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Compassion Fatigue Among Mental Healthcare Providers and The Impact on Overall Wellbeing

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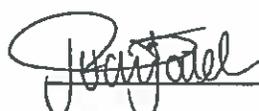
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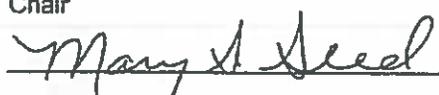
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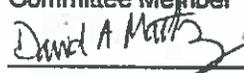
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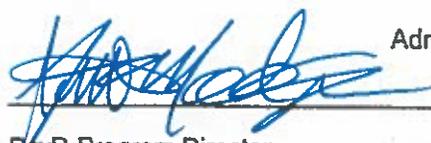
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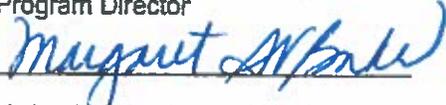

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Compassion Fatigue Among Mental Healthcare Providers and The Impact on

Overall Wellbeing

University of San Francisco

Ruchi Patel

Abstract

Compassion, a virtue of the helping profession, can be jeopardized by a provider's continuous exposure to the trauma experiences of others. The impact of burnout, secondary stress and compassion fatigue on a mental healthcare provider's work and personal life has been increasingly studied due to negative ramifications on our community healers. The present study used a cross-sectional design to survey mental healthcare providers across specialty and discipline in efforts to gain a better understanding of the relationship between a provider's degree of compassion fatigue and specific demographic variables, physical health and their spirituality. One hundred and thirty-seven participants across the United States completed the electronic survey, which included a demographic questionnaire, the Professional Quality of Life Scale, and the Daily Spiritual Experience Scale. Participants represented a diverse sample with respect to age, years of experience, and educational background.

The majority of mental healthcare providers in this study reported experiencing average levels of compassion fatigue. Providers who earned a doctoral degree as compared with those who earned a master's degree reported greater compassion fatigue, while there was no significant relationship between compassion fatigue and gender, age, race, number of years in the field, or employment setting. Mental healthcare providers who scored higher on compassion fatigue were more likely to be diagnosed with a physical or mental health condition. Participants with greater compassion fatigue were more likely to suffer from sleep disturbances, marginally significantly more likely to be obese, and exercised less frequently. Providers who reported greater spirituality experienced less compassion fatigue. These findings support the need to increase awareness around the phenomenon of compassion fatigue through the promotion of health and healthy coping styles to sustain the expression of compassion.

Dedication and Acknowledgements

*“Compassion is not a relationship between the healer and the wounded.
It's a relationship between equals.
Only when we know our own darkness well
can we be present with the darkness of others.
Compassion becomes real when we recognize our shared humanity.”*

- Pema Chodron

I dedicate this work to my mother, Rekha Patel, who has been the ultimate embodiment of compassion. She has instilled the true qualities of compassion, empathy, and love, and through her grace I am able to spread this with others. She has been the foundation to all my success.

I would also like to dedicate this work to my father, Jayesh Patel, who has instilled the value of knowledge and wisdom. He has continuously recognized my inner potential, and inspired me to deeply connect with all dimensions life has to offer.

To Dr. Dhara Meghani, your constant support, guidance and encouragement has been the key to my success during this journey. You have truly been an inspiration to me as you have been by teacher, advisor, mentor and role model. For this, I want to thank you.

To my committee members, Dr. David Martinez and Dr. Mary Seed, each of you have given me the special guidance and attention to support me through this process. You both have been so critical in my path of reaching this goal. Through your perspective and enthusiasm, I have added unique pieces to my work.

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CHAPTER I

INTRODUCTION

Statement of the Problem

Compassion fatigue is a phenomenon that affects healthcare providers across disciplines and is associated with psychological disruptions, emotional exhaustion, impaired interpersonal functioning, and physiological problems (Sabo, 2011). Mental healthcare professionals engage in providing therapeutic services which may bring them face to face with excessive stress and trauma; these experiences have been shown to take a toll on their psychosocial, physical health and negatively impact their overall wellbeing (Sabo, 2011). Empirical inquiry to date has primarily focused on understanding the existence and symptomology of compassion fatigue (Sabo, 2011). The majority of research in this area has included nurses, emergency personnel, and medical providers with less attention on professionals in the mental health sector. Additionally, few studies have examined the relationship between compassion fatigue and physical health, lifestyle decisions, and spirituality. Identifying the impact of compassion fatigue upon these factors will contribute to and extend the current literature base to account for the complex ways in which it affects mental healthcare providers.

Compassion fatigue likely affects many dimensions of a mental healthcare provider's health, which may put maintaining ethical standards of professional care towards their clients at risk (Sabo, 2011). Understanding the extent to which and how mental healthcare providers are affected by compassion fatigue can inform future policies and interventions that can be implemented in a number of diverse settings to help lower the incidence of compassion fatigue. This project was a cross-sectional study surveying mental healthcare providers including

psychologists, psychiatric nurses, psychiatric social workers, and psychiatrists. The three primary aims of this project were:

Aim 1: To assess current levels of compassion fatigue experienced by mental healthcare providers in a variety of health settings.

Aim 2: To examine how demographic factors are associated with the levels of compassion fatigue experienced by mental healthcare providers.

Aim 3: To examine the relationship between compassion fatigue and physical health, lifestyle decisions, and spirituality of mental healthcare providers.

The data gathered from this study can contribute to a greater understanding of the degree to which compassion fatigue occurs among mental health professionals, as well as highlight how varying levels of compassion fatigue impact health and well-being of this group. This project aligns with the University of San Francisco's Jesuit mission and values which emphasize 'cura personalis' or care for the whole person, where the improvement of overall health of providers is in part a social responsibility that is frequently overlooked. Further, this study addresses a significant social justice issue related to equitable, accessible, and quality care for all by ultimately seeking to support professionals who are tasked with the challenging yet necessary burden of caring for members of society who have the greatest need for mental health services.

CHAPTER II

LITERATURE REVIEW

Compassion Fatigue Among Mental Healthcare Providers and The Impact on Overall Wellbeing

Three out of every four Americans describe their work to be stressful, and the United Nations' International Labor Organization has declared occupational stress to be a "global epidemic" (Maxon, 1999). The National Mental Health Association recognizes stress as a natural part of life, whereas acute or primary stress is considered short term, manageable, and does not result in extensive damages (Figley Institute, 2012; Mental Health America, 2016). However, the United States healthcare industry is acknowledged as being especially demanding of and stressful to mental healthcare providers within all specialties (CDC, 2008). Due to the inherent psychological and interpersonally challenging nature of the work, mental healthcare providers experience chronic stress, which puts them at risk for secondary stress injuries such as compassion fatigue (Figley Institute, 2012). Raising awareness and empirical inquiry into the effects of compassion fatigue on mental healthcare professionals can ultimately inform the field of ways in which to improve and/or prevent circumstances that may otherwise jeopardize the overall well-being of providers and their clients.

Caring and Compassion Among Mental Health Providers

Compassion has been recognized as a foundational tenet for those who enter the healthcare profession and is defined by the Webster's Encyclopedia as "a feeling of deep sympathy and sorrow for another who is stricken by suffering or misfortune, accompanied by a strong desire to alleviate the pain or remove its cause" (Anon, 1989, p. 255). Compassion is not only a virtue in the helping professions, but also a virtue endorsed by nearly all cultures and

religions (Collins & Long, 2003). For example, in the Buddhist teachings, all human beings need to embrace the essence of compassion, which is defined as the ultimate goal to attain, after which each and every individual shall be freed from the sufferings of the world (Collins & Long, 2003). Christianity teaches its followers to emulate the compassion of Jesus towards all individuals, including “the poor, blind, sick, and imprisoned” (Collins & Long, 2003, p. 421). Individuals generally choose to enter the mental healthcare field because caring and compassion are interwoven deeply into who they already are, which may also affirm aspects of their spiritual, religious, and/or cultural identity (Yoder, 2010).

In addition to being compassionate, mental healthcare providers are taught to be objective, analytical, and helpful in their professional roles through developed clinical skills to appropriately administer treatment according to best practice guidelines (Figley, 2012). Mental healthcare providers are professionals trained to attend to a variety of mental health presentations ranging from mild to severe problems such as relational and behavioral issues, cognitive/developmental delays, autism, trauma, mood disorders, personality disorders, and schizophrenia (Negash & Sahin, 2011). Ideally, services provided are contingent on a professional’s specific discipline, level of education, clinical experience, and specialty.

Compassion and empathy are fundamental qualities implemented in the art of human service; these qualities allow mental healthcare providers exposure into the client’s world and serve as tools that can attune to adjust provision of services to fit a client’s needs (Figley, 2002). Charles Figley’s (2002) etiological model of compassion fatigue, which will be discussed next, is grounded on the very basis that empathy and emotional energy are the motivating forces in all healing professions and are essential for effectively establishing and maintaining a strong therapeutic rapport, as well as providing proficient delivery of care.

Compassion Fatigue

Whereas the act of being compassionate can be described as the effort made to view the world from the perspective of someone who is suffering, *compassion fatigue* reduces one's ability to express compassion and bear the suffering of others (Figley, 2012). Joinson (1992) explored the nature of stress in nurses and first used the term compassion fatigue to describe a nurse's emotional exhaustion due to the provision of care needed for their suffering patients. Later, Charles Figley adopted this term and expanded compassion fatigue (CF) to describe the "natural consequence of working with people who have experienced extremely stressful events" (Collins & Long, 2003, p. 421). Today, CF is understood as the cost of any professional being exposed to the trauma, fear, and suffering of their client in conjunction with the act of being compassionate and empathic towards their clients (Collins & Long, 2003; Figley, 2012).

Figley's model of CF explains that the combination of direct exposure to clients' suffering and a professional's empathic ability, empathic concern, and empathic response contributes to the phenomenon of CF by placing stress on a provider's ability to express compassion (Refer to Figure 1). Figley explains that prolonged exposure to suffering may induce a provider to have an emotional reaction that is more disruptive, e.g., recollections of trauma memories of clients as well as their own trauma, which can be a source of life-disruptions, adding to the degree of CF that is experienced by a provider. In addition to the expenditure of energy required to deliver mental health services, Figley highlights that the expression of compassion and empathy of providers involves a personal sacrifice as continuous exposure to stress reduces one's capacity to express compassion. The vulnerability and reduced capacity of expressing compassion often leads a provider to develop various coping strategies to address their compassion fatigue.

Compassion fatigue presents as an occupational hazard for those in the helping professions including but not limited to lawyers, physicians, nurses, psychologists, social workers, emergency response teams, pastors, hotline workers, and teachers. Mental healthcare professionals have the privilege to guide patients through the depths of their suffering and bear witness to the stress and trauma of their patients' lives, and from this process mental healthcare providers often absorb the emotional pain experienced by their patients (Showalter, 2010). This natural byproduct is known as the "cost of caring" where providers become susceptible to experiencing CF as well as other related constructs: burnout and secondary trauma (Boyle, 2015). These secondary stressors weigh heavily when combined with accumulated stress, a demanding schedule, lack of social and emotional support, and challenging work environment. This collective experience can cause providers to lose sight of their initial inspiration and limit their ability to feel compassion for others (Showalter, 2010; Thomson, Amatea, Thomson, 2014; Yoder, 2010).

Because mental health professionals have an ethical and legal responsibility to their clients and must adhere to the high standards of professional competence, it may be more challenging for providers to admit feelings of fatigue because they are 1) unable to recognize their own symptoms, and/or 2) do not want to appear inferior or inadequate to their colleagues (Negash, & Sahin 2011). The assumption that mental healthcare providers are unscathed by their work and immune to CF is an unrealistic standard. Thus, furthering our understanding the costs of caring among mental healthcare providers is essential not only to protect the health of individual providers, but also to ensure the promotion and ongoing health of clients to whom service is provided.

The Costs of Caring: Constructs Related to Compassion Fatigue

The costs of caring for others can activate varying stress responses in mental health professionals; the literature reflects several related, but perhaps distinct terms to capture these responses (see Figure 2 for a summary). Compassion fatigue has been utilized interchangeably with related concepts such as secondary traumatic stress, vicarious trauma, and burnout (Day & Anderson, 2011; Phelps et al., 2009), although it is thought to be a more complex process that may or may not encompass some of these concepts. Existing studies have used a variety of measures to examine the costs of caring, which limits generalizability of their findings (Day & Anderson, 2011; Najjar et al., 2009; Phelps et al., 2009). Brief definitions of the constructs that are most often discussed alongside compassion fatigue (i.e., burnout and secondary traumatic stress) are provided below, and were examined as separate constructs in the present study in order to determine whether there are indeed differences among these experiences among healthcare providers. Additionally, compassion satisfaction is included in this discussion as it is another method to gauge providers' stress response and can potentially buffer the impact of high levels of compassion fatigue, burnout, and secondary traumatic stress.

Compassion fatigue. Compassion fatigue is a comprehensive way of considering this response as it overwhelms the provider's competence and judgment, can threaten the quality of the therapeutic relationship, and may occur outside of a provider's consciousness. CF is encompassing of the individual and is understood to have a more rapid onset of symptoms in comparison to other related constructs such as burnout and secondary traumatic stress, which are likely to contribute to and/or reinforce CF (Ruyschaert, 2010). In contrast, compassion satisfaction is a phenomenon that gives one pleasure and joy in their work with others. It is important to acknowledge that compassion satisfaction and compassion fatigue may exist

simultaneously, although it is possible that the former may buffer the effects of the cost of caring. These related constructs are defined and distinguished from compassion fatigue below.

Burnout. Maslach (1982) created the term *burnout* to describe a syndrome of “emotional exhaustion, depersonalization, and reduced personal accomplishment that [occurs in response to] ... the chronic emotional strain of dealing extensively with other human beings, particularly when they are troubled or having problems” (Moore & Cooper, 1996, p. 82). Traditionally, burnout is conceptualized as a response to prolonged demands of occupational stress, high expectations and minimum support in a work environment (Collins & Long, 2003; Thompson et al., 2014). For example, burnout is understood to occur when ongoing exposure to occupational stress (e.g., caseload size, organizational politics) coupled with continuous deprivation of reward and feelings of achievement increase in intensity over time within an organizational environment (Sprang, Clark, & Whitt-Woosley, 2007). Although the terms *burnout* and *compassion fatigue* are distinct phenomena, *burnout* is one of the components of *compassion fatigue* and therefore mutually reinforcing constructs (Stamm, 2010). However, they are often distinguished by burnout having a gradual onset, where as *compassion fatigue* has a rapid onset of negative symptoms (Stamm, 2010).

Secondary Traumatic Stress. Secondary traumatic stress (STS) is a natural response that occurs most frequently among psychotherapists working with trauma survivors (Pearlman, 2012) “regardless of race, gender, age or level of training” (Collins & Long, 2003, p. 418). This natural response is characterized by symptoms that are analogous to posttraumatic stress disorder (PTSD) in the Diagnostic and Statistical Manual of Mental Disorders, such as emotional exhaustion and depersonalization (Phelps et al., 2009). When clients share their traumatic history with a provider, through empathic concern and empathic responding the provider

becomes vulnerable to perceive the client's experience in a realistic way which can result in elevated empathic distress. In the reviewed literature, many researchers use the terms CF and secondary traumatic stress interchangeably because the phenomena result in an overlap of symptoms that include a natural response to repeated exposure to trauma in an empathic relationship (Phelps et al., 2009). Although Stamm 2010 describes STS as the second component of compassion fatigue, other studies suggest the terms have been used interchangeably and are often seen labeled as "secondary traumatic stress/compassion fatigue" (Heritage, Rees, & Hegney, 2018). Furthermore, STS is known as a response that occurs when mental and health care providers are reacting and responding to exposure of trauma. Where as compassion fatigue, can be experienced even when providers do not directly work with patients who have trauma. Additionally, the reasons for the interchange are in part due to Figley, who decided to rename secondary traumatic stress to CF as an attempt to soften the stigma that has been associated with the traumatic stress response that occurs in healthcare professionals (Sansbury, Graves, & Scott, 2015).

Compassion Satisfaction. In contrast to burnout and secondary traumatic stress, *compassion satisfaction* encompasses the positive aspects that buffer the effects of stressors in one's work. Compassion satisfaction is described as the amount of pleasure a provider receives from helping others and contributing to society. Specifically, it represents one's ability to receive gratification from giving care towards others who are suffering (Kelly, Runge, & Spencer, 2015). Collins and Long (2003) suggest that compassion satisfaction may serve as a protective function against developing CF, and research demonstrates that providers with high compassion satisfaction are often found to have relatively healthy coping skills and higher self-efficacy (Smart et al., 2014).

Factors Associated with Compassion Fatigue, Burnout, Secondary Traumatic Stress, and Compassion Satisfaction Among Mental Healthcare Providers

Empirical studies have validated the presence of compassion fatigue and tested its association with a number of other conditions such as burnout, characterized by emotional exhaustion, depersonalization, and reduced feeling of personal accomplishment, that negatively impact professions and the individuals/clients under their care (Morse, Salyers, Rollins, Monroe-DeVita, & Pfahler, 2012). Further, there are a number of studies that have considered factors that contribute to CF within healthcare providers, although few studies have looked specifically at this relationship with regard to mental healthcare providers across settings (Morse et al., 2012; Rossi et al., 2012; Sprang et al., 2007). A provider's personal demographic characteristics (e.g., age, sex, racial/cultural identification), as well as work factors related to their level of experience, setting, and the population they serve have been considered to understand who may be at greater risk for developing compassion fatigue.

Demographic Correlates

The relationship between demographic factors and compassion fatigue has been empirically tested primarily within the nursing field but has more recently been considered with other healthcare providers. Age, gender, and race working in the field remain important factors to research with respect to CF because studies have yielded mixed findings about the relationships between these variables.

Age of provider. Studies exploring the correlation between age and compassion fatigue have generally demonstrated that younger healthcare professionals are at risk of experiencing higher levels of burnout and compassion fatigue (Roy et al., 2013; Craig & Sprang, 2010; Moore & Cooper, 1996). Sacco, Cieurzynski, Harvey, and Ingersoll (2015) conducted a study where they explored the prevalence of compassion satisfaction and CF among critical care nurses using the

Professional Quality of Life (ProQOL) Scale, which incorporates two aspects, positive (compassion satisfaction) and negative (compassion fatigue), with CF broken into two subscales: burnout and secondary traumatic stress. The results found that nurse's age had a significant impact on one's level of compassion satisfaction, burnout and secondary traumatic stress. Younger nurses were at greater risk for CF, whereas nurses above 50 years of age scored higher on compassion satisfaction and lower on the ProQOL burnout and secondary traumatic stress subscales. (Sacco et al., 2015).

A study by Kelly, Runge, and Spencer (2015) investigated CF and compassion satisfaction in acute care nurses across several departments in a hospital setting located in the southwestern United States. Four hundred and ninety-one nurses completed the ProQOL Scale as well as an investigator-derived questionnaire which included demographic questions (Kelly et al., 2015). Results indicated that nurses ages 21-33 were more likely than nurses 34 and above to experience high levels of burnout and CF and lower levels of compassion satisfaction. In contrast, nurses aged 50-65 indicated higher levels of compassion satisfaction. There were no notable differences across nursing specialties, units, and/or departments (Kelly et al., 2015). However, these findings cannot necessarily be generalized across mental health disciplines, and it would be important to learn how compassion fatigue affects mental healthcare providers of different age groups.

Provider gender. Many women are drawn to enter professions aligned with traditional gender roles which ensue qualities of helping and nurturance, thus resulting in the increased number of females represented within the mental healthcare professions. The U.S. Department of Labor (2017) reports having 69% female psychologist, 72% female counselors, and 83% female social workers. Although significant findings are relatively sparse and conflicting, the existing

literature suggests gender as a possible predictor for CF. Thompson et al. (2014) conducted an online study assessing the relationship between gender, perceived working conditions, and CF among mental health counselors. They found that female counselors were more likely to report CF; however, gender did not remain a significant predictor when accounting for counselors' perception of working conditions. This finding suggests that there may be a complex relationship between gender and CF to explore further.

According to Sprang et al. (2007), being of the female gender enhanced the risk of compassion fatigue and burnout. The role of gender in the development of CF, burnout, secondary traumatic stress and compassion satisfaction has not been well understood and is somewhat restricted by the overrepresentation of women in the mental healthcare field and research study respondents (Sprang et al., 2007). According to Moore and Cooper (1996), the relationship between gender of a provider and stress and burnout is less clear and may be dependent on the environment and culture of the work setting. Negash and Sahin (2011) commented on perceived differences between men and women in work settings, suggesting female therapists to have a greater risk of developing symptoms of CF than men due to the perceived family responsibilities and differences in salaries (Nagesh & Sahin, 2011). In contrast, Moore and Cooper (1996) found that males have a higher attrition rate from family services agencies than females due to burnout. Due to the lack of consistency within the literature, which may be partially attributable to differences in the female to male ratio in the field, it is important to continue to further research this area in attempt to obtain a clearer understanding of CF rates among female and male mental healthcare providers.

Race of provider. There has been little to no discussion in the CF literature regarding the relationship of race and prevalence rates of CF. Many studies have a disproportionate number of

White participants participating in these research studies, limiting the possibility of examining racial differences. For example, in Lee, Veach, MacFarlane, and LeRoy's (2015) investigation of "Who is at risk for compassion fatigue?" out of the 402 participants, 380 identified as White. In Thompson et al.'s (2014) investigation of exploring predictors of CF, their national sample comprised of 213 mental health counselors and 179 of them identified as White. Many other studies of CF leave this demographic variable out of their study (Cicognani, Pietrantonio, Palestini, & Prati, 2009; Craig & Sprang, 2010). The Labor Force Statistics from the Current Population Survey reported the breakdown of employed psychologists in the United States by the following races in 2015 as follows: 2% African American, 1% Asian, and 3% Hispanic psychologists; other racial groups were not represented in this report (U.S. Department of Labor, 2016). The racial composition of mental healthcare providers with other degrees such as counselors and social workers is more representative of the American population (U.S. Department of Labor, 2016) and therefore important to include non-White racial groups in research to understand whether and how ethnically diverse providers experience compassion fatigue. It is possible that they encounter similar or higher rates of CF than their White counterparts due to a lack of role models or mentors, perceived discrimination, or feeling forced to fill gaps in service delivery to clients who are linguistically and culturally similar to them (American Psychological Association, 2015).

Workplace Correlates

Years of experience. It is important to distinguish research related to age and years of experience as they are related but separate factors; for example, mental health professionals may have entered the field at a later age due to a career change, or may have had the educational background without working in the field until later in their lives. In general, the data examining

the association between CF and years of experience in one's field are generally consistent and suggest that experience is inversely related to compassion fatigue. Roy et al. (2013) found that a mental health provider's number of years in the field was a risk factor and illustrated that providers holding less tenure in their position are at greater risk of developing compassion fatigue. Similarly, Kelly et al. (2015) found nurses with fewer years of experience indicated higher levels of compassion satisfaction; there were no notable differences across nursing specialties, units, and/or departments. Furthermore, research which examines years of experience and its relationship to CF among psychiatrists and master level clinicians has yielded similar trends to the nursing literature; professionals who are newer to their field tend to report higher levels of CF than more experienced professionals (Craig & Sprang, 2010; Moore & Cooper, 1996). Despite the consistency in findings thus far regarding years of experience and CF, there appears to be limited action taken to prevent CF and/or provide greater support to professionals new to the field. Additional research into this relationship with mental healthcare providers working in a variety of settings may provide further evidence regarding when it may be most necessary to promote awareness about the development of CF and support professionals accordingly.

Setting. Mental healthcare providers from a variety of disciplines such as nursing, social work, counseling, psychology, psychiatry, and case management who provide direct services to individuals with complex mental health needs may be at particular risk of developing compassion fatigue (Roy, Wong, White, & Heaslip, 2013). The settings in which a mental healthcare provider can work include private practice, hospitals, universities, and community agencies. Mental health professionals work in settings vulnerable to severe emotional exhaustion and psychological tension that are beyond the normative occupational stressors (Moore &

Cooper, 1996). For example, Lent and Schwartz (2012) investigated the relationship between clinical work setting and burnout and found that counselors working in community mental health outpatient settings reported more burnout than counselors working in private practice and inpatient settings. The authors explained that differences were related to emotional exhaustion and organizational characteristics (Lent & Schwartz, 2012). Providers working in institutional and organizational settings such as community mental health, public mental health agencies and hospitals face a higher risk of CF due to environmental factors characterized by work overload, restricted schedules, and compliance with organizational policies (Lent & Schwartz, 2012; Negash & Sahin, 2011).

Population type. Providing services for populations with certain types of diagnoses that are more severe and/or chronic may also place mental healthcare providers at greater risk of developing compassion fatigue. Specifically, providers who regularly work with clients suffering from severe depression, child abuse, trauma, and death/grief are at higher risk for experiencing CF compared with others working in the mental health profession (Negash & Sahin, 2011). In addition, providers working with clients who threaten their own or others' safety, have suicidal thoughts or ideation, and present with a previous history of trauma history may also be more vulnerable to experiencing compassion fatigue (Negash & Sahin, 2011).

Health and Coping Correlates

Mental healthcare providers' wellbeing has received particular attention since the late 1990s with studies recognizing the secondary stress impacts of a provider in relation to their overall wellbeing (Phelps, Lloyd, Creamer, & Forbes, 2009). Compassion fatigue manifests in a variety of ways through signs and symptoms that can disrupt a provider's overall wellbeing (Showalter, 2010). According to the Oxford English Dictionary, 'wellbeing' is defined as the

“state of being or doing well in life; happy, healthy or prosperous condition; moral or physical welfare of a person or community” (OED Online, 2006). Phelps et al. (2009) believe the definition of wellbeing includes an ability to physically and psychologically manage the stress of professional and social demands. Therefore, it is suggested that an individual with a positive overall wellbeing has the ability to flourish physically, mentally, emotionally, socially, and spiritually (Phelps et al., 2009). A description of each category and relevant empirical and theoretical data are presented in greater detail below.

Medical health conditions. While physical health is an essential component of overall wellbeing and is often the most visible and detectable dimension of health, no published studies have considered the relationship between CF and medical health diagnoses among mental healthcare providers. Theoretical accounts explained by existing research in health psychology identify chronic physical fatigue, insomnia, hypersomnia, headaches/migraines, an increased susceptibility to illness or impaired immune system, weight gain/loss, somatization and hypochondria as potential physical health outcomes of CF (Boyle, 2015; Collins and Long, 2003; Khan, Khan, & Malik, 2015; Negash & Sahin, 2011; Slatten, Carson & Carson, 2011). Although empirical data on physical health and CF is lacking among mental healthcare providers, stress-inducing events are believed to have direct impacts on physical health by causing negative emotions (e.g., fear, anxiety, depression), which trigger physiological responses within the immune system and other biological processes, and influence our health behaviors (e.g., less exercise, more binge eating) that can increase our risk of developing poor healthy lifestyle behaviors (Cohen, Janicki-Deverts, & Miller, 2007).

Although health psychology explains the effects of stress on individuals, limited research has been conducted to understand how healthcare professionals fare with regard to their physical

health. Using the National Health Interview Survey from 2002-2013, Dayoub and Jena (2015) analyzed healthcare outcomes of physicians, dentists, chiropractors, pharmacists, physician assistants, therapists, and nurse practitioners with regards to obesity, diabetes, hypertension and coronary artery disease. They compared the overall health trends of these healthcare professionals and to the general population. Whereas prevalence rates of obesity, diabetes, and hypertension were lower among healthcare professionals in comparison to the overall population, these health risks increased over time at a similar rate to the general population (Dayoub & Jena, 2015). Because some of these physical health outcomes such as obesity develop over years, and longitudinal studies are costly and time intensive, other researchers have tended to rely on related indicators of health risk such as blood pressure (Kramer & Son, 2016). It is important to note that the studies discussed above did not examine CF among medical healthcare providers, but found that this population was susceptible to physical health challenges due to their occupation, which is focused on caring for others, and can be chronically stressful as in the mental healthcare field. If we can draw from prior studies conducted with medical healthcare professionals, it is crucial to examine the impact of CF on mental healthcare providers' physical health and wellbeing as any professional in the helping field is fundamental in sustaining society's healthcare (Kramer & Son, 2016).

Physical activity, diet and sleep. Healthcare professionals play an integral role in health promotion and are credible sources of physical and mental health information. In particular, physical exercise, defined as "any force exerted by skeletal muscles that results in energy expenditure above resting level," and healthy diet are fundamental in maintaining an individual's overall wellbeing (Singh & Purohit, 2012, p. 563). Medical health professionals are aware of the advantages of physical activity and healthy eating in the prevention and reduction of diseases

such as coronary heart disease, diabetes, colon cancer, hypertension, and obesity (Burdick et al., 2015). Mental healthcare providers, in turn, become aware through their training, of the benefits of physical activity in increasing mood for those who have anxiety and depression (Weir, 2011). The current recommended guidelines of physical activity by the Center for Disease Control and Prevention (CDC) for adults are to participate in 150 minutes of moderate-intense physical activity or 75 minutes of vigorous-intensity activity and two or more days a week of muscle strengthening (U.S. Department of Health and Human Services, 2011). Despite this recommendation and awareness, many healthcare professionals encounter barriers to maintaining a regular physical activity regimen, which include working irregular schedules which are prone to deregulated sleeping patterns, development of unhealthy eating habits, and overuse of caffeine (Kramer & Son, 2016). There is little to no literature documenting the relationship between CF and mental healthcare providers' lifestyle decisions with respect to physical activity and caffeine consumption. However, Lombardo and Eyre (2011) identify healthy nutrition, sleep, and exercise as important ways to recover from CF, suggesting that negative health related behaviors may coexist with the presence of compassion fatigue.

Mental health professionals encounter stressors in various aspects of their life which can augment to the level of secondary stress and influence the choices they make to ameliorate and cope with the stressors (Kramer & Son, 2016). Specifically, changes in behavior at work, social activity, engagement in other lifestyle behaviors (e.g. physical exercise, consumption of substances) is often illustrated as ways of coping with the demands of the profession in response to compassion fatigue, burnout, and secondary trauma.

Substance use behavior. As mental healthcare provider's may engage in risky lifestyle behaviors to cope with CF, their choices can impact their own wellbeing in addition influence the

quality of care provided to society. Slatten et al. (2011) indicate that engagement in more destructive behaviors such as an increased use of substances can occur to cope with stressors. Saridi, Karra, Kourakos, and Souliotis (2016) highlight that the study of alcohol abuse by health professionals has been a topic of focus for decades. This concern of alcohol consumption has been evident in numerous studies. For example, Dayoub and Jena (2015) found that healthcare professionals reported lower rates of smoking and fewer sedentary activities, but higher rates of alcohol consumption compared to the general population. It has been estimated that 10%-15% of healthcare professionals will abuse alcohol or substances at some point in their career, although little is known specifically about mental healthcare providers (Saridi et al., 2016). Collins and Long (2003) identify substance misuse as a behavioral symptom of CF in which providers engage to cope with the high demands of their life as well as to manage CF and burnout. The prevalence rates of substance misuse among healthcare providers are concerning when health and mental health professionals are society's advocates of health and wellbeing.

Spirituality

Spirituality can be defined as a process that involves a “personal transformation, an encounter with transcendence, or a search for ultimate truth or an ultimate reality that is sacred to the individual” (Seybold & Hill, 2001, p.21). Similarly, religion can contain a similar process, and may also include specified behavior patterns and adherence to predetermined religious practices (Seybold & Hill, 2001). Beliefs in a higher power and that of a shared religious community may have an influence in coping with compassion fatigue (Phelps et al., 2009). Although spirituality and religion have been identified as critical ways of coping with stress, loss, and illness for centuries through a cultural perspective, how spiritual experience supports one's well being is not well researched (Galek, Flannelly, Vane, & Galek, 2005).

Traditionally, comprehensive health measures did not include inquiry in regards to religion and spirituality to evaluate the health needs of patients. Routinely, spiritual health was omitted from initial health assessments, however, as empirical research evaluates the role of spirituality and religion on health, agencies like the Joint Commission on Accreditation for Healthcare Organizations (JCAHO) and the Commission on Accreditation of Rehabilitation Facilities (CARF) have shifted the direction of spirituality's role in healthcare and mandates spiritual assessment as part of routine history to ensure a client's spiritual needs are arranged for and are met. Because spirituality encapsulates something intangible and mystical, the role of spirituality in coping has been ambiguous (Galek et al., 2005). Despite this ambiguity, Seybold and Hill (2001) explain that the literature from disciplines like psychology, medicine, and education have increasingly been investigating the role of religion and spirituality as ways of coping. However, the investigations of this role suggest that religion and spirituality usually but not always play a positive role in coping (Seybold & Hill, 2001).

Before understanding the impact of spirituality and religion on providers with compassion fatigue it is important to highlight that approximately 50% of healthcare professionals describe themselves to be agnostic or atheist, in comparison to 3% of the American population (Seybold & Hill, 2001). Becoming aware of how providers find meaning and purpose in the midst of suffering lends to understand how spirituality can support mental healthcare providers (Puchalski, 2012). Professionals who encounter the stress of working with their clients' trauma and suffering may experience spirituality as both a protective factor that buffers them from developing CF, but also potentially as a risk factor. As providers continue to face exposure to secondary trauma, they may experience a shift in their cognitive schema about safety to increased sense of vulnerability, power to a sense of hopelessness, and meaning to a loss of

knowing their purpose (Collins & Long, 2013). The shaking and questioning of their fundamental life's purpose can result when providers experience challenges healing certain patients, encounter traumatic situations with their clients, feel inadequate in their role as a helper and can induce great insecurity (Phelps et al., 2005). Regardless of religious or spiritual affiliation, aspects of questioning provider's role, pervasive sense of hope, loss of connection and compassion can shadow the intrinsic need to find meaning and purpose in their lives (Puchalski, 2012). Therefore, looking into a provider's spiritual health and compassion fatigue will emphasize the need to consider coping resources to restore the hope and compassion of mental healthcare providers.

CHAPTER III

Research Questions

While there is a growing body of empirical research that has assessed the existence, predictors, and consequences of compassion fatigue and related secondary stressors, there remain many gaps in what is known about how these processes impact mental healthcare providers. This project aimed to gain a deeper understanding of the relationship between demographic variables of age, gender, race, discipline, years of experience, clinical setting, type of population and CF among providers who work in the mental health profession. Additionally, providers' physical health and lifestyle behaviors were examined in relation to CF. The frequency of illness and engagement in health related behaviors such as consumption of caffeine, alcohol or drugs, level of exercise, sleep patterns, and coping through spirituality informed the impact of CF on a mental healthcare provider's overall wellbeing. Specifically, the current study proposed to answer the following questions:

Question 1: To what degree do mental healthcare providers experience compassion fatigue, burnout, secondary traumatic stress and compassion satisfaction?

Hypothesis 1: Based on empirical data presented above, it was hypothesized that the majority of mental healthcare providers in this study would report average to high levels of compassion fatigue, burnout, and secondary traumatic stress, with a minority of participants reporting average to high levels of compassion satisfaction.

Question 2: What is the association between demographic variables (age, gender, years in the field, and race) and occupational variables (educational background and setting) of mental healthcare providers and compassion fatigue, burnout, secondary traumatic stress and compassion satisfaction?

Hypothesis 2a: Based on research that generally suggests that being younger, less experienced, and having less training is associated with greater vulnerability to stress in the healthcare professions, it was hypothesized that providers younger in age, providers with fewer years of experience, and providers with lower levels of education would experience higher levels of compassion fatigue, burnout and or secondary traumatic stress.

Hypothesis 2b: Based on the existing research of ethnic and gender disparities, which suggests that minority groups may experience greater stress in their professional roles, it was hypothesized that providers identifying as female and/or from a racial minority group would experience higher levels of compassion fatigue, burnout and secondary traumatic stress.

Hypothesis 2c: Based on the existing research presented above, a provider's organizational setting has the potential to place providers at greater risk due to environmental factors such as large caseloads, restricted schedules, and limited organizational support. Therefore, it was hypothesized that providers who worked in community mental healthcare settings would experience the highest levels of compassion fatigue, burnout, or secondary traumatic stress. While participants at non-outpatient settings such as inpatient settings, hospitals and private practices will experience lower levels of compassion fatigue, burnout, and secondary traumatic stress.

Question 3: What is the relationship between a provider's physical health, lifestyle behaviors, and compassion fatigue, burnout, secondary traumatic stress and compassion satisfaction?

Hypothesis 3a: Based on the empirical research on stress and health psychology, it was hypothesized that providers with higher levels of compassion fatigue, burnout, or secondary traumatic stress may indicate poorer physical health illustrated by having one or more medical conditions such as high blood pressure, high cholesterol, diabetes, headaches/migraines or obesity.

Hypothesis 3b: Based on the empirical research on stress and mental health, it was hypothesized that providers with higher levels of compassion fatigue burnout, or secondary traumatic stress would indicate their own mental health challenges illustrated by having one or more mental health conditions such as anxiety, depression, or other mental health diagnosis.

Hypothesis 3c: Based on the supporting research on stress and coping, it was hypothesized that providers with higher levels of compassion fatigue, burnout or secondary traumatic stress will report more negative health related behaviors such as: disrupted sleep patterns, greater consumption of caffeine, drugs, and alcohol, and less physical exercise.

Question 4: What is the relationship between compassion fatigue, burnout, secondary traumatic stress, compassion satisfaction and providers' coping through spirituality?

Hypothesis 4a: Based on the research, which supports spirituality as a protective factor, it was hypothesized that providers reporting more spiritual coping experiences will indicate lower levels of compassion fatigue, burnout or secondary traumatic stress, and higher levels of compassion satisfaction.

CHAPTER IV

Method

Design

This study was conducted implementing a cross-sectional design with a quantitative approach to assess the degree of compassion fatigue reported by mental healthcare providers and to understand the relationship of compassion fatigue and a providers' demographics, physical health, lifestyle behaviors, and spiritual experience. All data were obtained through self-report questionnaires that were administered through the online survey service SurveyMonkey.

Procedures

Once IRB approval from the University of San Francisco was granted in May 2017, investigator recruited participants through a method of convenience snowball sampling. Investigator contacted mental/behavioral health agencies and organizations, USF faculty, professional organizations, professional mentors/advisors, and peers from the constructed list (Appendix A). Utilizing this list, the investigator contacted a representative of that agency such as a program director and sent an email inviting and requesting their participation in the study.

Participant recruitment. All of the recruitment occurred through online administration of the survey through a standardized email sent to staff of mental health/ behavioral health agencies (Appendix B). Mental healthcare providers who were interested in the study were directed to the online survey at <https://www.surveymonkey.com/r/CFMHP17> for further information in regards to the study. An initial screening questionnaire determined if the participant was eligible for the study (Appendix C). Mental healthcare providers were deemed eligible to participate if they met all of the following inclusion criteria:

- a) employed at least half time and providing mental health services to clients of mental/behavioral health needs
- b) employed by an agency, hospital or any organization that provides mental/behavioral healthcare

e.g. Those working within a mental health agency setting include the following but are not limited to: in-patient hospitals/treatment facilities, in-home-based treatment programs, outpatient treatment programs, community mental health, and integrated behavioral healthcare settings

- c) identified as a Mental Healthcare Provider

Participants were excluded from the study if they were:

- a) currently unemployed
- b) currently retired from the field

Participants who were deemed eligible were directed to an electronic informed consent form and continued to the survey after they provided their electronic signature and email address (Appendix D). On average it took participants approximately 11 minutes to complete the survey. All participants who completed the survey were entered in a drawing for the opportunity to win one of five \$25 gift cards to Amazon. After data collection was complete, five participants were selected at random through a function of Microsoft Excel and awarded their gift card through the email address provided by participant.

Participants

There were 229 mental healthcare providers who agreed to participate and started the survey. However, 81 of these participants did not complete one or more of the measures (Demographics, ProQOL-5, and Daily Spiritual Experience Scale) and were therefore excluded

from the analyses. Of the 148 participants who completed the survey, 11 participants who identified as current students did not meet all of the eligibility criteria, resulting in a total of 137 participants (see Figure 3 for a Preferred Reporting Items for Systematic Reviews and MetaAnalysis (PRISMA) flow diagram).

Of the 137 participants in the study, 82% were females, 72.9% self-identified as White; and participants' ages ranged from 25-74, with the mean age being 41.67 ($SD=11.49$ years). Fifty-six percent of participants held a doctoral or medical degree (psychologist and psychiatrist), 38% were master level clinicians (e.g., social worker, marriage and family therapist, licensed mental health counselors), and 6% were bachelor level providers (e.g. behavioral health technicians and psychiatric mental health nurse). On average, providers had been in the field for 9.6 years ($SD= 9.48$), with a wide range of number of years in the field (1-44 years). Sixty percent of providers worked in non-out-patient settings, which was categorized by including in-patient, psychiatric units/hospitals, residential settings, prisons, and jails. Participants worked with a wide range of populations with considerable overlap in terms of age range and diagnosis. Of note, 65% of providers identified working with individuals aged 18-65, 70% of providers had patients on their current caseload who had experienced trauma, and 52% of providers indicated they currently supported clients with suicidal risks. See Table 1 for all participant demographic details.

Measures

Demographics. Demographic information was collected from all participants, which included their age, gender, race, relationship status, educational and employment history, work setting, years in the field, and population served. As demographics can consist of many different components, this research study also focused on obtaining a history of physical health where

participants were asked about their current physical health, which was assessed by the presence of medical and mental health conditions. Participants were also asked about specific lifestyle behaviors such as level of physical activity, consumption of substances, and daily amount of sleep (Appendix E).

Physical activity. Providers reported the frequency with which they engaged in leisure and structured exercise (per day/week/month). Leisure activities included hiking, biking, and walking, whereas structured forms of exercise could include strength training in gyms, running, or involvement in sports.

Consumption of substances. Overuse of substances such as alcohol and drugs can alter one's mood, have addictive tendencies, and may contribute to negative health and mental health outcomes. This study asked participants to report the type of substance (e.g. caffeine, alcohol, cigarettes, and other drugs) and frequency intake of these substances on a daily basis.

Medical self-care. Participants were also asked to indicate when they last saw a medical provider and what actions they typically take when faced with illness to assess the level of self-care they practice with regard to their own well-being. For example, when signs and symptoms of illness occur, does the provider choose to seek medical consult?

Sleep. Participants were asked to indicate how long it takes for them to fall asleep; how many hours of sleep they get per night; if they had trouble staying asleep through the night on most days, if it takes them a while to fall asleep, if they wake up at night often, feel unrested in the morning, and or feel chronically sleepy; as well as to rate their overall sleep.

Provider stress response. For this study, providers' compassion fatigue, burnout, and secondary traumatic stress (collectively referred to as "stress response") were measured using the Professional Quality of Life (ProQOL; Stamm, 2009) Version 5 (Appendix F). The ProQOL is a standardized, validated tool designed to measure a variety of symptoms and behaviors reflecting characteristics of burnout, secondary traumatic stress, and CF. This is a 30-item closed ended questionnaire that asks respondents to use a five-point Likert scale (1-5) where 1 = *Never*, 2 = *Rarely*, 3 = *Sometimes*, 4 = *Often*, and 5 = *Very Often*. In scoring the scale, items 1, 4, 15, 17, and 29 are reverse scored. The ProQOL is the most commonly used inventory to measure CF and has been found to be reliable and valid demonstrated by good convergent and construct validity (Stamm, 2010). Additionally, this instrument is demonstrated to have discriminant validity, and has supported the use of the instrument across diverse samples (Stamm, 2010). A summary of the scoring instructions (Stamm, 2010) for each of the scales measuring provider stress response is below.

Compassion fatigue. For this study, the ProQOL manual was utilized to guide the calculation of compassion fatigue, and was calculated by first reversing the scores for 1, 4, 15, 17, and 29 and then summing all the items on the ProQOL scales. Higher scores suggest greater compassion fatigue. The ProQOL manual does not indicate cutoff scores for categorizing one's level of compassion fatigue and there is limited discussion about this in other empirical studies using the ProQOL (Hertiage, Rees, & Hegney, 2018). For these reasons, the score for compassion fatigue was used continuously in all analyses.

Burnout. Burnout measures a feeling of hopelessness and lowered sense of accomplishment. Item scores for 1, 4, 15, 17, and 29 are reversed, and the total burnout score is calculated by summing items 1, 4, 8, 10, 15, 17, 19, 21, 26, and 29. The raw

score total for the burnout subscales ranges from 10-50. After scoring, the scores were interpreted according to the following: < 22 is indicative of a *low* level of burnout; 23-41 is indicative of *average* level of burnout; and 42 and greater indicated *high* levels of the burnout (Stamm, 2010). Cronbach's alpha for the burnout subscale is .75 for burnout. In the current study, Cronbach's alphas were calculated for burnout using the *psych* package in R, and showed a satisfactory level of reliability: $\alpha=.82$.

Secondary Traumatic Stress. The secondary traumatic stress subscale evaluates the potential distress providers are faced with due to the nature and exposure of their work. In scoring this scale, items 2, 5, 7, 9, 11, 13, 14, 23, 25, and 28 are summed; the sum of the raw scores ranges from 10-50. The secondary traumatic stress scale was scored and interpreted according to the following: < 22 is indicative of a *low* level of the construct; 23-41 is indicative of *average* level of the construct; and 42 and greater indicated *high* levels of secondary traumatic stress (Stamm, 2010). Cronbach's alpha for secondary traumatic stress is .81. In the current study, Cronbach's alphas were calculated for secondary traumatic stress using the *psych* package in R, and showed satisfactory levels of reliability: $\alpha=.83$.

Compassion satisfaction. The ProQOL also includes a *compassion satisfaction* subscale, which is used to measure the pleasure derived from a provider's work. When scoring this scale, items 3, 6, 12, 16, 18, 20, 22, 24, 27, and 30 are summed. The raw score total for compassion satisfaction ranges from 10-50. Once the scores are calculated, the scores were interpreted according to the following: < 22 is indicative of a *low* level of compassion satisfaction; 23-41 is indicative of *average* level of compassion satisfaction and 42 and greater indicated *high* levels of compassion satisfaction (Stamm, 2010). The

ProQOL manual reports Cronbach's alphas .88 for compassion satisfaction. In the current study, Cronbach's alpha was calculated using the *psych* package in R, and results showed satisfactory levels of reliability: $\alpha=.93$ for compassion satisfaction.

Coping through spiritual health. The Daily Spiritual Experience Scale (DSES; Underwood, 2006; Appendix G) is a 16-item self-report measure which was used to investigate a mental healthcare provider's ordinary spiritual experiences which included awe, inner peace, giving and receiving compassionate love, and feeling thankful for their role in their daily life. Respondents use a six-point Likert-scale for items 1-15 as follows: 1= never, 2 = once in a while, 3 = some days, 4 = most days, 5 = every day, 6 = many times a day. Item 16 is answered using the following scale: 1 = not at all=1, 2 = somewhat close, 3 = very close, and 4 = as close as possible. A total score is calculated by summing all 16 items, and higher scores are indicative of more frequent spiritual experiences. The DSES has been used in numerous health studies, social science research, and program evaluations. This measure has been validated cross-culturally, and has been translated into over forty languages. Cronbach's alpha is consistently above 0.90 according to psychometric studies, and for the current sample was found to be 0.95.

CHAPTER V

Results

Data were organized and analyzed using R statistics with the support of a statistical consultant.

Descriptive Results

As previously mentioned, detailed demographic characteristics and employment history of mental healthcare providers are further described in Table 1. Among participants, 65% of providers identified working with individuals aged 18-65, 70% of providers endorsed working with populations who had experienced trauma, and 52% of providers indicated they supported clients with suicidal risks. The majority of the providers indicated that they worked with multiple types of populations, which highlights the overlap between the various categories. For example, a provider working with children could also be working with trauma, along with other types of populations and diagnoses of patients. Due to this overlap, and difficulty in distinguishing differences, it was determined (in conjunction with a doctoral level statistical consultant) that it would not be valid to conduct specific analyses regarding compassion fatigue and type of population.

Seventy-two percent of participants reported at least one physical or mental health condition; the health conditions with highest prevalence within this sample were anxiety (33%), depression (26%), headaches/migraines (20%), chronic pain (9%), hypertension (7%), and insomnia (7%). Sixty-two percent of the participants reported that they consume caffeine 5+ days per week, while 63% reported drinking 1-2 alcoholic drinks per day, and 93% reported never smoking cigarettes. Furthermore, 82% reported engaging in physical exercise for at least 30 minutes or more daily, and 56% rated their overall sleep as *average, poor, or very poor*. The

physical/mental health and lifestyle behaviors of mental healthcare participants are listed in Table 2. An analysis of CF in relation to mindfulness and drugs other than alcohol was not conducted because there was not a sufficient number of providers who endorsed these items on the questionnaire (92% of providers reported not using other drugs; 66% of providers had an irregular mindfulness practice or had never engaged in it previously).

Compassion fatigue scores ranged from 37-95 ($M = 61.92$, $SD = 12.51$). The distribution of CF scores can be seen in Figure 4, illustrating a range of compassion fatigue experienced among providers. Table 3 lists mean scores, standard deviation, and number of participants which fell into the low, average, or high scales on each of the ProQOL subscales.

Table 4 shows the descriptive correlations between secondary stress variables among demographic, occupational demographic, physical/mental health, lifestyle behaviors, and spirituality. The results indicate significant negative association between compassion satisfaction and burnout ($p < .001$), compassion fatigue ($p < .001$) and physical/mental health diagnosis ($p < .05$). However, findings suggest a significant positive association between compassion satisfaction and spirituality ($p < .001$) and both structured ($p < .05$) and leisure forms of exercise ($p < .01$). As expected, results indicated burnout having a significant positive association with secondary traumatic stress (ST) ($p < .01$), CF ($p < .01$), physical ($p < .001$) and mental ($p < .01$) health diagnosis, as well as a significant negative associate with spirituality ($p < .001$), exercise and sleep. Results of ST exhibited a positive significant association between CF ($p < .001$), physical ($p < .01$)/mental health ($p < .05$) diagnosis, while a negative significant association with average hours of sleep per night ($p < .05$). Additionally, CF resulted in a positive significant association with physical and mental health diagnosis, and negative significant association spirituality, physical/mental health diagnosis, and average hours of sleep. Spirituality indicated a

positive association with average hours of sleep per night ($p < .001$), and negative significant association with mental health diagnosis ($p < .05$). Structured exercise resulted in having a strong positive association with leisure exercise ($p < .001$). Furthermore, leisure exercise suggested a positive significant association with average hours of sleep per night and age with a significance of $p < .05$, while indicated an inverse association with average time it takes to fall asleep and mental health diagnosis. The average hours of sleep per night had a negative association with average time it takes to fall asleep per night ($p < .01$). The time it takes to fall asleep per night illustrated a strong positive association with physical health diagnosis ($p < .001$). Physical health diagnosis had a significant inverse relationship with race ($p < .01$). Lastly, age had an inverse significant association with gender ($p < .05$).

DSES scores ranged from 17 – 93 ($M = 51.02$, $SD = 17.31$). The distribution of DSES scores can be seen in Figure 5.

Question 1: To what degree do mental healthcare providers experience compassion fatigue, burnout, secondary traumatic stress and compassion satisfaction?

Hypothesis 1: Based on empirical data presented above, it was hypothesized that the majority of mental healthcare providers in this study would report average to high levels of compassion fatigue, burnout, and secondary traumatic stress, with a minority of participants reporting average to high levels of compassion satisfaction.

This hypothesis was partially confirmed, as there was variability in the amount of experienced compassion fatigue, burnout, secondary trauma and compassion satisfaction among mental healthcare providers. Scores for compassion fatigue ranged from 37 to 95 ($M = 61.92$, $SD = 12.51$). Scores on the burnout scale ranged from 13 to 36 ($M = 22.34$, $SD = 5.35$), with a majority (55.5%) of providers scoring in the low range (22 or below). Providers' secondary

trauma scores ranged from 11 to 32 ($M=19.62$, $SD=4.57$), and 66% percent of providers scored in the low range (22 or below). A majority of providers (62%) experienced average levels of compassion satisfaction (23-41), with scores ranging from 18 to 50 ($M=39.52$, $SD=5.96$).

Question 2: What is the association between demographic variables (age, gender, years in the field, and race) and occupational variables (educational background and setting) of mental healthcare providers and compassion fatigue, burnout, secondary traumatic stress and compassion satisfaction?

Hypothesis 2a: It was hypothesized that providers younger in age, years of experience, and level of education would experience higher levels of compassion fatigue, burnout and or secondary traumatic stress because of research suggesting that being younger is a vulnerability in the field of mental healthcare.

This hypothesis was not confirmed, as there was no significant correlations found between age or years of experience and compassion fatigue, burnout, secondary trauma and or compassion satisfaction. Results for provider's being younger in age and years of experience support the null hypothesis. Additionally, the results were contrary to the hypothesis: specifically, providers with a Master's degree reported marginally significantly less CF ($M=59.31$) than those with a doctoral degree ($M=63.92$), $t(126)=-4.61$, $p=0.05$).

Hypothesis 2b: Based on the existing research of ethnic and gender disparities, which suggests that minority groups may experience greater stress in their professional roles, it was hypothesized that providers identifying as female and/or from a racial minority group would experience higher levels of compassion fatigue, burnout and secondary traumatic stress.

Although men and women did not significantly differ in CF, burnout, or secondary traumatic stress, results indicated a weak trend for compassion satisfaction ($X^2(2)=5.37, p=.07$), which illustrated that women had slightly higher scores than men. A Welch two-sample t-test was conducted for this analysis because a Bartlett test indicated that there was unequal variance between the groups. Because of the relatively small sample size and non-significant p -value, this hypothesis was not confirmed.

Furthermore, due to the majority of the participants identifying as White, race was dichotomized into “White” and “non-White” in order to analyze between group differences. The hypothesis was not confirmed, as the analysis found no significant differences in compassion satisfaction, burnout, secondary traumatic stress or CF between White and Non-White participants.

Hypothesis 2c: Based on the existing research presented above, a provider’s organizational setting has the potential to place providers at greater risk due to environmental factors such as large caseloads, restricted schedules, and limited organizational support. Therefore, it was hypothesized that providers who worked in community mental healthcare settings would experience the highest levels of compassion fatigue, burnout, or secondary traumatic stress. While participants at non-outpatient settings such as inpatient settings, hospitals and private practices will experience lower levels of compassion fatigue, burnout, and secondary traumatic stress.

Providers who worked in community-based settings did not significantly differ on CF, burnout, secondary traumatic stress or compassion satisfaction compared with providers working in non-community based settings (see Table 6). The majority of providers (60.8%) indicated working in non-outpatient settings as defined earlier to include settings such as hospitals and

other in-patient/residential center. There were no significant differences between providers who worked in outpatient versus other non-outpatient settings on CF, burnout, and compassion satisfaction. However, providers who worked in outpatient settings had significantly higher secondary traumatic stress than providers who worked in other types of settings ($M_{\text{outpatient}}=20.63$, $M_{\text{nonoutpatient}}=18.93$), two-sample t-test, $t(127)=-2.10$, $p = 0.04$).

Question 3: What is the relationship between a provider's physical health, lifestyle behaviors, and compassion fatigue, burnout, secondary traumatic stress and compassion satisfaction?

Hypothesis 3a: Based on the empirical research on stress and health psychology, it was hypothesized that providers with higher levels of compassion fatigue, burnout, or secondary traumatic stress may indicate poorer physical health illustrated by having one or more medical conditions such as high blood pressure, high cholesterol, diabetes, headaches/migraines or obesity.

Binomial logistic regression was used to answer the question above. First, participants were coded on whether they had been diagnosed with a mental/physical health condition (0=no, 1=yes). Next, a logistic regression analysis was run and found that participants who scored higher on CF were more likely to have been diagnosed with chronic pain ($B=0.06$, $p = .02$), chronic headaches/migraines ($B=0.04$, $p = .03$), hypertension ($B=0.09$, $p = .003$), and were marginally significantly more likely to be obese ($B=0.04$, $p = .06$). Providers who scored higher on the burnout scale were more likely to be diagnosed with physical conditions such as chronic pain ($B=0.19$, $p = .001$), chronic headaches/migraines ($B=0.09$, $p = .02$), insomnia ($B=0.11$, $p = .04$), and obesity ($B=0.12$, $p = .02$). Participants with higher burnout were more likely to report hypertension ($B=0.13$, $p = .03$). Individuals who had higher scores on the secondary traumatic

stress scale were more likely to be diagnosed with chronic headaches/migraines ($B=0.10, p=.04$), insomnia ($B=0.20, p=.02$) and obesity ($B=0.13, p=.04$), however not significantly likely to be diagnosed with chronic pain. Mental healthcare providers who scored higher on compassion satisfaction were less likely to be diagnosed with chronic pain ($B=-0.09, p=0.05$). Participants with higher secondary traumatic stress were more likely to report hypertension ($B=0.16, p=.03$). The findings confirm this hypothesis; Table 2 further illustrates the relationship between physical health conditions and compassion fatigue, compassion satisfaction, burnout, and secondary traumatic stress.

Hypothesis 3b: Based on the empirical research on stress and mental health, it was hypothesized that providers with higher levels of compassion fatigue burnout, or secondary traumatic stress would indicate their own mental health challenges illustrated by having one or more mental health conditions such as anxiety, depression, or other mental health diagnosis.

Over 66.4% of mental healthcare providers indicated they were facing their own mental health diagnoses. Those mental healthcare providers who scored higher on CF were more likely to have been diagnosed with anxiety ($B=0.03, p=.02$) and depression ($B=0.06, p<.001$). Likewise, those providers who scored higher on the burnout scale were more likely to be diagnosed with anxiety ($B=0.08, p=.02$) and depression ($B=0.16, p<.001$). Individuals who had higher scores on the secondary traumatic stress scale were more likely to be diagnosed with anxiety ($B=0.09, p=.035$) and depression ($B=0.11, p=.02$). Mental healthcare providers who scored higher on compassion satisfaction were less likely to be diagnosed with depression ($B=-0.07, p=0.03$). The findings fully confirm this hypothesis; see Table 2 for details on the

relationship between mental health diagnoses and compassion fatigue as well as compassion satisfaction, burnout, and secondary traumatic stress.

Hypothesis: 3c: Based on the supporting research on stress and coping, it was hypothesized that providers with higher levels of compassion fatigue, burnout or secondary traumatic stress will report more negative health related behaviors such as: disrupted sleep patterns, greater consumption of caffeine, drugs, and alcohol, and less physical exercise.

In efforts to gain a better understanding of a provider's lifestyle behaviors, logistic regression (for binary outcome measures) and linear regression (for linear outcome measures) were used to predict lifestyle habits in relationship to CF scores. Results indicated that mental healthcare providers who scored higher on CF marginally significantly exercised less ($B=-0.02$, $p=0.05$). Providers who scored higher on compassion satisfaction exercised more ($B = 1.64$, $p=.002$) while those who reported greater burnout exercised less ($B = -1.54$, $p=.001$) (refer to Table 6).

Correlational analysis was also used to understand the relationship between CF, burnout, secondary traumatic stress, compassion satisfaction and lifestyle behaviors. Providers who experienced greater CF reported sleeping fewer hours each night on average (Pearson's $r = -0.24$, $p = .007$), although CF did not correlate with the length of time it took participants to fall asleep ($r = 0.11$, $p = .20$). Regarding the association between other ProQOL subscales and sleep, participants who experienced higher compassion satisfaction reported sleeping marginally significantly more hours each night on average (Pearson's $r = 0.17$, $p = .06$). Providers who experienced more burnout reported sleeping fewer hours each night ($r = -0.22$, $p = .01$). Participants who experienced more secondary traumatic stress reported sleeping fewer hours

each night ($r = -0.21, p = .016$), though secondary traumatic stress did not correlate how long it took participants to fall asleep ($r = 0.04, p = .68$).

When examining the relationship between compassion fatigue and alcohol consumption, consumption of caffeinated beverages (e.g., tea, coffee), or amount of cigarette smoking reported by participants, the results yielded no significant correlations. Similarly, neither burnout, secondary traumatic stress, nor compassion satisfaction scores correlated with alcohol use, consumption of caffeinated beverages (e.g., tea, coffee), or amount of cigarette smoking reported by participants, and therefore this hypothesis was only partially confirmed.

Question 4: What is the relationship between compassion fatigue, burnout, secondary traumatic stress, compassion satisfaction and providers' coping through spirituality?

Hypothesis 4a: Based on the research, which supports spirituality as a protective factor, it was hypothesized that providers reporting more spiritual coping experiences will indicate lower levels of compassion fatigue, burnout or secondary traumatic stress, and higher levels of compassion satisfaction.

There was a significant, inverse association between spirituality and compassion fatigue: mental healthcare providers who reported greater spirituality on the Daily Spiritual Experience Scale reported less CF ($r = -0.21, p = .02$). Participants who reported higher on burnout reported less spirituality ($r = -0.31, p < .001$). Participants who were higher on secondary trauma reported marginally significantly greater spirituality ($r = 0.15, p = .09$), while participants who scored higher on compassion satisfaction reported greater spirituality ($r = 0.29, p < .001$). The findings fully confirm this hypothesis.

CHAPTER VI

Discussion

This study aimed to assess the prevalence of compassion fatigue, burnout, secondary traumatic stress, and compassion satisfaction within various disciplines in the mental healthcare field. The study also sought to expand the literature in this area by understanding the relationships between the aforementioned phenomena and providers' demographic characteristics and wellbeing as measured by their physical and mental health, lifestyle behaviors, and spirituality.

Interpretation of Findings

Prevalence of compassion fatigue, burnout, secondary traumatic stress, and compassion satisfaction among mental healthcare providers

The first goal of this study was to determine the extent to which mental healthcare providers experience CF, burnout, secondary traumatic stress, and compassion satisfaction. When examining the distribution of CF scores among all mental healthcare providers, the majority of providers in this study fall within an “average” range, which is illustrated through a normal distribution (Figure 4). This finding is aligned with another study (Kelly et al., 2015), which assessed CF among 491 direct care registered nurses and found that participants reported average levels of compassion fatigue. Sprang, Clark & Whitt-Woosley (2007) found that “based on prevalence estimates in the literature” their sample of 1,121 licensed/certified behavioral health providers scored “somewhat lower than rates reported in other studies although no uniform measure of CF or consistent scoring parameters are evident in the empirical literature” (p. 271). This was a similar limitation this study faced, as there is no clear instruction on the ProQOL manual or subsequent literature that guides the scoring of CF. This lack of clarity in the

literature presumably contributes to the stress response terms being utilized interchangeably. Findings from the present study are consistent with the literature on prevalence and severity of compassion fatigue within the health professions and warrant further definition of cutoff scores that indicate at what level or degree of compassion fatigue there is cause for significant concern and/or intervention.

The findings of the current study also suggest that mental healthcare providers are not immune from experiencing CF or related stress responses. The culture of the mental health care field often accepts the assumption that training can serve as a protective factor and may provide greater awareness to cope with the exposure to a client's trauma (Nagesh & Sahin, 2011). However, a shift in the culture needs to accept the inevitable and natural responses created when hearing about and treating patients' mental health conditions and traumatic life experiences.

Demographic correlates

The relationship between demographic factors and CF, burnout, secondary traumatic stress, and compassion satisfaction is important to assess as differences may suggest possible points of intervention. Age, number of years of professional experience, gender, and race did not have a significant relationship with compassion fatigue, burnout, secondary traumatic stress, or compassion satisfaction in this study. These findings are contrary to other empirical accounts in which age and years of experience have found to correlate significantly with CF, burnout and STS (Crocker & Joss, 2016; Craig & Sprang, 2010; Moore & Cooper, 1996; Roy et al., 2013). In general, previous findings illustrated younger providers both in age and experience are at greater risks of experiencing stress responses.

Unique to our findings was that neither age (range 25-74 years old) nor number of years in the field (1-44 years) were significantly correlated with compassion fatigue, burnout,

secondary traumatic stress, or compassion satisfaction. Regardless of previous evidence illustrating older providers and more years of experience being a protective factor for CF, burnout and STS (Crocker & Joss, 2016) this distinct finding that a provider with very little experience looks generally the same with regard to CF compared to someone with a lot of years of experience suggests that all mental health providers are subjected to secondary stress regardless of the number of years in the field. This finding may be further explained by individual characteristics (e.g. own personal history of trauma), the accumulation of CF over the years as well as the intense empathic responses during earlier periods of employment, which were not factors that were assessed in this study. In addition, it may be that there was a convergence toward an average level of CF such that less experienced providers did not have as much accumulated stress or may be experiencing CF out of their immediate awareness, and more experienced providers may have learned how to cope with and/or prevent compassion fatigue over the years. This finding highlights the notion that CF is a construct that can exist at any point during a provider's career in the mental healthcare field.

The disproportionate number of participants between men ($n = 24$) and women ($n = 113$) is representative of the gender gap in the psychology workforce as identified by both the American Psychological Association (2015), as well as the U.S. Census Bureau (2006). Other studies that have examined the relationship between gender, compassion fatigue, burnout, secondary traumatic stress and/or compassion satisfaction have found the female gender being associated with higher levels of CF (Crocker & Joss, 2016; Sprang et al., 2007; Thompson et al., 2014). The majority of participants in previous studies have presented with similar gaps as females are highly represented in healthcare and social industries (Crocker & Joss, 2016). Although the study sample is comparable to the national breakdown in the mental healthcare

field, the number of men relative to women made it challenging to discern potential associations between a provider's gender, compassion fatigue and related constructs. However, the disproportion of females in mental healthcare positions may be associated with the positive aspects and meaning of their work; in particular females may tend to experience increased compassion satisfaction with regards to caring, increased pleasure and gratitude, and believing one's work can make a difference (Stamm, 2010).

In relation to race, there were a limited number of ethnic providers who responded to this study. Having increased variability in ethnic diversity would have allowed for conducting more nuanced analyses rather than having to dichotomize the race variable. This trend in lack of racial diversity is exhibited beyond this study, where the U.S Census Bureau (2006) reported 30% or one third of the population constitutes of racial minorities, this limited representation of racial diversity spills into the mental healthcare field, seeing limited number of ethnic mental healthcare providers. According to the APA (2015), the profession has become more diverse over time, such that "between 2005 and 2013, the percentage of racial/ethnic minority groups within the [psychology] workforce grew from 8.9% to 16.4%, compared to 39.6% [ethnic representation] for the overall workforce, and 25.8% for the general doctoral/professional workforce" (APA, 2015, p.1). Although racial diversity continues to expand, it is critical to note the disparities of race and gender in studies of compassion fatigue and related constructs, as previous research has not included or reported race as a variable (Cicognani et al., 2009; Craig & Sprang, 2010). Nonetheless, knowing that the majority of participants reported average levels of CF suggests that compassion fatigue can influence a provider regardless of age, sex, race or number of years in the field (Collins & Long, 2003).

Occupational demographics and compassion fatigue

When comparing outpatient versus in-patient/residential settings there were also no differences among providers' compassion satisfaction or burnout when the scores were categorized as "high," "low," and "average." However, results showed that participants who worked in outpatient settings scored higher on secondary trauma than providers who worked in in-patient settings. There are a number of reasons to attribute to this difference, one being a provider's exposure to primary or secondary trauma may be dependent on type of setting (Crocker & Joss, 2016). First, outpatient settings generally face greater organizational constraints, and often need to make difficult choices such as budget cuts, which result in lower salaries and increased caseloads. This strain on workplace conditions can contribute to a provider's CF and burnout and present increased risks of turnover. These organizational factors such as lower salary, high workload, and perceived organizational commitment to valuing employees contribute to higher scores on secondary trauma (The Social Work Policy, 2010). Additionally, providers in outpatient organizational settings often face hierarchal work environments and have less autonomy as their work may be monitored and overseen by program directors, office managers or supervisors (Negash & Sahin, 2011). Furthermore, outpatient settings may be subjected to a provider needing to adhere to organizational policies with productivity expectations of the agency, resulting in higher caseloads and fewer breaks between clients. In contrast, Najjar, Davis, Beck-Coon, & Doebbeling (2009) reported that providers working at non-outpatient settings may have an increased perception of supervisor support and organized delivery systems. Negash & Sahin (2011) also suggest that non-outpatient settings have a more positive work environment and provide integrated, higher levels of inpatient productivity, and greater total system revenue. Moreover, inpatient facilities may have an

environment with more coworker and organizational support, which are key factors in buffering against compassion fatigue (Najjar et al., 2009). Additionally, outpatient settings require providers to spend more time with clients, develop an ongoing therapeutic relationship with longer and more frequent sessions and potentially are exposed to hearing more narratives and traumatic history of patients. In contrast, in-patient settings are structurally organized around crisis management and stabilizing patients, with more acute care reducing the time a provider may spend with a client.

Contrary to the hypothesis, when comparing the level of CF between providers with a master's degree to providers with a doctoral degree, results indicated master level clinicians reported less CF than psychologists and psychiatrists. Both group of providers reported working with adults across the lifespan, had caseloads with trauma and suicidality, as well as had similar responsibilities of diagnosis and treatment. While meeting the emotional needs of clients, psychologists and psychiatrists in this study reported more CF possibly due to increased role responsibility towards their clients and their commitment to organizational roles. Similarly, Sprang and colleagues (2007) reported that a provider's discipline proved to be an important factor in compassion fatigue, and highlighted psychiatrists reporting higher CF than non-medical providers. Chronic exposure to clients' suffering combined with the responsibility of professional commitment places stress on a provider's ability to express compassion (Figley, 2012). The primary tasks of mental healthcare providers are to meet the needs of their clients, yet the nature of this work creates an occupational hazard of developing compassion fatigue. According to Mathieu (2007), there are other factors outside of occupational demographics such as provider's current life circumstance, history, coping style and personality which contribute to developing CF. The theory discussed how providers who care about their patients will eventually

develop a certain amount of CF with varying degrees of severity due to the combination of occupational and life stressors (Mathieu, 2007).

Health correlates and compassion fatigue

As a mental healthcare provider's physical health continues to receive little attention in empirical research, this study attempted to gain some insight around a mental healthcare provider's health and its relation to compassion fatigue. Although "wellbeing" can often be subjective, for the purposes of this study, it was defined by the presence of or lack thereof a physical or mental health condition. Overall, the findings illustrated that those who reported having physical and mental ailments such as anxiety, depression, chronic pain, chronic headaches/migraines, hypertension, obesity, and insomnia had greater compassion fatigue. Additionally, those with the presence of a condition were more likely to be obese and suffer from insomnia. Providers with higher CF are exposed to stressors, and prolonged exposure to stress, which induces a long-term activation of the stress-response system (Cohen, Janicki-Deverts, & Miller, 2007). According to the American Psychological Association (2018), when the body is under stress, this leads to overexposure to cortisol and other stress hormones and puts a provider at risk for numerous health and mental health problems such as anxiety, depression, digestive problems, chronic headaches, heart disease, insomnia, and weight gain. In a provider's role of service, they are subjected to repeated acute stress and chronic stress, which can result in long-term risks on a provider's health (APA, 2018). Additionally, it is important to consider the directional impacts of physical health and CF as the work stress can contribute to higher risks of developing physical and mental health conditions due to exposure to environmental stressors. Likewise, a preexisting physical or mental health condition can contribute to emotional

exhaustion, work conflicts, and other personal and organizational stress related factors, which intensify the risks of experiencing compassion fatigue.

Findings confirmed that compassion fatigue predicted less sleep quality, suggesting that mental healthcare providers reporting secondary stressors are receiving less quality sleep on average which is an indicator of the negative impacts of CF, burnout and STS. Although there is limited research on sleep and compassion fatigue, health psychology research illustrates the ramifications of low sleep quality on a provider's performance and patients safety (Wali et al., 2013). Acute sleep deprivation due to extended work hours and other stressors historically and continuously have been concerns among healthcare providers (Wali et al., 2013). As explained by Wali et al. 2013 the quality of sleep impacts a provider's psychomotor performance, cognitive function, and emotional stability. Therefore, the exposure to long-term stress induces the arousal of the nervous system which contributes to quality of sleep reported by providers. This highlights the risks of deregulated sleep, the possible ramifications on a provider's health and the influence on focus and attention needed to provide quality care.

Whereas, the findings for exercise were correlated with CF and burnout illustrated providers who exercised less were more likely to report greater CF and burnout. Meanwhile, exercise was positively correlated with compassion satisfaction, where providers who exercised more reported greater compassion satisfaction. The Anxiety and Depression Association of American states that exercise can be a way to manage and reduce stress and fatigue. Exercise and other physical activities produce endorphins, chemicals in the brain that can act as natural painkillers and can reduce stress. Providers with regular participation in exercise can acquire the benefits of exercise enhancing overall cognitive functioning (ADAA, 2010), which can explain greater compassion satisfaction among providers engaging in regular exercise. The positive

impact of exercise is an important finding as it demonstrates the benefits that can be produced beyond preventing CF or burnout, and can be used as a platform for employers and health agencies as they can promote greater satisfaction by emphasizing and proving wellness-related benefits.

Empirical studies and reports regarding stress and health suggest that the exposure to prolonged stress can interfere with health, causing disease and negative lifestyle behaviors resulting from an individual's attempts to cope (ADAA, 2010; APA, 2013; Burdick et al., 2015; Dayoub & Jena, 2015; Singh & Purohit, 2012). Mental healthcare providers are subjected to the chronic exposure of secondary stress along with possible occupational and other external stress factors that are often not accounted for. This can place great strain on a provider's ability to focus and ability to provide quality care.

Spirituality and compassion fatigue

With the limited literature regarding the relationship between spirituality and CF, the purpose of question four was to understand the relationship between spirituality and compassion fatigue. Through the use of Underwood's Daily Spiritual Experience scale, spirituality was measured through investigating a provider's daily experiences and connection the divine, holy, or transcendent, manifested by compassionate love, awe, gratitude, mercy, inspiration and sense of deep inner peace (Underwood, 2011). As expected, mental healthcare providers with greater spirituality reported lower compassion fatigue ($p=0.02$). It is possible that greater spirituality may protect one's actual experience of CF or spirituality have served to changed one's perception of and/or awareness of felt compassion fatigue and related difficulties in the workplace. This finding corroborates with other studies which demonstrate that spiritually can play a positive role in coping with secondary stress, as well as increase health-promoting

behaviors, and positive stress management (Puchalski, 2012; Seybold & Hill, 2001). For example, a study conducted by Graham, et al. (2001) examined the relationship between religion and spirituality in coping with stress and found a positive correlation between spiritual health and stressful situations. Increased spirituality in a provider can act as a buffer and ensue qualities of compassion, gratitude and the instillation of hope (Seybold & Hill, 2001).

Study Limitations

Despite the contributions this study makes in further understanding mental healthcare providers and their experiences of and impact felt by CF, there are a number of limitations and possibilities for future improvement. The cross-sectional design, convenience sampling, self-reporting instruments, and exclusion/inclusion criteria placed limitations on the research. Foremost, the cross-sectional design does not allow the investigator to establish causality between variables nor can it be used to analyze the development of CF over a period of time. By the nature of this design, it limits the ability to further understand whether a diagnosis of a physical or mental health condition occurred pre- or post-licensure, and whether lifestyle behaviors and spirituality were consistent over time or influenced by changes in compassion fatigue. Second, a disadvantage of convenience sampling is that it becomes vulnerable to selection bias beyond the control of the researcher. For example, the aim of the study was to gather a representative sample of providers from many disciplines within the mental healthcare field. However, due to the investigator's associations to the field of clinical psychology, the majority of the sample was comprised of psychologists due to investigator's awareness and access of provider directories.

Although a common and convenient methodology, the sample was collected by those who volunteered to participate in the study. The participants' inclination to participate may have

been related to their own anticipated levels of CF, creating a natural bias in the responses. A majority of participants reported an average level of compassion fatigue. It is possible that individuals who experience greater levels of CF, burnout, and/or secondary trauma were less likely to participate in a voluntary study due to lack of motivation, shortage of time, challenges in other areas of their lives, or feelings of shame or incompetence related to work that they did not want to report in a study. Providers with low to no CF, in contrast, may have also been less likely to respond if they assumed that this study did not pertain to them. The clustering of responses around average levels of CF may limit the generalizability of this study's findings and be most relevant for other providers with similar levels of compassion fatigue.

Self-report questionnaires face response bias as mental healthcare providers respond in a certain way based on their introspective ability. Since the questions of this study linked professional information to personal health information, this contributes to a provider having a conservative response bias responding positively to questions in regards to CF, physical health, lifestyle behavior, and spirituality. The limitations of using subjective, self-reported assessments of health and physical capacity have been widely recognized (Baker, Stabile, & Deri, 2004). Therefore, it is important to consider that a provider's degree of CF may be slightly greater than actually reported, which can result in skewing the collected data. Additionally, the use of close-ended questions limited the information the investigator received around health and lifestyle behaviors. In fact, a participant reached out to inform the investigator of their change in current sleep due to becoming a new mother, in attempt to clarify that this lowered amount of sleep was based on a life transition, and not necessarily due to CF or related constructs. This highlights the importance of having more open-ended questions in efforts to gain an overall understanding one's physical health.

Moreover, in the midst of data collection, this writer realized that she had excluded and limited a great number of participants who are valuable and contribute to the mental healthcare community. The investigator came across participants who identified as physical therapist, occupational therapists, recreation therapists, and bachelor level jobs such as a behavioral health technician, and did not consider the inclusion nor impact of CF on these participants. Providers such as physical therapists, occupational therapists, and recreational therapists are not formally trained in disciplines related to mental healthcare, nonetheless these providers are exposed to secondary trauma, and are often integrated in the interdisciplinary team of clients receiving mental and behavioral health services. Additionally, the study did not account for mental healthcare provider's additional role of supervisory or teaching responsibilities and the commitment to the needs of clients. Further research should include interdisciplinary providers involved in providing mental and behavioral health services.

As the data collection occurred throughout the nation in a variety of settings with providers working with a wide range of diverse populations, the investigator expected a heterogeneous representation of providers. However, the sample yielded a relatively homogenous sample of White (70.8%), female (82.48%) mental healthcare providers. Therefore, the findings may not be generalizable to all mental/behavioral health providers, as many variables beyond sex and race were not equally represented. The small sample size may have also inhibited the ability to find differences among examined variables. Findings found in the study between physical health and CF cannot be widely generalized, as there was no validated measure utilized to measure physical health. Although the investigator attempted to gain a better understanding of a provider's health by examining indicators of health risks, as well as lifestyle behavioral choices, a mixed method qualitative approach examining physical health and

spirituality through open-ended questions may have yielded more information. It is evident that there are multifaceted factors playing a role in determining provider's professional quality of life, thus requiring further research to gain a comprehensive understanding on the impacts of overall wellbeing.

Directions for Future Research

This study aimed to illustrate the degree of compassion fatigue among mental healthcare providers in relation to specific demographic variables, physical health, and spirituality. The findings demonstrate that the majority of providers in this study reported average levels of compassion fatigue, burnout, and secondary traumatic stress. These results indicate the need to continue to explore the impacts of CF and related constructs on a provider's physical health and overall sense of wellbeing. As the research around compassion fatigue and physical health is scarce, both quantitative and qualitative studies exploring this important relationship through validated measures is warranted.

Qualitative studies with focus groups divided by a provider's disciplines allowing professionals to discuss their health and personal views on spirituality will provide further insights around the relationship of health, spirituality and compassion fatigue. As spirituality and spiritual experience may be a potential protective mechanism against CF, more investigation about this under-researched topic can provide insights on how providers can prevent and possibly treat compassion fatigue. With the limited number of male providers, and ethnic minority representation in research regarding CF and related constructs, it is important to conduct future studies with an increased focus and representation of males, ethnic diversity and larger sample size.

Additionally, with the cross-sectional design one cannot see how and whether a level of CF is susceptible to change over time. Given that theory states the onset of CF is more rapid than other secondary stress variables; it would be interesting to determine the causality through a longitudinal study design. Therefore, future research should include longitudinal studies to begin to consider causality of secondary stressors, and being to increase the understanding of predictors of compassion fatigue and associated variables. Findings can be valuable for program development, and for the prevention, protection, and management of CF among existing mental healthcare providers and those who choose to join the field.

Further analysis exploring spirituality can elicit a more accurate understanding of provider's engagement with spirituality. As spirituality is a subjective and individual experience, this variable may be better explored through qualitative questions assessing more in-depth aspects of a provider's spirituality. This would merit the exploration of other related internal factors in relation to compassion fatigue. For example, resiliency, character, personality, values/beliefs, hope, and faith may further support the idea that spirituality can be a protective factor or positive way of coping from compassion fatigue.

Clinical Implications: Increasing Awareness

Mental healthcare providers are an important human resource asset in the "frontlines" of our healthcare system and warrant proper oversight and surveillance to ensure the protection of their overall wellbeing (Boscarino, Figley, & Adams, 2004). Although causality of physical/mental health conditions is often difficult to identify, it bears noting that factors such as compassion fatigue, burnout, secondary traumatic stress and compassion satisfaction can contribute to one's overall health. Mental healthcare providers, who work in a variety of settings and whose expertise is in high demand by colleagues of other disciplines, are crucial in

assessment, diagnosis and treatment of acute and chronic mental health conditions and cannot fulfill their roles adequately if in poor health. Therefore, results support the need for greater health promotion within mental healthcare providers. Although much of the focus in the empirical literature has been on establishing and defining secondary stress related constructs as associated risks of caring professions, there now must be a shift in the literature which attends to the development of protective strategies and interventions aimed to protect professionals from experiencing average or higher levels of compassion fatigue. Findings suggest exercise and a provider's spirituality are fruitful coping mechanisms that might be encouraged in a more systematic way in the workplace. "Prevention and treatment of compassion fatigue must begin with care for, protection of, and healing of the spirit" (Bush, 2009, p. 27), and therefore calls for a greater understanding of additional protective and coping factors specific to a mental healthcare provider's health.

The historical avoidance, unawareness, and disregard of CF within the helping professions has ethical, clinical and legal implications, making the results of this research study of particular import. The findings contribute to existing literature that is committed to understanding the impact of CF within the mental healthcare industry and calls for attention before the phenomenon of compassion fatigue infiltrates mental healthcare providers. As some researchers in the field have defined compassion fatigue as well as burnout as a subject of needing considerable attention (Kelly et al, 2015; Moore & Cooper, 1996; Phelps et al., 2009), it is essential for all mental healthcare providers to first become aware of the concept of CF signs and symptoms. In response, professional organizations such as American Psychological Association, educational universities and other affiliates who are the gatekeepers of mental healthcare professionals have the duty to protect and train new clinicians' entering the field.

Educators and leaders of the field have an ethical responsibility to increase awareness around secondary trauma responses in efforts to protect the livelihood of mental healthcare professionals and the provision of quality services.

Secondly, encouraging a culture granting mental healthcare providers to assess and recognize the signs related to the development of compassion fatigue and related constructs (burnout and secondary trauma) can permit providers to take preliminary steps to create self-awareness and self-compassion. Once the awareness of CF increases, providers will have an alternative way of understanding their experience, as they may be more inclined to seek assistance, consult, or collaborate with their colleagues, peers, and or mentors during distress.

As mental healthcare providers begin to understand the ways CF affects various dimensions of their lives, they can be better equipped to develop and refine internal coping skills which help process and manage the difficult nature of their job. Over time, these skills as well as their growing awareness of how their work affects their well being can serve to promote and protect their sense of compassion, overall health and functioning, as well as enhance quality of services for the patients under their care.

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Appendix A

Initial Recruitment List

Type of Setting	Name
Community Mental Health	Department of Public Health San
Alcohol and Drug Rehab Center	Mountain Vista Farm in Sonoma
Community Mental Health (Domestic Violence)	Riley Center
Community School Settings	Y-Team at West Contra Costa
Hospital/Child Psychiatry	Affiliate of hospital in Dallas
Hospital/Psychiatry	Affiliate of hospitals in Phoenix
Private Practice	Dr. Raj Pandaya
Residential Setting	Ronald McDonald House at Stanford, Pasadena and Los Angeles
List-Serves	Asian American Psychological Association
List Serves	Early Career Psychologists
Hospital/Medical School	McLean Hospital/Harvard Medical School
Hospital	El Camino Hospital-Behavioral Health
Hospital	John Muir Hospital-Behavioral Health
School	University of San Francisco- School of Nursing and Health
List Serve	BAPIC
List Serve	APPIC

Appendix B

Sample Email

Hello,

You are invited to participate in a brief study about your level of compassion fatigue and the impacts on your overall health. My name is Ruchi Patel, a doctoral candidate at University of San Francisco Clinical Psychology PsyD program, and I am working under the direction of Dhara Meghani, Ph.D.. I am looking for mental health professionals to complete the survey below:

<https://www.surveymonkey.com/r/CFMHP17>

The study has been approved by the University of San Francisco Institutional Review Board (IRB Protocol #814). The survey should take no more than 15 minutes to complete and after completion you will have the opportunity to enter to win one of five \$25 Amazon gift cards.

In addition, please feel free to distribute this survey to your colleagues. Your involvement and any distribution you make are greatly appreciated.

If you have any questions, please contact me at rjpatel@usfca.edu. Thank you for your participation.

Ruchi Patel, MPH, MS
Doctoral Student | Clinical Psychology
University of San Francisco | School of Nursing & Health Professions

Appendix C

Eligibility Criteria Form

Instructions: Please check all of the criteria that apply.

In order to be eligible to participate in this study, all of the criteria below must be met.

- Mental healthcare provider: License classification or recognition to practice within your residential state as a social worker, marriage and family therapist, psychiatric mental health nurse or nurse practitioner, psychologist, psychiatrist, or an otherwise qualified mental health professional

If other, please specify _____

- Currently directly providing services to clients of mental health needs half-time
- Employed by an organization that provides mental healthcare

e.g. This includes the following but are not limited to: in-patient hospitals/treatment facilities, in-home-based treatment programs, outpatient treatment programs, community mental health, integrated behavioral healthcare settings

- Working as a licensed mental healthcare provider

If one or more of the criteria below apply, participation in the study will not be permitted.

- Currently Unemployed
- Retired from the field

Appendix D

INFORMED CONSENT

Name of Study: Understanding Compassion Fatigue Among Mental Healthcare Providers: The Impact on Physical, Psychological, and Spiritual Overall Wellbeing

Participant's Name:

Purpose and Background

Ruchi Patel, a doctoral student from the University of San Francisco is doing a study on professionals working in mental health. The researcher is interested in learning the relationship between compassion fatigue and the physical, psychological, and spiritual wellbeing of a provider.

I understand that I am being asked to participate because I am a provider of mental health services.

Procedures

If I agree to be a participant in this study, I understand that I will be asked a series of questions which gather basic demographic information, and personal information regarding my physical, psychological, and spiritual health.

Risks and/or Discomforts

1. It is possible that the time needed to complete the survey may be longer than anticipated.
2. It is possible that I may feel a sense discomfort from the questions being asked, but I am free to decline to answer any questions I do not wish to answer, and understand that I have the right to stop participation at any time.
3. Participation in this study may mean a loss of confidentiality. Information gathered during the study will be kept as confidential as possible. There will be no individual identities that will be used in any other reports or publications resulting from the study. Personal information will be protected, and kept in either a password protected database or secure location at all times. Only the researcher and her dissertation committee will have access to this information.
4. Because the time required to complete the questionnaires may take longer than 20 minutes, I may become tired or bored.

Benefits

Upon completion of my participation in the study, I understand that I have the opportunity to win one of two \$50 gift cards to Amazon. In addition to this there will be no direct benefit to me from participating in this study. The anticipated benefit of this study is to contribute to the existing body of empirical research on compassion fatigue.

Costs/Financial Considerations

There are no financial costs to me as a result of taking part in this study. The main cost will be my time.

Consent

I understand that participation in this research study is VOLUNTARY. I am at liberty to decline to be apart of this study, and understand I am free to withdraw my participation at any point.

My signature below indicates that I agree to participate in this study.

Participant's Signature

Date of Signature

*Please note: the online informed consent will replicate this format, however will explicitly state "I understand by continuing to fill out this survey, I give my consent to participate in this study."

Appendix E

DEMOGRAPHIC QUESTIONNAIRE

Instructions: Please complete all of the following items.

Personal History

1. Age _____

2. Identifying Sex:

- Male
- Female
- Transgender or Transsexual

3. Race:

- Hispanic/Latino
- African American
- Asian
- Pacific Islander
- Caucasian
- Native American
- Alaskan Native
- Other _____

4. What is your current martial status?

- Single, never married
- Married
- In a committed relationship
- Widowed
- Divorced
- Separated

5. Do you have any children?

- No
- Yes

If Yes, indicate how many children and their age? _____

Education and Employment History

6. Highest Earned Degree _____

- Earned a Master’s Degree
- Earned a Doctorate Degree

7. Please Specify your Professional Degree related to Behavioral/Mental Health:

If you hold more than one degree, specify your highest earned degree.

- Social Worker
- Marriage and Family Therapist
- Psychiatric Mental Health Clinical Nurse Specialists
- Nurse Practitioner
- Psychologist
- Psychiatrist
- Other, Please specify which degree _____

8. Please specify the year you were licensed _____, and the state you are licensed _____

9. Please specify number of years you have been working as the indicated professional above _____

10. Current Number of Hours Worked per Week:

- Please specify how many hours per week on average you work _____
- Please indicate how many face to face hours you work on average per week _____
- Please indicate how many individuals you work with on an average week _____
- Please indicate how many couples you work with on an average week _____
- Please indicate how many groups you work with on an average week _____
- Please indicate how many families you work with on an average week _____

11. Current employment setting:

Please check all that apply:

- Inpatient setting
 - Please specify, which type of setting:
 - Psychiatric Hospital
 - Psychiatric unit/Behavioral unit
 - Residential mental health treatment environment
- Outpatient settings
 - Please specify which type of setting:
 - Partial hospitalization programs (day programs)
 - Community Mental Health Centers
 - Outpatient clinic

- Schools
- Integrated primary health-care facility
- Alcohol and drug rehabilitation facility
- Jails
- Nursing Home
- Telemental health services
- Private Practice
- Other_____

12. Please indicate the population type you work with:

Please check the ones that apply in majority:

- Infants 0-3
- Children 3-12
- Adolescents 13-17
- Families
- Couples
- Individual ages 18-65
- Elderly 65+
- LGBTQI
- Veterans
- Substance Use
- Suicide
- Domestic Violence
- Sexual abuse
- Child abuse
- Autism
- Trauma
- Schizophrenia
- Severe Mental Illness
- Cognitive Impairments
- Neurological Impairments
- Personality Disorders
- Other(s)_____

13. Level of Income:

- < \$50,000
- \$50,000 - \$75,000
- \$75,000 - \$100,000
- \$100,000- \$150,000
- \$150,000 - \$300,000
- > \$300,000

Physical health history.

14. Have you ever had or been diagnosed to have:

- | | | |
|--|--|--|
| <input type="checkbox"/> Hypertension | <input type="checkbox"/> Chronic Headaches/Migraines | <input type="checkbox"/> Diabetes, Type_____ |
| <input type="checkbox"/> Thyroid Disease | <input type="checkbox"/> Seizure Disorder | <input type="checkbox"/> Cancer |
| <input type="checkbox"/> Lung Disease | <input type="checkbox"/> Muscle-Skeletal Disability | <input type="checkbox"/> Neurological Disorder |
| <input type="checkbox"/> Chronic Pain | <input type="checkbox"/> Obesity | <input type="checkbox"/> Depression |
| <input type="checkbox"/> Anxiety | <input type="checkbox"/> Insomnia | <input type="checkbox"/> Bipolar |
| <input type="checkbox"/> Other _____ | | |

15. If you checked one or more on Question 1, have you had this condition *before or after* you became licensed? _____

16. When was the last time you saw a medical provider/medical specialist?

- Within the last 6 month
- Approximately one year ago
- Over one year ago
- Can't remember the last time I saw a primary care physician
- I don't have a medical provider, I have the knowledge to treat myself.

17. Please indicate the steps you would take if and when you are faced with signs and symptoms of an illness.

- Manage presenting symptoms on my own by purchasing over the counter medications
- Seek peer or medical consult
- Schedule an appointment to see medical provider
- Believe that the symptoms will resolve over time without needing medication

18. During the time that you were training to become a mental health provider and or during your professional employment, please indicate whether you have received the following healthcare services:

- Inpatient Hospitalizations for Medical Treatment, Number of past hospitalizations_____
- Inpatient Hospitalizations for Mental Health Treatment, Number of past hospitalizations_____
- Partial Hospitalization (Medical Observation) for Medical Treatment, Number_____
- Partial Hospitalization for Mental Health Treatment, Number_____
- Outpatient therapy
Number of months and years receiving therapy_____
- Support or Self-help groups_____
- Primary Care Provider_____
- Alternative treatments (holistic, herbal etc.,)_____
- None

Lifestyle Health-Related Behaviors

19. In the last month, how often do you consume caffeine? (e.g. coffee, teas, soda)

- Never
- 1-2 days per week
- 3-5 days per week
- 5+ days per week

20. In the last month, how many drinks did you have consumed during any particular day? Please indicate all that apply.

- 0 caffeinated drinks
- 1-2 caffeinated drinks
- 3-4 caffeinated drinks
- 5+ caffeinated drinks
- Never have consumed Alcohol
- 1-2 Alcoholic drinks
- 3-5 Alcoholic drinks
- 5 Alcoholic drinks

21. If you consume alcohol, check the following?

- Rarely, social (Less than once/wk)
- Beer, 12 oz./day
- Wine, 1 glass/day
- Hard liquor, 1-3 oz./day
- Beer, 2 bot./day
- Wine, 2 glasses/day
- Hard liquor, over 3 oz./day
- Beer, 3 bot. or more /day
- Wine, 3 or more glasses/day

22. Do you smoke cigarettes?

- Never
- On Occasion
- Yes

23. If yes, how many cigarettes per day?

- 1-2 cigarettes
- 3-4 cigarettes
- 5-6 cigarettes
- 7+ cigarettes

24. In the past 6 months have you used marijuana, cocaine, heroine, speed, crack or other inhalants?

- Yes
- No

25. In the past 6 months have you tried to cut down or quit drinking or use of other substances (such as caffeine, wine, beer, hard liquor, pot, coke, heroin, or other inhalants)?

- Yes
- No

26. In a typical week, on how many hours per week do you engage in leisure or recreational activities? (i.e. hiking, biking, walking, swimming)

- Never
- 1-2 days per week
- 3-5 days per week
- 5+ days per week
- Engagement in physical exercise is sporadic

27. In a typical week, how many hours a day do you engage in structured forms exercise? (i.e. muscle/strength conditioning, running or involvement in sports)

- Never
- 30 minutes-1 hour
- 1-2 hours
- 2-3 hours
- 3+ hours
- Engagement in physical exercise is sporadic

28. On a weekly basis, how often do you practice meditation or mindfulness?

- Never
- 1-2 days per week
- 3-5 days per week
- 5+ days per week
- I practice meditation, but my practice is irregular.

29. How many minutes do you practice mindfulness or meditation in a sitting?

- Never
- 5-20 minutes
- 20-30 minutes
- 30-60 minutes

- 60-90 minutes
- 90+ minutes
- I practice meditation daily, but my practice is irregular.

30. On average, how long does it take for you to fall asleep?

- 0-15 minutes
- 16-30 minutes
- 31-45 minutes
- 46-60 minutes
- > 60 minutes

31. How many hours of sleep do you get during a night?

- Less than 3 hours
- 3-5 Hours
- 5-6 Hours
- 6-7 Hours
- 8 Hours
- 8 + Hours

32. Please indicate the following that are true for you.

- I have trouble staying asleep through the entire night on most days.
- It takes me a while to fall asleep.
- I wake up at night often.
- I feel unrested when I wake up in the morning.
- During the day, I am chronically sleepy, fatigued or tired.
- None of them are true for me.

33. How would you rate your sleep overall?

- Very good
- Good
- Average
- Poor
- Very poor

Appendix F

Professional Quality of Life Scale (ProQOL)

Compassion Satisfaction and Compassion Fatigue (ProQOL) Version 5 (2009)

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

1=Never	2=Rarely	3=Sometimes	4=Often	5=Very Often
----------------	-----------------	--------------------	----------------	---------------------

1. I am happy. _____
2. I am preoccupied with more than one person I help. _____
3. I get satisfaction from being able to help people. _____
4. I feel connected to others. _____
5. I jump or am startled by unexpected sounds. _____
6. I feel invigorated after working with those I help. _____
7. I find it difficult to separate my personal life from my life as a helper. _____
8. I am not as productive at work because I am losing sleep over traumatic experiences of a person I help. _____
9. I think that I might have been affected by the traumatic stress of those I help. _____
10. I feel trapped by my job as a helper. _____
11. Because of my helping, I have felt "on edge" about various things.
12. I like my work as a helper. _____
13. I feel depressed because of the traumatic experiences of the people I help. _____
14. I feel as though I am experiencing the trauma of someone I have helped. _____
15. I have beliefs that sustain me. _____
16. I am pleased with how I am able to keep up with helping techniques and protocols. _____
17. I am the person I always wanted to be. _____
18. My work makes me feel satisfied. _____
19. I feel worn out because of my work as a helper. _____
20. I have happy thoughts and feelings about those I help and how I could help them. _____

21. I feel overwhelmed because my case [work] load seems endless. _____
22. I believe I can make a difference through my work. _____
23. I avoid certain activities or situations because they remind me of frightening experiences of the people I help. _____
24. I am proud of what I can do to help. _____
25. As a result of my helping, I have intrusive, frightening thoughts. _____
26. I feel "bogged down" by the system. _____
27. I have thoughts that I am a "success" as a helper. _____
28. I can't recall important parts of my work with trauma victims. _____
29. I am a very caring person. _____
30. I am happy that I chose to do this work. _____

© B. Hudnall Stamm, 2009. Professional Quality of Life: Compassion Satisfaction and Fatigue Version 5 (ProQOL). /www.isu.edu/~bhstamm or www.proqol.org. This test may be freely copied as long as (a) author is credited, (b) no changes are made, and (c) it is not sold.

Appendix G

Daily Spiritual Experience Scale

The list that follows includes items you may or may not experience. Please consider how often you directly have this experience, and try to disregard whether you feel you should or should not have these experiences. A number of items use the word ‘God.’ If this word is not a comfortable one for you, please substitute another word that calls to mind the divine or holy for you.

	Many times a day	Every day	Most days	Some days	Once in a while	Never
1) I feel God’s presence.						
2) I experience a connection to all of life.						
3) During worship, or at other times when connecting with God, I feel joy which lifts me out of my daily concerns.						
4) I find strength in my religion or spirituality.						
5) I find comfort in my religion or spirituality.						
6) I feel deep inner peace or harmony.						
7) I ask for God’s help in the midst of daily activities.						
8) I feel guided by God in the midst of daily activities.						
9) I feel God’s love for me, directly.						
10) I feel God’s love for me, through others.						
11) I am spiritually touched by the beauty of creation						
12) I feel thankful for my blessings.						

13) I feel a selfless caring for others.						
14) I accept others even when they do things I think are wrong.						
15) I desire to be closer to God or in union with the divine.						

	Not at all	Somewhat Close	Very close	As close as possible
16) In general, how close do you feel to God?				

The Daily Spiritual Experience Scale © Lynn G. Underwood www.dsescal.org Do not copy without permission of the author. Underwood, LG. 2006. Ordinary Spiritual Experience: Qualitative Research, Interpretive Guidelines, and Population Distribution for the Daily Spiritual Experience Scale. *Archive for the Psychology of Religion/ Archiv für Religionspsychologie*, 28:1 181-218.

Table 1
Participant Demographics and Employment Demographic Data

<i>Variable</i>	N	%
Gender		
Female	113	82.48
Male	24	17.51
Age		
25-74 years	M 41.67	SD 11.49
Race		
White	100	72.9
Asian	17	12.4
Hispanic/Latino	11	8.02
African American	7	5.11
Relationship Status		
Single	26	18.98
In a Committed Relationship	16	11.68
Married	82	59.85
Divorced	12	8.76
Separated	1	0.73
Widowed	1	0.73
Have Children?		
Yes	68	49.64
No	69	50.36
Degree Earned		
Bachelor	8	5.83
Master	52	37.95
Doctorate	77	56.2
Employment Setting		
Community Based Mental Health Setting	42	30.7
Non-Community Based Setting	95	69.34
Out-Patient Setting	55	40.14
In-Patient/Residential Setting	82	59.85
Level of Income		
<\$50,000	30	21.90
\$50,000-\$75,000	42	30.66
\$75,000-\$100,000	27	19.71
\$150,000-\$300,000	6	4.38

>\$300,000	1	0.73
Types of Population Served		
Infants 0-3	9	6.57
Children 3-12	53	38.69
Adolescents 13-17	72	52.55
Families	55	40.15
Couples	20	14.60
Individual Ages 18-65	89	64.96
Elderly 65+	38	27.74
LGBTQI	57	41.61
Veterans	30	21.90
Substance Use	56	40.88
Suicide	71	51.82
Domestic Violence	37	27.01
Sexual abuse	64	46.72
Child abuse	56	40.88
Autism	25	18.25
Trauma	96	70.07
Schizophrenia	33	24.09
Severe Mental Illness	56	40.88
Cognitive Impairments	40	29.20
Neurological Impairments	29	21.17
Personality Disorders	64	46.72

Table 2

History of Mental Healthcare Provider's Physical Health & Lifestyle Behaviors

<i>Health Variables of Providers</i>	N	%
Physical Health Diagnosed Conditions		
Hypertension	10	7.30
Thyroid Disease	8	5.84
Lung Disease	2	1.46
Chronic Pain	12	8.76
Chronic Headaches/Migraines	28	20.44
Seizure Disorder	1	0.73
Muscle-Skeletal Disability	5	3.65
Obesity	13	9.49
Diabetes	5	3.65
Cancer	5	3.65
Insomnia	10	7.30
Mental Health Diagnosed Conditions		
Anxiety	45	32.85
Depression	35	25.55
Bipolar Disorder	1	0.73
None of the above	51	57.23
Other	10	7.30
Lifestyle Behaviors		
<i>Caffeine Consumption</i>		
Never	6	4.38
1-2 days per week	25	18.25
3-5 days per week	21	15.33
5+ days per week	85	62.04
<i>Alcohol Consumption</i>		
Abstinent from Alcohol	34	24.82
1-2 Alcoholic Drinks per day	86	62.77
3-5 Alcoholic Drinks per day	10	7.30
5+ Alcoholic Drinks per day	7	5.11
<i>Cigarette Smoking</i>		
Never	127	92.7
On Occasion	8	5.84
Yes	2	1.46
<i>Engagement in Physical Exercise</i>		
Never	24	17.52
30mins-1 hr	38	27.74
1-2 hrs	19	13.87

2-3 hrs	21	15.33
3+ hrs	13	9.49
Engagement in Physical exercise is sporadic	22	16.06
<i>Practice of Mindfulness</i>		
Never	46	33.58
1-2 days per week	35	25.55
3-5 days per week	19	13.87
5+ days per week	6	4.38
I practice meditation, but my practice is irregular.	31	22.63
<i>Overall Quality of Sleep</i>		
Very good	13	9.49
Good	47	34.31
Average	30	33.58
Poor	30	21.90
Very poor	1	0.73

Table 3
Overall ProQOL Results

ProQOL Scale	M (SD)	Range	“Low” (<23)	“Average” (23-41)	“High” (>41)
<i>Compassion Satisfaction</i>	39.52 (5.96)	18-50	3 (2.18%)	85(62.04%)	49(35.8%)
<i>Burnout</i>	22.34 (5.35)	13-36	76 (55.5%)	61 (44.5%)	0
<i>Secondary Trauma</i>	19.62 (4.57)	11-32	91 (66.4%)	38 (27.7%)	0
<i>Compassion Fatigue</i>	61.92 (12.51)	37-95	N/A	N/A	N/A

Table 4
 Pearson's r correlations between variables for the entire sample of participants ($N=137$)

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13
1. CS	--	--	--	--	--	--	--	--	--	--	--	--	--
2. Burnout	-.67***	--	--	--	--	--	--	--	--	--	--	--	--
3. ST	-.17 ⁺	.46***	--	--	--	--	--	--	--	--	--	--	--
4. CF	-.82***	.91***	.64***	--	--	--	--	--	--	--	--	--	--
5. Spirituality	.29***	-.31***	.15 ⁺	-.21*	--	--	--	--	--	--	--	--	--
6. Str. Ex.	.18*	-.19*	-.02	-.17 ⁺	0.12	--	--	--	--	--	--	--	--
7. Leisure Ex.	.26**	-.28**	.00	-.23**	0.11	.41***	--	--	--	--	--	--	--
8. Hours/sleep	.14 ⁺	-.22**	-.21*	-.24**	.22**	.05	.19*	--	--	--	--	--	--
9. Time/sleep	-.14 ⁺	.15 ⁺	.04	0.11	-.14	-.14	-.20*	-.27**	--	--	--	--	--
10. MH diag. ^a	-.21*	.26**	.22*	.24**	-.17*	-.13	-.24**	-.03	.16 ⁺	--	--	--	--
11. PH diag. ^b	-.19*	.29***	.26**	.29***	.02	-.10	-.11	-.06	.23**	.29***	--	--	--
12. Age	.05	.09	.13	.10	.01	-.10	.22*	.04	-.03	-.14	.06	--	--
13. Gender ^c	.18*	-.06	.10	-.10	.14 ⁺	-.09	-.20*	.01	.06	.12	.08	-.13	--
14. Race ^d	.03	-.07	-.05	-.08	.05	-.00	-.05	-.06	.00	-.12	-.23**	-.20*	.11

Table 4

Continued

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Mean	39.52	22.34	19.62	61.92	51.02	2.99	3.37	3.05	1.81	0.37	0.42	41.67	0.83	0.27
SD	5.96	5.35	4.57	12.51	17.31	1.71	0.96	0.87	1.11	0.50	0.49	11.49	0.38	0.45
Range	18-50	13-36	11-32	37-95	17-93	1-6	1-5	1-5	1-5	0-1	0-1	24-75	0-1	0-1
α	0.93	0.82	0.83	0.91	0.95									

Note. CS=compassion satisfaction, ST=secondary trauma, CF=compassion fatigue, Str.=structured, Ex.=exercise,

Hours/sleep=average hours of sleep per night, Time/sleep=average time it takes to fall asleep, MH diag.=mental health condition

diagnosis, PH diag.=physical health condition diagnosis. ^aMH diag.: 0=no diagnosis, 1=at least one diagnosis. ^bPH diag.: 0=no

diagnosis, 1=at least one diagnosis. ^cGender: 0=male, 1=female. ^dRace: 0=White, 1=non-White.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

Table 5
Demographic Indicators Predicting Compassion Fatigue

Variable	Mean	t or r value	<i>p</i>
<i>Education Level</i>			
Master	59.31	-4.61	0.05
Doctorate	63.92		
<i>Setting</i>			
Community Based	62.5	0.91	0.37
Non Community Based	60.59		
Outpatient	62.46	-0.42	0.67
Inpatient/Residential	61.56		
<i>Demographics</i>			
Age		1.14	0.26
<i>Sex</i>			
Female	61.33	-1.16	0.25
Male	64.65		
<i>Race</i>			
White	62.52	-0.90	0.37
Non-White	60.27		

Table 6
Logistic Regression of Medical Condition, Exercise & Spirituality

Compassion Satisfaction			
<i>Variable</i>	B	SE	<i>p</i>
Anxiety	0.05	0.03	0.13
Insomnia	0.05	0.05	0.26
Obesity	0.02	0.05	0.72
Chronic Pain	0.09	0.05	0.05
Depression	0.07	0.03	0.03
Chronic Headaches	0.06	0.03	0.10
Hypertension	0.11	0.05	0.02
Structured Exercise	0.62	0.30	0.04
Leisure-Related	1.64	0.52	0.002
Exercise			
Spirituality	0.06	0.02	<0.001
Burnout			
<i>Variable</i>	B	SE	<i>p</i>
Anxiety	0.08	0.04	0.02
Insomnia	0.11	0.06	0.04
Obesity	0.12	0.05	0.02
Chronic Pain	0.19	0.06	0.001
Depression	0.16	0.04	<0.001
Chronic Headaches	0.09	0.04	0.02
Hypertension	0.13	0.06	0.03
Structured Exercise	-0.68	0.30	0.03
Leisure-Related	-1.54	0.46	0.001
Exercise			
Spirituality	0.06	0.02	<0.001
Secondary Traumatic Stress			
<i>Variable</i>	B	SE	<i>p</i>
Anxiety	0.09	0.04	0.04
Insomnia	0.20	0.08	0.02
Obesity	0.13	0.06	0.04
Chronic Pain	0.04	0.07	0.53
Depression	0.11	0.05	0.02
Chronic Headaches	0.10	0.05	0.04
Hypertension	0.16	0.07	0.03
Structured Exercise	-0.06	0.24	0.80
Leisure-Related	0.00	0.42	0.99
Exercise			
Spirituality	0.03	0.02	0.10
Compassion Fatigue			
<i>Variable</i>	B	SE	<i>p</i>
Anxiety	0.03	0.03	0.04
Insomnia	0.04	0.03	0.13
Obesity	0.04	0.02	0.06

Chronic Pain	0.06	0.03	0.53
Depression	0.06	0.02	<0.001
Chronic Headaches	0.04	0.02	0.03
Hypertension	0.09	0.03	0.003
Structured Exercise	-1.25	0.64	0.05
Leisure-Related Exercise	-3.03	1.12	0.01
Spirituality	0.02	0.01	0.02

Figure 1

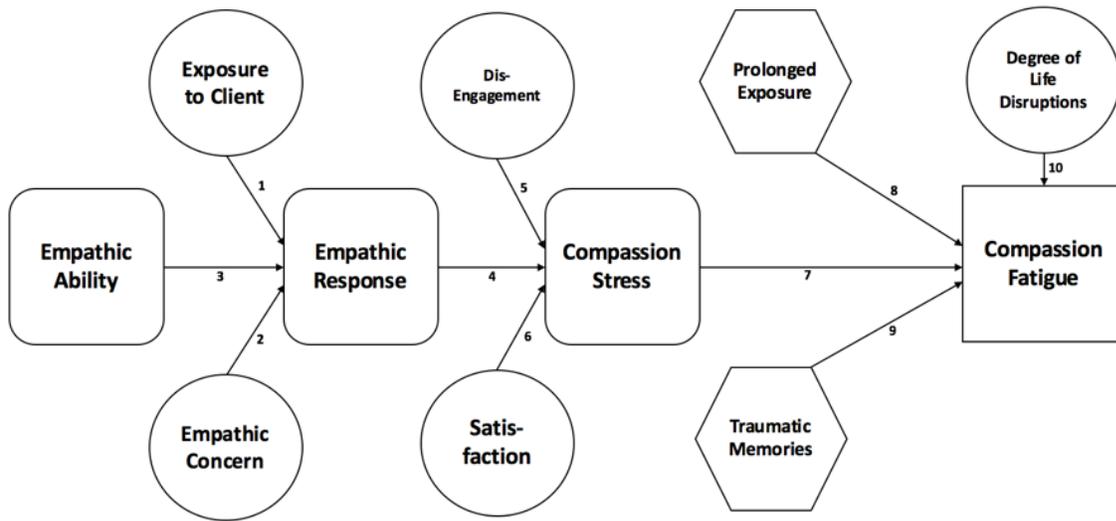


Figure 1. Figley’s model on compassion fatigue explains that the combination of direct exposure to clients suffering and a professionals’ skills of empathic ability, empathic concern, and empathic response contributes to the phenomena of compassion fatigue by placing stress on a provider’s ability to express compassion.

Figure 2

<p>COMPASSION FATIGUE is the result of professionals exposed to trauma, fear and suffering of clients in conjunction with the empathy expressed for their clients.</p>	<p>COMPASSION SATISFACTION the amount of pleasure a provider receives from helping others, and the positive feelings associated to their work</p>
<p>SECONDARY TRAUMATIC STRESS refers to a natural response after being exposed to the trauma or suffering of a client, which result to the presence of distress</p>	<p>BURNOUT is characterized by three dimensions: emotional exhaustion, depersonalization, and reduced feeling of personal accomplishment. Development of burnout is a result of occupational stress; this construct is not used to describe the indirect effects of exposure to trauma.</p>

Figure 2. This figure represents a brief overview of compassion fatigue and other stress responses such as secondary traumatic stress, burnout, and compassion satisfaction. The listed definitions of each of these stress responses inform how compassion fatigue differs from these other related constructs.

Figure 3

PRISMA (Preferred Reporting Items for Systematic Reviews and MetaAnalysis) Flowchart

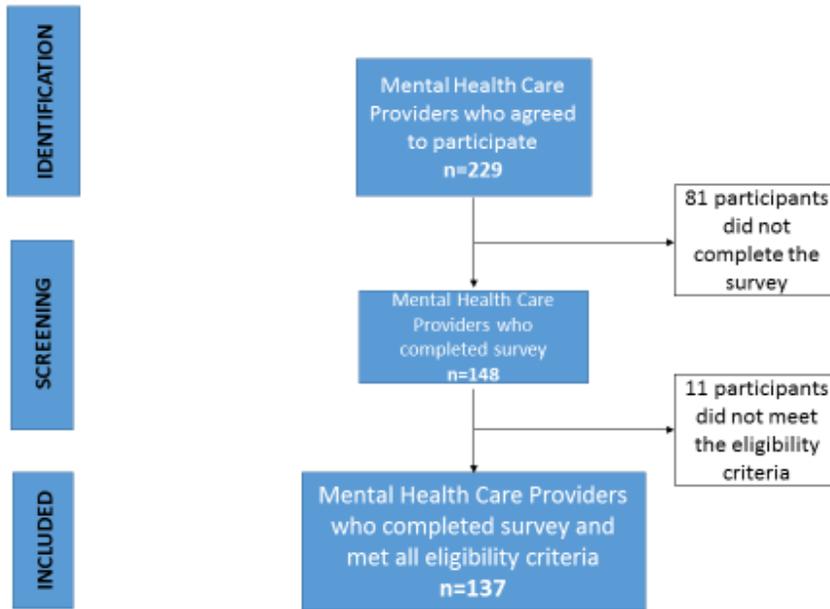


Figure 4

Distribution of compassion fatigue scores (n = 137).

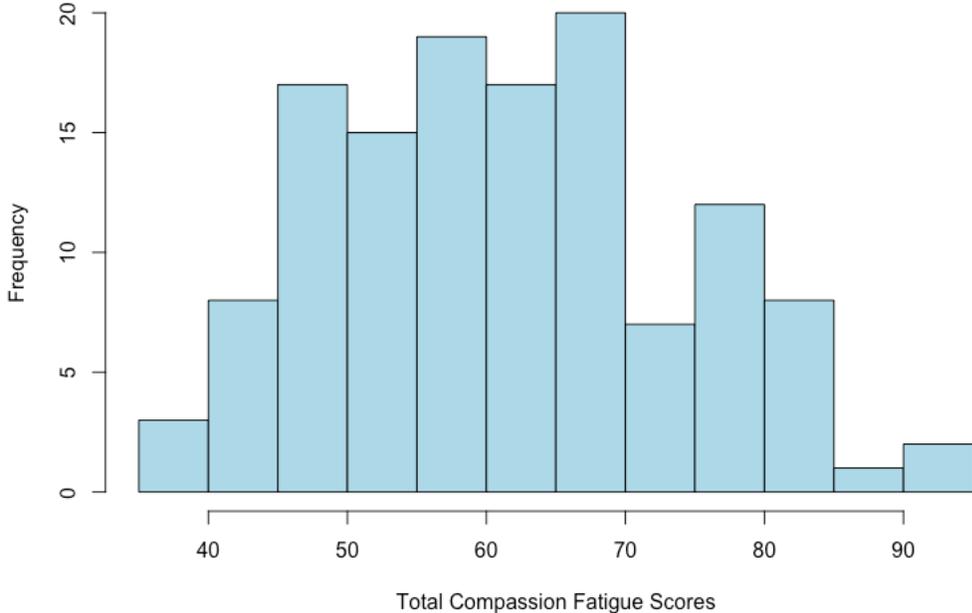


Figure 5

Distribution of daily spiritual experience scale scores (n = 137).

