurses identified positive correlations between work demands and burnout, whereas many items in the other two scales showed negative correlations with burnout. As noted in Chapter 4, there was an inverse relationship between burnout on the CFSS and perceptions of work demands, such that lower mean values indicated less favorable work conditions, which did align with other findings (Holst et al., 2011). In addition, it should be noted that the work demands subscale was negatively correlated with the other two subscales in this study.

Limitations of the Study

Studies on compassion fatigue as a stand-alone term has suffered conceptual limitations in that many researchers have utilized the terms compassion fatigue, secondary trauma, vicarious trauma, and burnout interchangeably. Consequently, this has created misconceptions and a lack of clarity, which in turn has hindered the implementation of research findings. It was discovered during the literature review that researchers have proposed and utilized several scales to measure compassion fatigue, which has also contributed to contradictory results. Rather than spending valuable time

thoroughly examining the concepts and how to prevent the occurrence of compassion fatigue, researchers have focused on examining the differences and the inconsistent use of terms.

There are many limitations to this study. One important limitation is the lack of clarity in the use of terms to provide the fundamental base to build this current study, which has resulted in a lack of conceptual agreement in the definition and use of measurement scales. Another limitation is that the current study did not control for individual trauma history, personality factors, and social support. It is possible that staff with history of trauma may experience high level of compassion fatigue than those with no history of trauma. In addition, individuals who have adequate social supports may have better protection from their work-related stress.

Another limitation of the study is the small sample size. Although reliability tests indicate the internal consistency of the questionnaire responses, challenges obtaining cooperation created a significant delay in data collection, which resulted in under-sampling. It is hopeful that future studies can report results on a larger population of mental health paraprofessionals.

Recommendations

Due to the negative effects of compassion fatigue not only on the staff but also the indirect effects on patients' well-being, Branch and Klinkenberg (2015) advocated for the implementation of a site-specific programs aimed at educating staff to recognize negative signs and symptoms of compassion fatigue so as to prevent it at its onset. The authors clarified that the program is thought to work by empowering staff to become more aware

and identifying negative thoughts, feelings and behaviors that staff may have and be addressed (Brand & Klinkenberg, 2015). Other activities such as formal and informal peer mentoring, self-reflection, and mindfulness training programs are recommended to help prevent the development of compassion fatigue.

Implications

Figley (1995) defined compassion fatigue as emotional and spiritual depletion associated with caring for patient in significant emotional and physical pain. Geraghty et al. (2016) described compassion as staff's ability to be attentive, present and salient so as to anticipate the needs of their clients/patient and identified it as an important characteristic needed to maintain professionalism at work. Compassion is not just an innate disposition, but rather a behavior that can be taught to enable workers foster and deliver high-quality care to their patients, which in turn could help to prevent compassion fatigue. Given the significant role that paraprofessionals or mental health therapy aides play in the care of patients in psychiatric hospital settings, understanding the impact of work environment in the prevention of compassion fatigue is paramount.

This study has implications for theory as well as practice. First, the findings appear to correlate strongly with the theoretical literature relating compassion fatigue to unfavorable organizational factors. Even when workers feel emotionally supported at work, other issues such as lack of role clarity, influence, and inclusion in decision-making as well as high cognitive and emotional work demands take their toll on their ability to cope and maintain emotional equilibrium. More studies are needed to further explore the greater connections between these issues and burnout versus secondary

trauma. In this context, the links between the latter and interpersonal relations and leadership should be examined in more depth. The paraprofessionals who participated in this study felt emotionally supported at work; however, it might be the case that a more significant relationship between interpersonal relations related to staff support could be investigated to better explain the connections between such factors and secondary trauma.

The study's implications for practice include the need to empower inpatient paraprofessionals to participate in decision-making regarding their work roles and burdens and to find ways to reduce workloads. Nearly 90% of the participants in this study reported working over 40 hours a week, although very few worked in other facilities besides their primary organization. However, this could prove to be a more complex issue due to the lower salaries earned by paraprofessionals vis a vis therapists and other professionals and the limited budgets available to increase salaries. The findings regarding leadership and role clarity suggest that work burdens could also be eased by devoting more energy toward work organization and training, which might help aides feel more mentally and emotionally equipped to deal with the long hours and often intensive demands of mental health work.

Conclusions

There have been numerous studies on the phenomena of compassion fatigue, including the current study, which focuses on how organizational factors contribute to compassion fatigue. This study has confirmed the significant combined effect of organizational factors, namely work demands, interpersonal relations and leadership and work organization and job content on the presence of compassion fatigue. It is critical

that psychiatric and other health care settings work to address these issues in order to create a better environment for their workers, which in turn will improve staff members' ability to care for and help heal their clients.

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Appendix A: Walden IRB Approval Email

From: IRB <irb@mail.waldenu.edu>
Sent: Thursday, January 17, 2019 6:56 PM
To: Sephiratu Wahab
Cc: [REDACTED]
Subject: IRB Materials Approved - Sephiratu Wahab

Dear Ms. Wahab,

This email is to notify you that the Institutional Review Board (IRB) has approved your application for the study entitled, "Compassion Fatigue and Organizational factors among Paraprofessionals in an Inpatient Psychiatric Center."

Your approval # is 01-17-19-0337581. You will need to reference this number in your dissertation and in any future funding or publication submissions. Also attached to this e-mail is the IRB approved consent form. Please note, if this is already in an on-line format, you will need to update that consent document to include the IRB approval number and expiration date.

Your IRB approval expires on January 16, 2020. One month before this expiration date, you will be sent a Continuing Review Form, which must be submitted if you wish to collect data beyond the approval expiration date.

Your IRB approval is contingent upon your adherence to the exact procedures described in the final version of the IRB application document that has been submitted as of this date. This includes maintaining your current status with the university. Your IRB approval is only valid while you are an actively enrolled student at Walden University. If you need to take a leave of absence or are otherwise unable to remain actively enrolled, your IRB approval is suspended. Absolutely NO participant recruitment or data collection may occur while a student is not actively enrolled.

If you need to make any changes to your research staff or procedures, you must obtain IRB approval by submitting the IRB Request for Change in Procedures Form. You will receive confirmation with a status update of the request within 1 week of submitting the change request form and are not permitted to implement changes prior to receiving approval. Please note that Walden University does not accept responsibility or liability for research activities conducted without the IRB's approval, and the University will not accept or grant credit for student work that fails to comply with the policies and procedures related to ethical standards in research.

When you submitted your IRB application, you made a commitment to communicate both discrete adverse events and general problems to the IRB within 1 week of their occurrence/realization. Failure to do so may result in invalidation of data, loss of academic credit, and/or loss of legal protections otherwise available to the researcher. Both the Adverse Event Reporting form and Request for Change in Procedures form can be obtained at the Documents & FAQs section of the Walden web site: <http://academicguides.waldenu.edu/researchcenter/orec>

Researchers are expected to keep detailed records of their research activities (i.e., participant log sheets, completed consent forms, etc.) for the same period of time they retain the original data. If, in the future, you require copies of the originally submitted IRB materials, you may request them from Institutional Review Board.

Both students and faculty are invited to provide feedback on this IRB experience at the link below:

http://www.surveymonkey.com/s.aspx?sm=qHBJzkJMUx43pZegKlmdiQ_3d_3d



Appendix B: Permission to Use COPSOQ

Dear Dr. Kristensen, S. Tage,

My name is Sephiratu (Sephi) Wahab and I am a Ph.D. General Psychology-(Specialization in Teaching Track) student at Walden University here in the USA. The focus of my dissertation study is "examining the relationship between Compassion Fatigue and organizational factors among Pediatric Paraprofessionals (direct care staff) in an Inpatient Psychiatric Center". The study is A quantitative, cross-sectional research. I would like to ask your permission to allow me to utilize the Copenhagen Psychosocial Questionnaire (COPSOQ) II published by you, Dr. Pejtersen, Jan Hyld, Dr. Borg, Vilhelm, and Dr. Bjorner, Jakob Bue as the instrument to measure organizational factors in my research study. I would appreciate it if you could please let me know if there is/are any action (s) that I needed to take to permit me to use the tool during my research study.

I thank you in advance for your attention, help, and support.

Sincerely,

Sephiratu (Sephi) Wahab, LMSW (ID: A00337581)

Ph.D. In General Psychology Student, Walden University

From: Tage Søndergaard Kristensen <tsk@task-consult.dk>

Sent: Monday, July 16, 2018 6:39:32 AM

To: Sephiratu Wahab

Subject: Fwd: Permission to Use the Compassion Fatigue-Short Scale (COPSOQ)

Dear Sephiratu Whahab,

Thank you for your mail and for your interest in COPSOQ.

The questionnaire is in public domain and free to be used by all researchers.

Please note that COPSOQ III has been constructed. If you want to use this new version, please contact B or M on the enclosed list of contact persons.

All the best,

Am 17.07.2018 um 06:27 schrieb Sefhiratu Wahab

Dear K, thank you for your quick response and permission to use the tool.

Dear Dr. Burr and Dr. M, please see email below

from Dr.K. Could you please send me a copy of COPSOQ III via email response to this email? I am currently working on my dissertation and I am interested in utilizing the COPSOQ tool during my research.

Thank you and I look forward to hearing back from you,

Sincerely,

Sefhiratu (Sephi) Wahab, LMSW (ID: A00337581)

Ph.D. In General Psychology Student, Walden University, USA.

Tue 7/17, 6:31 AM

Dear Sefhiratu Wahab,

please find the new COPSOQ 3 version and the guidelines to use COPSOQ on the website of the COPSOQ international network's website:

Please note, that national/regional teams all over the world compose their own "COPSOQs" based on CORE-items and other items / contents.

All the best



SW

Sephiratu Wahab

Tue 7/17, 10:18 AM

Thank you, Dr. M,

Could you also send me a copy of the COPSOQ 2? I mentioned in my proposal that I was going to utilize the COPSOQ 2. I thank you very much for your support and helping me proceed in the research.

Sincerely,

Sephiratu Wahab

Appendix C: Permission to Use CFSC

SW

Sephiratu Wahab

Fri 7/13, 10:19 PM

Dear Dr. B,

My name is Sephiratu (Sephi) Wahab and I am a Ph.D. General Psychology- (Specialization in Teaching Track) student at Walden University. The focus of my dissertation is "examining the relationship between Compassion Fatigue and organizational factors among Pediatric Paraprofessionals (direct care staff) in an Inpatient Psychiatric Center". The study is A quantitative, cross-sectional research. I would like to ask your permission to allow me to utilize the Compassion Fatigue Short Scale published by you as the instrument to measure compassion fatigue in my research study. I would appreciate it if you could please let me know if there is/are any action (s) that I needed to take/do, to permit me to use the instrument during my research study.

I thank you in advance for your attention.

Sincerely,

Sephiratu (Sephi) Wahab, LMSW (ID: A00337581)

Ph.D. In General Psychology Student, Walden University

Dear Sephiratu,

Our Compassion Fatigue (CF) Instruments are in the public domain and, therefore, are free to use. Please see the attached papers. The *Psychiatric Times* paper suggests cut-points that can be used, but otherwise these measures are simple additive scales.

We request you cite these original publications when using these scales.

Thank you for interest in our CF scales,

SW

Sephiratu Wahab

Sat 7/14, 4:05 PM

I thank you, very much for your quick response, permission to use your tool, and support.

Thank you again,

Sincerely,

Sephiratu (Sephi)

Appendix D: Recruitment Email Wahab



Title of Study: The role of Organizational factors as predictors of compassion fatigue among Paraprofessionals in Inpatient Psychiatric Center
Principal Investigator: Sephiratu Wahab, LMSW, Ph.D. Candidate
Protocol Number: 1301245

Recruitment Email:

Hello, my name is Sephiratu (Sephi) Wahab, and I am a Ph.D. Candidate at Walden University. I am inviting you to participate in my research study. The research is about the role of organizational factors as predictors of developing compassion fatigue. Organizational factors are related to work demands, work organization and content, and interpersonal relationships between leadership and staff. Compassion fatigue is the feeling of repeatedly being overwhelmed, exhausted (emotionally, physically, or mentally), and tired because of one's work.

If you decide to participate in the study, you will be asked to complete a demographic questionnaire and answer questions related to organizational factors contributing to compassion fatigue via an online survey platform called Qualtrics. Your participation in this study is completely voluntary and you have the right to end your participation at any time. The time to complete the survey should take 20-30 minutes.

The study is open to paraprofessionals/mental health therapy aides who work directly with patients in the inpatient unit. If you decide to participate, you will be presented with an online consent form explaining all details of the study.

As a quality measure, please answer "yes" or "no" to each of the following questions:

1. **Are you currently working as a Paraprofessional/Mental Health Therapy Aide in the inpatient psychiatric unit at Greater Binghamton Psychiatric Center, Hutchings Psychiatric Center, or Mohawk Valley Psychiatric Center?**
2. **Do you have at least 1 year of experience in your position in the inpatient unit?**
3. **Are you 18 years of age or older?**

If you answered "no" to any of the above questions, you do not meet the eligibility requirements for participation in this study. Please delete this email and thank you for your consideration.

If you answered "yes" to each of the questions, you are eligible to participate in this study.

If you would like to participate in this study, please click [HERE](#) to be taken to the survey.

Thank you for your time,

Sephi Wahab, LMSW

Sephiratu.wahab@waldenu.edu

Appendix E: Follow-up Recruitment Email

The Person sending this email is not part of my research team, and they are just sharing this email on my behalf. This study is completely Anonymous, and they would have no access to the data collected, and this study is in no way related to your employment.

Reminder recruitment e-mail.

Subject line: Compassion Fatigue and Organizational factors among Paraprofessionals in an Inpatient Center.

Recently you volunteered and were sent an invitation to participate in a study to examine the relationship between paraprofessionals experiences of compassion fatigue and organizational factors. My name is Sephi Wahab, and I am conducting this study as part of my Ph. D. in Psychology degree at Walden University. This email was sent to you because you are a mental health therapy aide (MHTA) or paraprofessional in the inpatient psychiatric center at [REDACTED] and or [REDACTED]. If you have already completed the survey, please disregard this email. However, if you have not completed the survey and wish to do so, please consider participating in the study. Study will be kept totally confidential in nature; posing no risk to you should you decide to participate in this voluntary study. All that is asked is that you read the informed consent if you wish to advance the study to click the next button after reading the informed consent form found on the first page of the survey platform. Please note that no one will be aware of who rated whom or how any particular person is rated. The individuals sending this survey link on my behalf have no part in this study. They are just sharing this on my behalf and they have no access to the data collected and the study is not related to your employment at all. It should take you 20-30 minutes to complete the questionnaires. The results will only be shared with the research team. The survey is open to all inpatient mental health therapy aides who care directly in the hospital's inpatient unit. Your responses are greatly appreciated. If you would like to participate in the survey, please click on the Begin Survey Link below.

https://survey.az1.qualtrics.com/jfe/form/SV_6YlbTJzfgqMR38x

Thank you again for your time,
Sephi Wahab

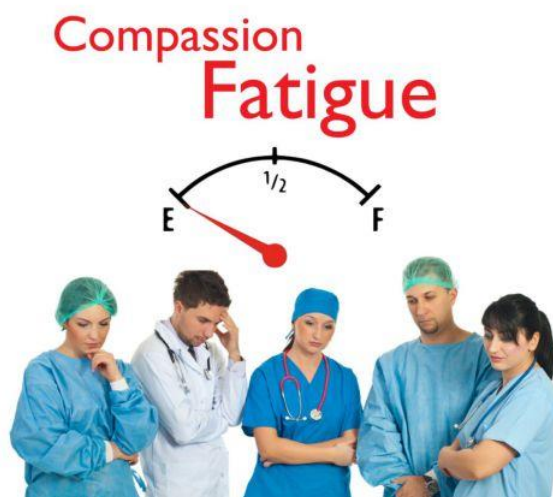
Appendix F : CFSC Questionnaire



Appendix G: Flyer

RESEARCH PARTICIPANTS NEEDED

Paraprofessionals/Mental Health Therapy Aides
Needed for a Research Study



Complete a brief online survey to help researchers learn more about compassion fatigue in Paraprofessionals and Mental Health Therapy Aides
You may qualify to participate in this study if you:

- 1) Currently work as a Paraprofessional/Mental Health Therapy Aide in a psychiatric inpatient unit.
- 2) Have at least 1 year of experience in your position.
- 3) Are at least 18 years old.

If interested in participating, please go onto the survey link below:

https://survey.az1.qualtrics.com/jfe/form/SV_6YlbTJzfgqMR3

8x

Appendix H: Scoring Items

According to Adams et al. (2006), the entire scale item score can be combined to give a total score for compassion fatigue. The subscale scores can be totaled separately to give subjects scores for work burnout and secondary traumatic stress. Compassion fatigue short-scale (CF Short Scale) is a 13-item instrument contains eight-item and five-item subscales for job burnout and secondary traumatic stress (Adams et al., 2006).

Compassion fatigue= a+ b+ c+ d+ e+ f+ g+ h+ I+ j+ k+ m

[Redacted content]

[Secondary trauma subscale = c, e, h, j, l;]

[Redacted content]

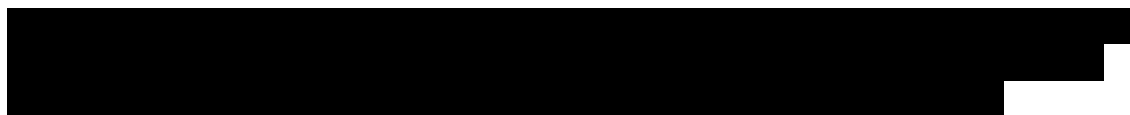
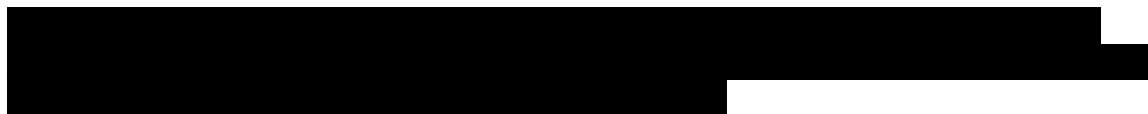
Job burnout subscale = a, b, d, f, g, i, k, m

[Redacted content]



Organizational factors scale:

This scale constitutes four overall dimensions including question items consisting of:
subscales:



Appendix I: Wahab Consent Form

Privacy:

Details or reports from this study such as the location of the study will not be shared. Any information you provide will be kept confidential. I will be sharing the findings of my study with my department. The researcher will not use any information for the purpose outside of this research project. Data will be kept secure by data encryption and using the online secure data base for data collection via Qualtrics. Data will be kept for a period of at least 5 years, as required by the university.

Contacts and Questions:

If you have any questions, you may contact the researcher via Sephiratu.wahab@waldenu.edu or 917-414-4135. If you want to talk privately about your rights as a participant, you can call the Research Participant Advocate at my university at 612-312-1210. Walden University's approval number for this study is **01-17-19-0337581** and it expires on **January 16, 2020**. Please print or save this consent form for your records.

Obtaining Your Consent

You may click the next button to advance to the next page to complete the survey questionnaires.

CONSENT FORM

You are invited to take part in a research study about compassion fatigue and organizational factors among paraprofessionals in inpatient psychiatric center.

This researcher is inviting paraprofessionals who work in inpatient psychiatric units, have at least 1 year experience in the position and are at least 18 years old to participate in this study. Permission has been obtained from the hospital's organizational leaders and Institutional Review Board as well as Walden University to conduct this study. This form is part of a process called "informed consent" to allow you to understand this study before deciding whether to take part.

This study is being conducted by a researcher named Sephiratu (Sephi) Wahab, who is a doctoral candidate at Walden University Ph. D. in Psychology- General Psychology. You might already know the researcher as a Social Worker in the inpatient unit for children but this study is separate from that role. [This researcher will not have access to any identifying information.](#)

Background Information:

The purpose of this study is to investigate organizational factors including (work demand, work organization and content, interpersonal and leadership) and compassion fatigue development among paraprofessionals, (a.k.a.) mental health therapy aides. Paraprofessionals/Mental Health therapy aides work closely with patients with intense emotions, and may experience compassion fatigue. The awareness of compassion fatigue can provide information to enable prevention, treatment and further education in this area.

Procedures:

If you agree to be in this study, you will be invited to complete series of questionnaires.

Here are some examples of the types of questions you may be asked:

I have thoughts that I am not succeeding in achieving my life goals

I have felt depressed as a result of my work.

Do you have enough time for your work tasks?

Is your work emotionally demanding?

Privacy:

Details or reports from this study such as the location of the study will not be shared. Any information you provide will be kept confidential. I will be sharing the findings of my study with my department. The researcher will not use any information for the purpose outside of this research project. Data will be kept secure by data encryption and using the online secure data base for data collection via Qualtrics. Data will be kept for a period of at least 5 years, as required by the university.

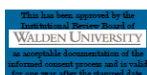
Contacts and Questions:

If you have any questions, you may contact the researcher via Sephiratu.wahab@waldenu.edu or 917-414-4135. If you want to talk privately about your rights as a participant, you can call the Research Participant Advocate at my university at 612-312-1210. Walden University's approval number for this study is **01-17-19-0337581** and it expires on **January 16, 2020**. Please print or save this consent form for your records.

Obtaining Your Consent

You may click the next button to advance to the next page to complete the survey questionnaires.

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Appendix J: IRB Net Document

**INSTITUTIONAL REVIEW BOARD**

OF
THE NATHAN KLINE INSTITUTE FOR PSYCHIATRIC RESEARCH
&
ROCKLAND PSYCHIATRIC CENTER
140 OLD ORANGEBURG RD.
ORANGEBURG, NY 10962

Nigel Bark
CHAIRMAN

Fabien Tremeau
Co-CHAIRMAN

Abel Lajtha
Vice-CHAIRMAN

Modification/Amendment Approval

Date: May 21, 2019

Principal Investigator: Sephiratu WAHAB, Ph.D Candidate
 Study Title: The role of Organizational factors as predictors of compassion fatigue development Among Paraprofessionals in Inpatient Psychiatric Center
 IRBNet ID: 1301245-5
 Submission Type: Amendment/Modification
 Action: APPROVED
 Approval Date: May 21, 2019
Expiration Date: September 6, 2019
 Review Type: Expedited Review

Thank you for the submission of your Modification. This modification was to: *update recruitment procedures.*

The NKI IRB has approved your submission. You may implement this revision(s) to this research project.

The approval is based on an appropriate risk and benefit ratio evaluation. The study design has been evaluated to confirm that the risks have been minimized. All research must be conducted in accordance with the approved revision(s).

Any proposed changes in the protocol must be immediately submitted to the IRB for review and approval prior to implementation, unless the change is necessary to avoid immediate harm to the participants.

All adverse events must be reported to the IRB in accordance to NKI IRB policy. All FDA and sponsor reporting requirements should be followed.

Report all noncompliance issues, complaints, and protocol deviations related to this protocol to the IRB.

The following documents were reviewed and/or approved with this submission:

- Amendment/Modification - Modification packet cover sheet SWAHAB. 5.13.19.docx (UPDATED: 05/13/2019)
- Amendment/Modification - VOID Modification packet cover sheet SWAHAB (6) (2)5.6.19.docx (UPDATED: 05/10/2019)
- Other - Recruitment email SWahab with survey link 5.6.19.docx (UPDATED: 05/10/2019)
- Other - Follow up recruitment email 5.6.19.docx (UPDATED: 05/10/2019)

- Protocol - Site Specific Research Protocol 7 SWAHAB 5.13.19.docx (UPDATED: 05/13/2019)
- Protocol - VOID Site Specific Research Protocol 6 SWAHAB 5.10.19.docx (UPDATED: 05/10/2019)

If you have any questions, please contact the NKI IRB at (845) 398-2199 or at NKI-IRB@nki.rfmh.org;
Include the study title and IRBNet ID in all correspondence.

This submission was electronically signed by a Chairperson of the IRB in IRBNet.

Tel: (845) 398-2199 Fax: (845) 398-5531; E-mail: NKI-IRB@NKI.rfmh.org



Appendix K : IRB Net Document Final Modification Approval Letter

**INSTITUTIONAL REVIEW BOARD**

OF
THE NATHAN KLINE INSTITUTE FOR PSYCHIATRIC RESEARCH
&
ROCKLAND PSYCHIATRIC CENTER
140 OLD ORANGEBURG RD.
ORANGEBURG, NY 10962

Nigel Bark
CHAIRMAN

Fabien Tremeau
Co-CHAIRMAN

Abel Lajtha
Vice-CHAIRMAN

Modification/Amendment Approval

Date: May 21, 2019

Principal Investigator: Sephiratu WAHAB, Ph.D Candidate
Study Title: The role of Organizational factors as predictors of compassion fatigue development Among Paraprofessionals in Inpatient Psychiatric Center
IRBNet ID: 1301245-5

Submission Type: Amendment/Modification
Action: APPROVED
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Review Type: Expedited Review

Thank you for the submission of your Modification. This modification was to: *update recruitment procedures.*

The NKI IRB has approved your submission. You may implement this revision(s) to this research project.

The approval is based on an appropriate risk and benefit ratio evaluation. The study design has been evaluated to confirm that the risks have been minimized. All research must be conducted in accordance with the approved revision(s).

Any proposed changes in the protocol must be immediately submitted to the IRB for review and approval prior to implementation, unless the change is necessary to avoid immediate harm to the participants.

All adverse events must be reported to the IRB in accordance to NKI IRB policy. All FDA and sponsor reporting requirements should be followed.

Report all noncompliance issues, complaints, and protocol deviations related to this protocol to the IRB.

The following documents were reviewed and/or approved with this submission:

- Amendment/Modification - Modification packet cover sheet SWAHAB. 5.13.19.docx (UPDATED: 05/13/2019)
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- Other - Follow up recruitment email 5.6.19.docx (UPDATED: 05/10/2019)

- Protocol - Site Specific Research Protocol 7 SWAHAB 5.13.19.docx (UPDATED: 05/13/2019)
- Protocol - VOID Site Specific Research Protocol 6 SWAHAB 5.10.19.docx (UPDATED: 05/10/2019)

If you have any questions, please contact the NKI IRB at (845) 398-2199 or at NKI-IRB@nki.rfmh.org; Include the study title and IRBNet ID in all correspondence.

This submission was electronically signed by a Chairperson of the IRB in IRBNet.

Tel: (845) 398-2199 Fax: (845) 398-5531; E-mail: NKI-IRB@NKI.rfmh.org



Appendix L: Extended Data Analysis Tables

Table M1

COPSOQ Descriptive Statistics (n = 33)

		Mean	Median	Std. Deviation	Min.	Max.
Work Demands (M = 2.48)	Do you get behind with your work?	3.61	4.00	1.144	1	5
	How often do you not have time to complete all your work tasks?	2.85	3.00	1.228	1	5
	Do you have to work very fast?	2.56	2.00	1.162	1	5
	Do you work at a high pace throughout the day?	2.48	2.00	.939	1	5
	Do you have to deal with other people's personal problems as part of your work?	1.79	1.00	1.139	1	5
	Is your work emotionally demanding?	1.61	1.00	.864	1	4
Work Organization and Job Content (M = 2.73)	Do you have a large degree of influence on the decisions concerning your work?	3.45	3.00	1.175	1	5
	Can you influence the amount of work assigned to you?	3.82	4.00	1.044	2	5
	Do you have the possibility of learning new things through your work?	2.94	3.00	.899	1	5
	Can you use your skills or expertise in your work?	2.39	2.00	1.088	1	5
	Is your work meaningful?	2.03	2.00	1.015	1	5
	Do you feel that the work you do is important to a very large extent?	1.76	1.00	.969	1	5
Interpersonal Relations and Leadership (M = 2.78)	At your place of work, are you informed well in advance concerning important decisions, changes, or plans for the future?	3.70	4.00	1.287	1	5
	Do you receive all the information you need in order to do your work well?	3.27	3.00	1.153	1	5
	Is your work recognized and appreciated by the management?	3.73	4.00	1.153	1	5
	Are you treated fairly at your workplace?	3.21	3.00	1.139	1	5
	Does your work have clear objectives?	3.15	3.00	1.064	1	5
	Do you know exactly what is expected of you at work?	2.21	2.00	1.166	1	5
	Are contradictory demands placed on you at work?	2.24	2.00	1.251	1	5
	Do you sometimes have to do things which ought to have been done in a different way?	2.18	2.00	1.014	1	5

	To what extent would you say that your immediate superior is good at work planning?	2.82	3.00	1.074	1	5
	To what extent would you say that your immediate superior is good at solving conflicts?	2.91	3.00	1.234	1	5
	How often could you get help and support from your colleagues, if needed?	2.30	2.00	1.015	1	4
	How often is your nearest superior willing to listen to your problems at work?	2.33	2.00	1.137	1	5
	How often do you get help and support from your nearest superior?	2.67	3.00	1.137	1	5
	Is there a good atmosphere between you and your colleagues?	2.18	2.00	.769	1	4
	Are you worried about becoming unemployed?	3.82	4.00	1.261	1	5
	Are you worried about it being difficult for you to find another job if you became unemployed?	3.12	3.00	1.536	1	5
	Are you worried about being transferred to another job against your will?	4.06	5.00	1.298	1	5
	Does the management trust the employees to do their work well?	3.27	3.00	1.257	1	5
	Can the employees trust the information that comes from the management?	3.39	3.00	1.144	1	5
	Are conflicts resolved in a fair way?	3.36	3.00	.929	1	5
	Is the work distributed fairly?	3.44	3.00	1.105	1	5
	How well are environmental conditions managed (air quality, temperature, lighting, noise, workstation ergonomics)?	3.82	4.00	1.261	1	6
	How well are safety concerns managed (slip/trips/falls, toxic chemicals, infectious diseases, Wi-Fi radiation, working alone)?	3.58	3.00	1.347	1	6
	Regarding your work in general. How pleased are you with your job as a whole, everything taken into consideration?	2.73	3.00	1.180	1	5
	Regarding your work in general. How pleased are you with your job as a whole, everything taken into consideration?	2.73	3.00	1.180	1	5
	Do you feel that your work drains so much of your energy that it has a negative effect on your private life?	1.85	2.00	.795	1	4
	Do you feel that your work takes so much of your time that it has a negative effect on your private life?	1.88	2.00	.960	1	4

Work-Individual Interface (M = 3.03)

Burnout (M = 2.11)	Are there times when you need to be at work and at home at the same time?	1.55	1.00	.938	1	4
	In general, would you say your health is?	2.64	3.00	1.055	1	5
	How often have you been stressed?	2.03	2.00	.984	1	4
	How often have you been irritable?	2.45	2.00	1.175	1	5
	How often have you felt worn out?	1.94	2.00	.899	1	4
	How often have you been emotionally exhausted?	2.03	2.00	1.045	1	4
Conflicts and Offensive Behavior (M = 2.46)	At your workplace during the last 12 months, have you been exposed to undesired sexual attention	1.45	1.00	.938	1	5
	At your workplace during the last 12 months, have you been exposed to threats of violence?	3.06	4.00	1.638	1	5
	At your workplace during the last 12 months, have you been exposed to physical violence?	3.00	3.00	1.479	1	5
	At your workplace during the last 12 months, have you been exposed to bullying?	2.33	2.00	1.472	1	5

Table M2

Full Descriptive Frequencies for the COPSOQ-III

		Do you get behind with your work			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Always (4)	1	3.0	3.0	3.0
	Often (3)	5	15.2	15.2	18.2
	Sometimes (2)	9	27.3	27.3	45.5
	Seldom (1)	9	27.3	27.3	72.7
	Never/hardly ever (0)	9	27.3	27.3	100.0
Total		33	100.0	100.0	

		How often do you not have time to complete all your work tasks			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Always (4)	5	15.2	15.2	15.2
	Often (3)	8	24.2	24.2	39.4
	Sometimes (2)	11	33.3	33.3	72.7
	Seldom (1)	5	15.2	15.2	87.9

	Never/hardly ever (0)	4	12.1	12.1	100.0
	Total	33	100.0	100.0	

Do you have to work very fast

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Always (4)	5	15.2	15.6	15.6
	Often (3)	13	39.4	40.6	56.3
	Sometimes (2)	8	24.2	25.0	81.3
	Seldom (1)	3	9.1	9.4	90.6
	Never/hardly ever (0)	3	9.1	9.4	100.0
	Total	32	97.0	100.0	
Missing	System	1	3.0		
Total		33	100.0		

Do you work at a high pace throughout the day

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	to a very large extent (4)	4	12.1	12.1	12.1
	to a large extent (3)	14	42.4	42.4	54.5
	somewhat (2)	11	33.3	33.3	87.9
	to a small extent (1)	3	9.1	9.1	97.0
	to a very small extent (0)	1	3.0	3.0	100.0
	Total	33	100.0	100.0	

Do you have to deal with other people's personal problems as part of your work?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Always (4)	20	60.6	60.6	60.6
	Often (3)	4	12.1	12.1	72.7
	Sometimes (2)	6	18.2	18.2	90.9
	Seldom (1)	2	6.1	6.1	97.0
	Never/hardly ever (0)	1	3.0	3.0	100.0
	Total	33	100.0	100.0	

Is your work emotionally demanding

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	to a very large extent (4)	20	60.6	60.6	60.6
	to a large extent (3)	7	21.2	21.2	81.8
	somewhat (2)	5	15.2	15.2	97.0
	to a small extent (1)	1	3.0	3.0	100.0
	Total	33	100.0	100.0	

Do you have a large degree of influence on the decisions concerning your work

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Always (4)	2	6.1	6.1	6.1
	Often (3)	4	12.1	12.1	18.2
	Sometimes (2)	12	36.4	36.4	54.5
	Seldom (1)	7	21.2	21.2	75.8
	Never/hardly ever (0)	8	24.2	24.2	100.0
	Total	33	100.0	100.0	

Can you influence the amount of work assigned to you

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Often (3)	4	12.1	12.1	12.1
	Sometimes (2)	9	27.3	27.3	39.4
	Seldom (1)	9	27.3	27.3	66.7
	Never/hardly ever (0)	11	33.3	33.3	100.0
	Total	33	100.0	100.0	

Do you have the possibility of learning new things through your work

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	to a very large extent (4)	3	9.1	9.1	9.1
	to a large extent (3)	4	12.1	12.1	21.2
	somewhat (2)	19	57.6	57.6	78.8
	to a small extent (1)	6	18.2	18.2	97.0
	to a very small extent (0)	1	3.0	3.0	100.0

Total	33	100.0	100.0
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Can you use your skills or expertise in your work

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	to a very large extent (4)	8	24.2	24.2	24.2
	to a large extent (3)	9	27.3	27.3	51.5
	somewhat (2)	13	39.4	39.4	90.9
	to a small extent (1)	1	3.0	3.0	93.9
	to a very small extent (0)	2	6.1	6.1	100.0
	Total	33	100.0	100.0	

Is your work meaningful

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	to a very large extent (4)	12	36.4	36.4	36.4
	to a large extent (3)	11	33.3	33.3	69.7
	somewhat (2)	8	24.2	24.2	93.9
	to a small extent (1)	1	3.0	3.0	97.0
	to a very small extent (0)	1	3.0	3.0	100.0
	Total	33	100.0	100.0	

Do you feel that the work you do is important to a very large extent (4)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	to a very large extent (4)	17	51.5	51.5	51.5
	to a large extent (3)	9	27.3	27.3	78.8
	somewhat (2)	6	18.2	18.2	97.0
	to a very small extent (0)	1	3.0	3.0	100.0
	Total	33	100.0	100.0	

At your place of work, are you informed well in advance concerning for example important decisions, changes, or plans for the future?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	to a very large extent (4)	2	6.1	6.1	6.1
	to a large extent (3)	4	12.1	12.1	18.2
	somewhat (2)	9	27.3	27.3	45.5
	to a small extent (1)	5	15.2	15.2	60.6
	to a very small extent (0)	13	39.4	39.4	100.0
	Total	33	100.0	100.0	

Do you receive all the information you need in order to do your work well?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	to a very large extent (4)	2	6.1	6.1	6.1
	to a large extent (3)	7	21.2	21.2	27.3
	somewhat (2)	9	27.3	27.3	54.5
	to a small extent (1)	10	30.3	30.3	84.8
	to a very small extent (0)	5	15.2	15.2	100.0
	Total	33	100.0	100.0	

Is your work recognized and appreciated by the management?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	to a very large extent (4)	1	3.0	3.0	3.0
	to a large extent (3)	4	12.1	12.1	15.2
	somewhat (2)	9	27.3	27.3	42.4
	to a small extent (1)	8	24.2	24.2	66.7
	to a very small extent (0)	11	33.3	33.3	100.0
	Total	33	100.0	100.0	

Are you treated fairly at your workplace?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	to a very large extent (4)	1	3.0	3.0	3.0
	to a large extent (3)	10	30.3	30.3	33.3
	somewhat (2)	8	24.2	24.2	57.6

	to a small extent (1)	9	27.3	27.3	84.8
	to a very small extent (0)	5	15.2	15.2	100.0
	Total	33	100.0	100.0	

Does your work have clear objectives?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	to a very large extent (4)	1	3.0	3.0	3.0
	to a large extent (3)	9	27.3	27.3	30.3
	somewhat (2)	11	33.3	33.3	63.6
	to a small extent (1)	8	24.2	24.2	87.9
	to a very small extent (0)	4	12.1	12.1	100.0
	Total	33	100.0	100.0	

Do you know exactly what is expected of you at work?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	to a very large extent (4)	12	36.4	36.4	36.4
	to a large extent (3)	7	21.2	21.2	57.6
	somewhat (2)	11	33.3	33.3	90.9
	to a small extent (1)	1	3.0	3.0	93.9
	to a very small extent (0)	2	6.1	6.1	100.0
	Total	33	100.0	100.0	

Are contradictory demands placed on you at work?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	to a very large extent (4)	11	33.3	33.3	33.3
	to a large extent (3)	11	33.3	33.3	66.7
	somewhat (2)	6	18.2	18.2	84.8
	to a small extent (1)	2	6.1	6.1	90.9
	to a very small extent (0)	3	9.1	9.1	100.0
	Total	33	100.0	100.0	

Do you sometimes have to do things which ought to have been done in a different way?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	to a very large extent (4)	8	24.2	24.2	24.2
	to a large extent (3)	16	48.5	48.5	72.7
	somewhat (2)	5	15.2	15.2	87.9
	to a small extent (1)	3	9.1	9.1	97.0
	to a very small extent (0)	1	3.0	3.0	100.0
Total		33	100.0	100.0	

To what extent would you say that your immediate superior is good at work planning?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	to a very large extent (4)	3	9.1	9.1	9.1
	to a large extent (3)	10	30.3	30.3	39.4
	somewhat (2)	13	39.4	39.4	78.8
	to a small extent (1)	4	12.1	12.1	90.9
	to a very small extent (0)	3	9.1	9.1	100.0
Total		33	100.0	100.0	

To what extent would you say that your immediate superior is good at solving conflicts?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	to a very large extent (4)	4	12.1	12.1	12.1
	to a large extent (3)	9	27.3	27.3	39.4
	somewhat (2)	11	33.3	33.3	72.7
	to a small extent (1)	4	12.1	12.1	84.8
	to a very small extent (0)	5	15.2	15.2	100.0
Total		33	100.0	100.0	

How often could you get help and support from your colleagues, if needed?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Always (4)	9	27.3	27.3	27.3

Often (3)	9	27.3	27.3	54.5
Sometimes (2)	11	33.3	33.3	87.9
Seldom (1)	4	12.1	12.1	100.0
Total	33	100.0	100.0	

How often is your nearest superior willing to listen to your problems at work?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Always (4)	9	27.3	27.3	27.3
	Often (3)	11	33.3	33.3	60.6
	Sometimes (2)	7	21.2	21.2	81.8
	Seldom (1)	5	15.2	15.2	97.0
	Never/hardly ever (0)	1	3.0	3.0	100.0
	Total	33	100.0	100.0	

How often do you get help and support from your nearest superior?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Always (4)	6	18.2	18.2	18.2
	Often (3)	8	24.2	24.2	42.4
	Sometimes (2)	12	36.4	36.4	78.8
	Seldom (1)	5	15.2	15.2	93.9
	Never/hardly ever (0)	2	6.1	6.1	100.0
	Total	33	100.0	100.0	

Is there a good atmosphere between you and your colleagues?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Always (4)	6	18.2	18.2	18.2
	Often (3)	16	48.5	48.5	66.7
	Sometimes (2)	10	30.3	30.3	97.0
	Seldom (1)	1	3.0	3.0	100.0
	Total	33	100.0	100.0	

Are you worried about becoming unemployed?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	to a very large extent (4)	2	6.1	6.1	6.1
	to a large extent (3)	3	9.1	9.1	15.2
	somewhat (2)	8	24.2	24.2	39.4
	to a small extent (1)	6	18.2	18.2	57.6
	to a very small extent (0)	14	42.4	42.4	100.0
Total		33	100.0	100.0	

Are you worried about it being difficult for you to find another job if you became unemployed?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	to a very large extent (4)	6	18.2	18.2	18.2
	to a large extent (3)	8	24.2	24.2	42.4
	somewhat (2)	5	15.2	15.2	57.6
	to a small extent (1)	4	12.1	12.1	69.7
	to a very small extent (0)	10	30.3	30.3	100.0
Total		33	100.0	100.0	

Are you worried about being transferred to another job against your will?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	to a very large extent (4)	3	9.1	9.1	9.1
	to a large extent (3)	1	3.0	3.0	12.1
	somewhat (2)	5	15.2	15.2	27.3
	to a small extent (1)	6	18.2	18.2	45.5
	to a very small extent (0)	18	54.5	54.5	100.0
Total		33	100.0	100.0	

Does the management trust the employees to do their work well?

		Frequency	Percent	Valid Percent	Cumulative Percent
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Valid	to a very large extent (4)	3	9.1	9.1	9.1
	to a large extent (3)	6	18.2	18.2	27.3
	somewhat (2)	10	30.3	30.3	57.6
	to a small extent (1)	7	21.2	21.2	78.8
	to a very small extent (0)	7	21.2	21.2	100.0
	Total	33	100.0	100.0	

Can the employees trust the information that comes from the management?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	to a very large extent (4)	2	6.1	6.1	6.1
	to a large extent (3)	5	15.2	15.2	21.2
	somewhat (2)	10	30.3	30.3	51.5
	to a small extent (1)	10	30.3	30.3	81.8
	to a very small extent (0)	6	18.2	18.2	100.0
	Total	33	100.0	100.0	

Are conflicts resolved in a fair way?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	to a very large extent (4)	1	3.0	3.0	3.0
	to a large extent (3)	4	12.1	12.1	15.2
	somewhat (2)	13	39.4	39.4	54.5
	to a small extent (1)	12	36.4	36.4	90.9
	to a very small extent (0)	3	9.1	9.1	100.0
	Total	33	100.0	100.0	

Is the work distributed fairly?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	to a very large extent (4)	2	6.1	6.3	6.3
	to a large extent (3)	3	9.1	9.4	15.6
	somewhat (2)	12	36.4	37.5	53.1
	to a small extent (1)	9	27.3	28.1	81.3
	to a very small extent (0)	6	18.2	18.8	100.0
	Total	32	97.0	100.0	

Missing	System	1	3.0
Total		33	100.0

How well are environmental conditions managed (air quality, temperature, lighting, noise, workstation ergonomics)?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	not applicable (0)	1	3.0	3.0	3.0
	well designed/controlled (1)	3	9.1	9.1	12.1
	present but not usually an issue/concern (2)	11	33.3	33.3	45.5
	exposures cause concern (3)	7	21.2	21.2	66.7
	exposures cause annoyance (4)	8	24.2	24.2	90.9
	exposures interfere with ability to get job done (5)	3	9.1	9.1	100.0
Total		33	100.0	100.0	

How well are safety concerns managed (slip/trips/falls, toxic chemicals, infectious diseases, Wi-Fi radiation, working alone)?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	not applicable (0)	1	3.0	3.0	3.0
	well-designed/controlled (1)	6	18.2	18.2	21.2
	present but not usually an issue/concern (2)	10	30.3	30.3	51.5
	exposures cause concern (3)	10	30.3	30.3	81.8
	exposures cause annoyance (4)	1	3.0	3.0	84.8
	exposures interfere with ability to get job done (5)	5	15.2	15.2	100.0
Total		33	100.0	100.0	

Regarding your work in general. How pleased are you with your job as a whole, everything taken into consideration?

	Frequency	Percent	Valid Percent	Cumulative Percent
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Valid	very satisfied (4)	5	15.2	15.2	15.2
	satisfied (3)	11	33.3	33.3	48.5
	neither/nor (2)	7	21.2	21.2	69.7
	unsatisfied (1)	8	24.2	24.2	93.9
	very unsatisfied (0)	2	6.1	6.1	100.0
	Total	33	100.0	100.0	

**Regarding your work in general. How pleased are you with your job as a whole,
everything taken into consideration?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very satisfied (4)	5	15.2	15.2	15.2
	satisfied (3)	11	33.3	33.3	48.5
	neither/nor (2)	7	21.2	21.2	69.7
	unsatisfied (1)	8	24.2	24.2	93.9
	very unsatisfied (0)	2	6.1	6.1	100.0
	Total	33	100.0	100.0	

**Do you feel that your work drains so much of your energy that it has a negative effect on your
private life?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes, certainly (3)	11	33.3	33.3	33.3
	yes, to certain degree (2)	18	54.5	54.5	87.9
	yes, but only very little (1)	2	6.1	6.1	93.9
	no, not at all (0)	2	6.1	6.1	100.0
	Total	33	100.0	100.0	

**Do you feel that your work takes so much of your time that it has a negative effect on your
private life?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes, certainly (3)	14	42.4	42.4	42.4
	yes, to certain degree (2)	12	36.4	36.4	78.8
	yes, but only very little (1)	4	12.1	12.1	90.9

	no, not at all (0)	3	9.1	9.1	100.0
	Total	33	100.0	100.0	

Are there times when you need to be at work and at home at the same time?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes, certainly (3)	23	69.7	69.7	69.7
	yes, to certain degree (2)	4	12.1	12.1	81.8
	yes, but only very little (1)	4	12.1	12.1	93.9
	no, not at all (0)	2	6.1	6.1	100.0
	Total	33	100.0	100.0	

In general, would you say your health is?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent (4)	6	18.2	18.2	18.2
	very good (3)	7	21.2	21.2	39.4
	good (2)	14	42.4	42.4	81.8
	fair (1)	5	15.2	15.2	97.0
	poor (0)	1	3.0	3.0	100.0
	Total	33	100.0	100.0	

How often have you been stressed?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	all the time (4)	13	39.4	39.4	39.4
	a large part of the time (3)	8	24.2	24.2	63.6
	part of the time (2)	10	30.3	30.3	93.9
	a small part of the time (1)	2	6.1	6.1	100.0
	Total	33	100.0	100.0	

How often have you been irritable?

		Frequency	Percent	Valid Percent	Cumulative Percent
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Valid	all the time (4)	8	24.2	24.2	24.2
	a large part of the time (3)	11	33.3	33.3	57.6
	part of the time (2)	6	18.2	18.2	75.8
	a small part of the time (1)	7	21.2	21.2	97.0
	not at all (0)	1	3.0	3.0	100.0
	Total	33	100.0	100.0	

How often have you felt worn out?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	all the time (4)	12	36.4	36.4	36.4
	a large part of the time (3)	13	39.4	39.4	75.8
	part of the time (2)	6	18.2	18.2	93.9
	a small part of the time (1)	2	6.1	6.1	100.0
	Total	33	100.0	100.0	

How often have you been emotionally exhausted?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	all the time (4)	13	39.4	39.4	39.4
	a large part of the time (3)	10	30.3	30.3	69.7
	part of the time (2)	6	18.2	18.2	87.9
	a small part of the time (1)	4	12.1	12.1	100.0
	Total	33	100.0	100.0	

At your workplace during the last 12 months, have you been exposed to undesired sexual attention

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no (0)	24	72.7	72.7	72.7
	yes, a few times (1)	6	18.2	18.2	90.9
	yes, monthly (2)	1	3.0	3.0	93.9
	yes, weekly (3)	1	3.0	3.0	97.0
	yes, daily (4)	1	3.0	3.0	100.0
	Total	33	100.0	100.0	

At your workplace during the last 12 months, have you been exposed to threats of violence?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no (0)	9	27.3	27.3	27.3
	yes, a few times (1)	6	18.2	18.2	45.5
	yes, monthly (2)	1	3.0	3.0	48.5
	yes, weekly (3)	8	24.2	24.2	72.7
	yes, daily (4)	9	27.3	27.3	100.0
	Total	33	100.0	100.0	

At your workplace during the last 12 months, have you been exposed to physical violence?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no (0)	7	21.2	21.2	21.2
	yes, a few times (1)	8	24.2	24.2	45.5
	yes, monthly (2)	2	6.1	6.1	51.5
	yes, weekly (3)	10	30.3	30.3	81.8
	yes, daily (4)	6	18.2	18.2	100.0
	Total	33	100.0	100.0	

At your workplace during the last 12 months, have you been exposed to bullying?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no (0)	13	39.4	39.4	39.4
	yes, a few times (1)	9	27.3	27.3	66.7
	yes, monthly (2)	3	9.1	9.1	75.8
	yes, weekly (3)	3	9.1	9.1	84.8
	yes, daily (4)	5	15.2	15.2	100.0
	Total	33	100.0	100.0	

Table M3

Full Descriptive Statistics for the COPSOQ-III

	N		Mean	Median	Std. Deviation	Variance	Skewness	Std. Error	Kurtosis	Std. Error	Min	Max
	Valid	Missing						of Skewness		of Kurtosis		
Do you get behind with your work	33	0	3.61	4.00	1.144	1.309	-.344	.409	-.776	.798	1	5
How often do you not have time to complete all your work tasks	33	0	2.85	3.00	1.228	1.508	.198	.409	-.698	.798	1	5
Do you have to work very fast	32	1	2.56	2.00	1.162	1.351	.693	.414	-.093	.809	1	5
Do you work at a high pace throughout the day	33	0	2.48	2.00	.939	.883	.528	.409	.415	.798	1	5
Do you have to deal with other people's personal problems as part of your work?	33	0	1.79	1.00	1.139	1.297	1.255	.409	.617	.798	1	5
Is your work emotionally demanding	33	0	1.61	1.00	.864	.746	1.199	.409	.393	.798	1	4
Do you have a large degree of influence on the decisions concerning your work	33	0	3.45	3.00	1.175	1.381	-.253	.409	-.588	.798	1	5
can you influence the amount of work assigned to you	33	0	3.82	4.00	1.044	1.091	-.314	.409	-1.111	.798	2	5
Do you have the possibility of learning new things through your work	33	0	2.94	3.00	.899	.809	-.425	.409	.800	.798	1	5
Can you use your skills or expertise in your work	33	0	2.39	2.00	1.088	1.184	.522	.409	.224	.798	1	5
Is your work meaningful	33	0	2.03	2.00	1.015	1.030	.891	.409	.725	.798	1	5
Do you feel that the work you do is important to a very large extent (4)	33	0	1.76	1.00	.969	.939	1.401	.409	2.270	.798	1	5
At your place of work, are you informed well in advance concerning for example important decisions, changes, or plans for the future?	33	0	3.70	4.00	1.287	1.655	-.514	.409	-.845	.798	1	5

Do you receive all the information you need in order to do your work well?	33	0	3.27	3.00	1.153	1.330	-.184	.409	-.763	.798	1	5
Is your work recognized and appreciated by the management?	33	0	3.73	4.00	1.153	1.330	-.467	.409	-.694	.798	1	5
Are you treated fairly at your workplace?	33	0	3.21	3.00	1.139	1.297	.096	.409	-1.061	.798	1	5
Does your work have clear objectives?	33	0	3.15	3.00	1.064	1.133	.177	.409	-.714	.798	1	5
Do you know exactly what is expected of you at work?	33	0	2.21	2.00	1.166	1.360	.692	.409	-.017	.798	1	5
Are contradictory demands placed on you at work?	33	0	2.24	2.00	1.251	1.564	.937	.409	.098	.798	1	5
Do you sometimes have to do things which ought to have been done in a different way?	33	0	2.18	2.00	1.014	1.028	.952	.409	.751	.798	1	5
To what extent would you say that your immediate superior is good at work planning?	33	0	2.82	3.00	1.074	1.153	.385	.409	-.099	.798	1	5
To what extent would you say that your immediate superior is good at solving conflicts?	33	0	2.91	3.00	1.234	1.523	.289	.409	-.693	.798	1	5
How often could you get help and support from your colleagues, if needed?	33	0	2.30	2.00	1.015	1.030	.099	.409	-1.109	.798	1	4
How often is your nearest superior willing to listen to your problems at work?	33	0	2.33	2.00	1.137	1.292	.509	.409	-.612	.798	1	5
How often do you get help and support from your nearest superior?	33	0	2.67	3.00	1.137	1.292	.171	.409	-.521	.798	1	5
Is there a good atmosphere between you and your colleagues?	33	0	2.18	2.00	.769	.591	.109	.409	-.374	.798	1	4
Are you worried about becoming unemployed?	33	0	3.82	4.00	1.261	1.591	-.730	.409	-.475	.798	1	5
Are you worried about it being difficult for you to find another job if you became unemployed?	33	0	3.12	3.00	1.536	2.360	.004	.409	-1.536	.798	1	5
Are you worried about being transferred to another job against your will?	33	0	4.06	5.00	1.298	1.684	-1.306	.409	.708	.798	1	5
Does the management trust the employees to do their work well?	33	0	3.27	3.00	1.257	1.580	-.151	.409	-.884	.798	1	5

Can the employees trust the information that comes from the management?	33	0	3.39	3.00	1.144	1.309	-.322	.409	-.528	.798	1	5
Are conflicts resolved in a fair way?	33	0	3.36	3.00	.929	.864	-.321	.409	.172	.798	1	5
Is the work distributed fairly?	32	1	3.44	3.00	1.105	1.222	-.367	.414	-.153	.809	1	5
How well are environmental conditions managed (air quality, temperature, lighting, noise, workstation ergonomics)?	33	0	3.82	4.00	1.261	1.591	-.034	.409	-.557	.798	1	6
How well are safety concerns managed (slip/trips/falls, toxic chemicals, infectious diseases, Wi-Fi radiation, working alone)?	33	0	3.58	3.00	1.347	1.814	.441	.409	-.334	.798	1	6
Regarding your work in general. How pleased are you with your job as a whole, everything taken into consideration?	33	0	2.73	3.00	1.180	1.392	.205	.409	-.930	.798	1	5
Regarding your work in general. How pleased are you with your job as a whole, everything taken into consideration?	33	0	2.73	3.00	1.180	1.392	.205	.409	-.930	.798	1	5
Do you feel that your work drains so much of your energy that it has a negative effect on your private life?	33	0	1.85	2.00	.795	.633	1.079	.409	1.604	.798	1	4
Do you feel that your work takes so much of your time that it has a negative effect on your private life?	33	0	1.88	2.00	.960	.922	.931	.409	.039	.798	1	4
Are there times when you need to be at work and at home at the same time?	33	0	1.55	1.00	.938	.881	1.551	.409	1.203	.798	1	4
In general, would you say your health is?	33	0	2.64	3.00	1.055	1.114	-.044	.409	-.479	.798	1	5
How often have you been stressed?	33	0	2.03	2.00	.984	.968	.356	.409	-1.146	.798	1	4
How often have you been irritable?	33	0	2.45	2.00	1.175	1.381	.362	.409	-.955	.798	1	5
How often have you felt worn out?	33	0	1.94	2.00	.899	.809	.673	.409	-.248	.798	1	4
How often have you been emotionally exhausted?	33	0	2.03	2.00	1.045	1.093	.635	.409	-.772	.798	1	4
At your workplace during the last 12 months, have you been exposed to undesired sexual attention	33	0	1.45	1.00	.938	.881	2.555	.409	6.771	.798	1	5

At your workplace during the last 12 months, have you been exposed to threats of violence?	33	0	3.06	4.00	1.638	2.684	-.103	.409	-1.715	.798	1	5
At your workplace during the last 12 months, have you been exposed to physical violence?	33	0	3.00	3.00	1.479	2.188	-.062	.409	-1.523	.798	1	5
At your workplace during the last 12 months, have you been exposed to bullying?	33	0	2.33	2.00	1.472	2.167	.818	.409	-.751	.798	1	5

Table M4

CFSS Descriptive Statistics (n = 33)

	Mean	Median	Std.		
			Deviation	Min.	Max.
I have felt trapped by my work.	6.27	5.00	3.054	1	10
- I have thoughts that I am not succeeding in achieving my life goals.	5.67	6.00	3.351	1	10
I have had flashbacks connected to my clients.	4.24	5.00	3.364	1	10
I feel that I am a “failure” in my work.	2.61	2.00	1.936	1	9
I experience troubling dreams similar to those of a client of mine.	2.21	1.00	2.247	1	10
I have felt a sense of hopelessness associated with working with clients/patients.	3.88	2.00	3.029	1	10
I have frequently felt weak, tired or rundown as a result of my work as a caregiver.	6.00	5.00	3.240	1	10
I have experienced intrusive thoughts after working with an especially difficult client/patient. I have felt depressed as a result of my work.	3.59	2.00	3.435	1	10
I have suddenly and involuntarily recalled a frightening experience while working with a client/patient.	3.61	2.00	3.112	1	10
I feel I am unsuccessful at separating work from my personal life.	3.15	1.00	2.874	1	10
I am losing sleep over a client’s traumatic experiences.	2.61	1.00	3.030	1	10
I have a sense of worthlessness, disillusionment, or resentment associated with my work.	3.12	1.00	3.248	1	10

Table M5

Full Descriptive Frequencies for the CFSS

I have felt trapped by my work.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never/Rarely 1	4	12.1	12.1	12.1
	3	1	3.0	3.0	15.2
	4	3	9.1	9.1	24.2
	Sometimes 5	9	27.3	27.3	51.5
	6	2	6.1	6.1	57.6
	7	1	3.0	3.0	60.6
	8	2	6.1	6.1	66.7
	9	2	6.1	6.1	72.7
	Very Often 10	9	27.3	27.3	100.0

		Total	33	100.0	100.0
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I have thoughts that I am not succeeding in achieving my life goals.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never/Rarely 10	5	15.2	15.2	15.2
	2	5	15.2	15.2	30.3
	3	1	3.0	3.0	33.3
	4	1	3.0	3.0	36.4
	Sometimes 5	4	12.1	12.1	48.5
	6	2	6.1	6.1	54.5
	7	2	6.1	6.1	60.6
	8	4	12.1	12.1	72.7
	9	3	9.1	9.1	81.8
	Very Often 10	6	18.2	18.2	100.0
Total		33	100.0	100.0	

I have had flashbacks connected to my clients.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never/Rarely 10	14	42.4	42.4	42.4
	2	1	3.0	3.0	45.5
	3	1	3.0	3.0	48.5
	Sometimes 5	5	15.2	15.2	63.6
	6	3	9.1	9.1	72.7
	7	4	12.1	12.1	84.8
	Very Often 10	5	15.2	15.2	100.0
Total		33	100.0	100.0	

I feel that I am a "failure" in my work.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never/Rarely 10	13	39.4	39.4	39.4
	2	8	24.2	24.2	63.6
	3	3	9.1	9.1	72.7
	4	1	3.0	3.0	75.8
	Sometimes 5	7	21.2	21.2	97.0
	9	1	3.0	3.0	100.0
Total		33	100.0	100.0	

I experience troubling dreams similar to those of a client of mine.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never/Rarely 10	20	60.6	60.6	60.6
	2	6	18.2	18.2	78.8
	3	1	3.0	3.0	81.8
	4	2	6.1	6.1	87.9

	Sometimes 5	1	3.0	3.0	90.9
	7	1	3.0	3.0	93.9
	8	1	3.0	3.0	97.0
	Very Often 10	1	3.0	3.0	100.0
	Total	33	100.0	100.0	

I have felt a sense of hopelessness associated with working with clients/patients.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never/Rarely 10	11	33.3	33.3	33.3
	2	6	18.2	18.2	51.5
	3	1	3.0	3.0	54.5
	Sometimes 5	7	21.2	21.2	75.8
	7	2	6.1	6.1	81.8
	8	3	9.1	9.1	90.9
	9	1	3.0	3.0	93.9
	Very Often 10	2	6.1	6.1	100.0
	Total	33	100.0	100.0	

I have frequently felt weak, tired or rundown as a result of my work as a caregiver.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never/Rarely 10	5	15.2	15.2	15.2
	2	1	3.0	3.0	18.2
	3	1	3.0	3.0	21.2
	4	4	12.1	12.1	33.3
	Sometimes 5	7	21.2	21.2	54.5
	7	1	3.0	3.0	57.6
	8	4	12.1	12.1	69.7
	9	2	6.1	6.1	75.8
	Very Often 10	8	24.2	24.2	100.0
	Total	33	100.0	100.0	

I have experienced intrusive thoughts after working with an especially difficult client/patient. I have felt depressed as a result of my work.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never/Rarely 10	15	45.5	46.9	46.9
	2	4	12.1	12.5	59.4
	3	3	9.1	9.4	68.8
	Sometimes 5	2	6.1	6.3	75.0
	8	2	6.1	6.3	81.3
	9	3	9.1	9.4	90.6
	Very Often 10	3	9.1	9.4	100.0
	Total	32	97.0	100.0	
Missing	System	1	3.0		
Total		33	100.0		

I have suddenly and involuntarily recalled a frightening experience while working with a client/patient.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never/Rarely 10	16	48.5	48.5	48.5
	2	1	3.0	3.0	51.5
	3	1	3.0	3.0	54.5
	4	1	3.0	3.0	57.6
	Sometimes 5	8	24.2	24.2	81.8
	7	1	3.0	3.0	84.8
	8	1	3.0	3.0	87.9
	9	1	3.0	3.0	90.9
	Very Often 10	3	9.1	9.1	100.0
	Total	33	100.0	100.0	

I feel I am unsuccessful at separating work from my personal life.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never/Rarely 10	17	51.5	51.5	51.5
	2	3	9.1	9.1	60.6
	3	1	3.0	3.0	63.6
	Sometimes 5	7	21.2	21.2	84.8
	7	2	6.1	6.1	90.9
	9	1	3.0	3.0	93.9
	Very Often 10	2	6.1	6.1	100.0
	Total	33	100.0	100.0	

I am losing sleep over a client's traumatic experiences.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never/Rarely 10	20	60.6	60.6	60.6
	2	7	21.2	21.2	81.8
	Sometimes 5	1	3.0	3.0	84.8
	8	1	3.0	3.0	87.9
	9	1	3.0	3.0	90.9
	Very Often 10	3	9.1	9.1	100.0
	Total	33	100.0	100.0	

I have a sense of worthlessness, disillusionment, or resentment associated with my work.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never/Rarely 10	17	51.5	51.5	51.5
	2	5	15.2	15.2	66.7
	3	3	9.1	9.1	75.8
	Sometimes 5	2	6.1	6.1	81.8
	8	1	3.0	3.0	84.8
	9	1	3.0	3.0	87.9
	Very Often 10	4	12.1	12.1	100.0
	Total	33	100.0	100.0	

Table M6

Full Descriptive Statistics for the CFS

	N		Mean	Median	Std. Deviation	Variance	Skewness	Std. Error of		Min	Max.	
	Valid	Missing						Skewness	Kurtosis			
I have felt trapped by my work.	33	0	6.27	5.00	3.054	9.330	-.184	.409	-1.061	.798	1	10
I have thoughts that I am not succeeding in achieving my life goals.	33	0	5.67	6.00	3.351	11.229	-.110	.409	-1.526	.798	1	10
I have had flashbacks connected to my clients.	33	0	4.24	5.00	3.364	11.314	.495	.409	-1.144	.798	1	10
I feel that I am a “failure” in my work.	33	0	2.61	2.00	1.936	3.746	1.398	.409	2.050	.798	1	9
I experience troubling dreams similar to those of a client of mine.	33	0	2.21	1.00	2.247	5.047	2.270	.409	4.763	.798	1	10
I have felt a sense of hopelessness associated with working with clients/patients.	33	0	3.88	2.00	3.029	9.172	.684	.409	-.887	.798	1	10
I have frequently felt weak, tired or rundown as a result of my work as a caregiver.	33	0	6.00	5.00	3.240	10.500	-.153	.409	-1.317	.798	1	10
I have experienced intrusive thoughts after working with an especially difficult client/patient. I have felt depressed as a result of my work.	32	1	3.59	2.00	3.435	11.797	.986	.414	-.759	.809	1	10
I have suddenly and involuntarily recalled a frightening experience while working with a client/patient.	33	0	3.61	2.00	3.112	9.684	.882	.409	-.432	.798	1	10
I feel I am unsuccessful at separating work from my personal life.	33	0	3.15	1.00	2.874	8.258	1.159	.409	.268	.798	1	10
I have trouble losing sleep over a client’s traumatic experiences.	33	0	2.61	1.00	3.030	9.184	1.865	.409	1.905	.798	1	10
I have a sense of worthlessness, disillusionment, or resentment associated with my work.	33	0	3.12	1.00	3.248	10.547	1.423	.409	.456	.798	1	10