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Relationships Among Trait Mindfulness, Self-Compassion, and Compassion Fatigue in Mental Health Professionals Working with Clients with a Terminal Illness

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RELATIONSHIPS AMONG TRAIT MINDFULNESS, SELF-COMPASSION, AND COMPASSION FATIGUE IN MENTAL HEALTH PROFESSIONALS WORKING WITH CLIENTS WITH A TERMINAL ILLNESS

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ABSTRACT

RELATIONSHIPS AMONG TRAIT MINDFULNESS, SELF-COMPASSION, AND COMPASSION FATIGUE IN MENTAL HEALTH PROFESSIONALS WORKING WITH CLIENTS WITH A TERMINAL ILLNESS

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This quantitative study explores the relationships among trait mindfulness, self-compassion, and compassion fatigue (CF) in mental health professionals working with clients with a terminal illness. The Five-Facet Mindfulness Questionnaire (FFMQ), Self-Compassion Scale, and Quality of Life Version 5 were used to explore these facets through linear multiple regression analysis. The Reactions to Research Participation Questionnaire–Revised was used to explore the cost–benefit ratio based on participant perceptions of the research experience. Participants (N = 43) self-selected from emailed invitations sent to members of professional organizations. Data was analyzed using multiple linear regression. Significant correlations included individual relationships between elevated trait mindfulness levels, self-compassion levels, percentage of session content focused on a client's terminal illness, and FFMQ nonjudge subscale scores with lower CF levels. Additional outcomes also identified significant support for a correlation between higher FFMQ observe subscale scores with higher CF levels, and a moderating effect from gender in the correlation between trait mindfulness and CF levels. Generally, participants reported perceived benefits outweighed perceived costs of contributing to this project. Results warrant additional research to explore significant findings and potential intervention strategies for bolstering trait mindfulness and self-compassion levels among mental health professionals

working with clients with a terminal illness. This dissertation is available in open access at AURA (https://aura.antioch.edu) and OhioLINK ETD Center (https://etd.ohiolink.edu).

Keywords: compassion fatigue, Five-Facet Mindfulness Questionnaire, FFMQ, mental health professional, Reactions to Research Participation Questionnaire–Revised, RRPQ-R self-compassion, Self-Compassion Scale, SCS, Professional Quality of Life Version 5, ProQOL-5, survey, terminal illness, adult (18+), trait mindfulness

Dedication

I would like to dedicate this project to my husband, Chris Egan, and his love, belief in my abilities, and support throughout this exacting process. Thank you for encouraging me to be brave, grow, question, and to keep doing the next right thing.

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CHAPTER I: INTRODUCTION

The definition for posttraumatic stress disorder (PTSD) identified in the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5; American Psychiatric Association, 2013) states that it is a reaction to "exposure to actual or threatened death" (p. 271). These experiences of exposure can occur as a personal experience, a witnessed experience, a learned experience that occurred to a close friend or family member, or "experiencing repeated or extreme exposure to aversive details of the traumatic event(s)" (American Psychiatric Association, 2013, p. 271). The symptom clusters for PTSD described within the DSM-5 (American Psychiatric Association, 2013) include "intrusive symptoms, . . . persistent avoidance of stimuli, . . . negative alterations in cognitions and mood, . . . [and] marked alterations in arousal and reactivity" (p. 271).

The lifetime prevalence rate for PTSD among the U.S. general population is approximately 8.3% (Kilpatrick et al., 2013). Experiences with a terminal illness can result in PTSD or PTSD-related symptoms (Elklit et al., 2010; Swartzman et al., 2017; Teixeira & Pereira, 2014). For the first month after direct exposure to a traumatic experience, the DSM-5 (American Psychiatric Association, 2013) diagnosis is acute stress disorder, after which, if symptoms remain, this changes to PTSD. Although not included within the DSM-5 as an official diagnosis, individuals can also experience these symptoms after providing caregiving assistance to a loved one with a terminal illness (Figley, 1995b). This is often referred to as vicarious trauma. Another related unofficial condition is secondary traumatic stress or compassion fatigue (CF), which results from repeated and ongoing exposure to the traumatic experiences of others while working within a professional capacity, which Figley (1995b) defines as a natural stress reaction "from helping or wanting to help a traumatized or suffering person" (p. 10).

Those with a terminal illness can meet the criteria for a PTSD diagnosis in that they are repeatedly and directly experiencing the direct threat of dying (American Psychiatric Association, 2013). Their caregivers can also meet the criteria, due to repeatedly and directly witnessing the threat and eventual death of a close family member or friend. Health care professionals who regularly work with terminally ill patients also repeatedly observe the emotional effects on caregivers and the declining health and ultimate death of clients.

The potential for mental health professionals to work with terminally ill clients has likely increased because of the passage of the 2010 Affordable Care Act, which has included the encouragement of physical and behavioral or psychological health care collaboration and integration, including embedding mental health professionals within various health care systems (Mechanic, 2012). This trend is further encouraged through state laws, such as the Washington State Legislature House Bill 2572, which pushed for a "transition toward a fully integrated managed care system that provides physical health and behavioral health services on a statewide basis by 2020" (Washington State Health Care Authority, 2016, p. 3). As mental health professionals move into these new job opportunities, they share chart notes, treatment plans, desk spaces, and support staff to work side by side with other medical providers focusing on the holistic care of patients (Vogel et al., 2017). Due to the increased ease and speed in accessing an in-house behavioral health specialist during warm handoffs, patients are more likely to be seen by mental health professionals than if they required a referral to outside organizations or even an appointment within the organization in a different building or for whom they need to schedule a separate appointment (Serrano & Monden, 2011). Within these systems, mental health professionals increasingly work with patients whose conditions can include chronic obstructive pulmonary disease, cardiac issues, multiple sclerosis, geriatrics, cancer, and other palliative and

end-of-life care issues (Breland et al., 2015; Chung et al., 2016; Ehde et al., 2018; Greenberg et al., 2016; Markman et al., 2018; Weir, 2017). Therefore, mental health professionals who are working within such organizations have an increased risk of encountering more clients with a terminal illness and potentially experiencing CF compared with traditional mental health professionals.

Psychological distress associated with CF can include stress, anxiety, and depression, and in extreme cases it can result in PTSD (Boscarino et al., 2004; Bride, 2012; Figley, 1995a, 2002; Figley Institute, 2012). The evaluation of CF is important because mental health professionals with elevated levels have an increased risk for experiencing decreases in work effectiveness and "making poor professional judgements, such as misdiagnosis, poor treatment planning, or abuse of clients" (Bride & Robinson et al., 2004, p. 33). Figley (1995b) also proposes that CF is a reason that many mental health professionals develop work-related burnout and leave the field.

Burnout is characterized by cynicism, emotional exhaustion, depersonalization, and a reduction in the ability to feel accomplished, which ultimately results in an inability to function effectively in interpersonal relationships within multiple areas of life (Maslach & Jackson, 1981). Bride (2012) concurs that if CF is left unaddressed for a prolonged time, burnout is the result. Additionally, others are careful to point out that although CF can contribute to work-related burnout, other factors, such as an overwhelming workload or job ambiguity are more likely to have a direct influence on burnout outcomes (Maslach & Jackson, 1981). Therefore, it is important to identify protective factors to both reduce the risk for developing CF and to target for remediation after CF-related symptoms occur. Such factors identified as potential areas of interest include compassion satisfaction, self-compassion, and mindfulness.

Stamm (2010) defines compassion satisfaction as the pleasure that caregivers and those in helping professions acquire from providing help to others. The author proposes that it is a separate and distinctly measurable construct from CF and that individuals can have varying levels of both constructs. Alternatively, Geoffrion et al. (2019) argue that CF and compassion satisfaction are opposing ends of a single construct and state that an individual with a high level of compassion satisfaction will have an equally low level of CF and vice versa. Beaumont et al. (2016) report finding a nonsignificant, moderate association between increased compassion satisfaction and decreased CF, and a nonsignificant, small association between increased compassion satisfaction and increased self-compassion.

Neff (2003a, 2003b) derives a definition for self-compassion from a Buddhist framework within which self-compassion stems from self-kindness, common humanity, and the ability to maintain mindfulness of painful thoughts and feelings rather than overidentifying and becoming fused with them. Research by Fong and Loi (2016) found that higher levels of self-compassion have a large significant negative relationship with psychological distress. Several studies report that participants who complete a self-compassion program experience a reduction in self-reported stress level and have a decreased cortisol level, a common hormonal elevation response to stress (Breines et al., 2014; Finlay-Jones et al., 2017; Rockcliff et al., 2008). Additional research results indicate a significant positive relationship between self-compassion and happiness, life satisfaction, optimism, and psychological well-being (Beaumont et al., 2016; Finlay-Jones et al., 2017; Fong & Loi, 2016; Neff, 2003b; Neff & Germer, 2013; Neff, Kirkpatrick, & Rude, 2007; Neff, Rude, & Kirkpatrick, 2007).

Support is also found for the role of increased self-compassion in decreasing psychological distress. Research results report finding a significant negative relationship between

self-compassion and depression and rumination, indicating that as self-compassion level increases, levels of depression and rumination decrease (Finlay-Jones et al., 2017; Fong & Loi, 2016; Neff, 2003b; Van Dam et al., 2011). Several studies also report finding a significant negative relationship between self-compassion and general anxiety (Finlay-Jones et al., 2017; Neff, Hsieh, & Dejitterat, 2005; Neff & Germer, 2013; Neff, Rude, & Kirkpatrick, 2007; Van Dam et al., 2011).

Mindfulness is generally defined as "moment-to-moment, non-judgmental awareness, cultivated by paying attention in a specific way, that is, in the present moment, and as non-reactively, as non-judgmentally, and as openheartedly as possible" (Kabat-Zinn, 2005, p. 108). Within mindfulness research, two types are recognized, state and trait (Bishop et al., 2004; Lau et al., 2006). State mindfulness is the end state of increased openness, curiosity, acceptance, and a nonjudgmental stance of internal experiences such as physical sensations, emotions, and thoughts, which is achieved after participating in mindful activities. Whereas trait mindfulness is described as the degree to which an individual can enter a mindful state consistently "over time and across situations" without first participating in a mindfulness activity (Baer, 2011, p. 6).

Existing research identifies positive effects on patients and clients of care professionals who complete mindfulness-based training programs. Such research indicates that completing these programs can increase work effectiveness for health care providers, such as an increasing patient satisfaction ratings and inpatients experiencing a reduction in safety incidents (Beach et al., 2013; Brady et al., 2012). Furthermore, the clients of mental health professionals who complete mindfulness programs are also more likely to experience a reduction in psychological distress (Dunn et al., 2013; Grepmair et al., 2007). Research results also report finding positive effects from possessing an increased mindfulness level for care professionals themselves,

including identifying it as a protective factor against and interventional target for reducing psychological distress (Dunn et al., 2013; Grepmair et al., 2007). Research by Thomas and Otis (2010) found a relationship between trait mindfulness and work-related burnout but not with CF. Alternatively, research by Thieleman and Cacciatore (2014) later found a significant negative relationship between CF and trait mindfulness, indicating that as mindfulness levels increase, CF levels decrease. Additionally, research results report finding significant reductions in CF-related psychological distress symptoms including stress, depression, and anxiety after completing a mindfulness-based intervention program (Fortney et al., 2013; Shapiro, Brown, & Biegel, 2007). Therefore, a higher level of trait mindfulness may be a protective factor against higher levels of CF.

Purpose of the Study

The field of helping professions encompasses several categories, such as medical health providers, mental health professionals, social workers, educators, lawyers, law enforcement, and clergy, to name a few (Engs, 1980). Individuals within helping professions have an increased risk for developing CF because of the increased risk of being repeatedly exposed to the details of incidents when clients have either directly experienced, witnessed others experiencing, or learned that someone close to them has experienced being seriously harmed, sexually abused, or threatened with or witnessed another's death. Those working with clients with a terminal illness also have an increased risk for CF, due to the ongoing threat of the client's death. However, some perceive the extent of the effects or the existence of PTSD and CF to be questionable (Elwood et al., 2011; McHugh & Treisman, 2007). Such denial of these diagnoses serves to maintain the stigma associated with them and silence those in potential need of help. Such silencing can therefore impede self-awareness of symptoms and inhibit individuals from

admitting the need for self-care and possibly in seeking assistance. Left unaddressed over time, CF will create barriers to a mental health professional's ability to establish a therapeutic alliance, thereby reducing, if not negating, their ability to work effectively with clients (Bride, 2012; Bride & Robinson et al., 2004; Figley, 1995b; Maslach & Jackson, 1981). Therefore, initiative-taking steps should be taken to reduce possibilities for CF to develop, increase awareness of personal CF level, and further strengthen protective factors.

Consequently, the purpose of this project is to explore the potential relationship between levels of trait mindfulness, self-compassion, and CF in adult U.S. mental health professionals who are currently working with clients with a terminal illness. A cross-sectional, relational, quantitative design was used, with survey data obtained by soliciting responses from qualifying volunteers. This research could be used to inform future CF prevention and intervention strategies and programs to support mental health professionals who are working with clients with a terminal illness.

CHAPTER II: LITERATURE REVIEW

Posttraumatic Stress Disorder

In 1980, the American Psychiatric Association first included the PTSD diagnosis within the third edition of the DSM. It specified that individuals with the diagnosis may experience intrusive symptoms, such as memories, dreams, or flashbacks; negative cognitive or mood changes, like anhedonia, detachment or estrangement, or constricted affect; and changes in enthusiasm, awareness, and reactivity levels, for instance hypervigilance, concentration difficulties, or sleep issues. The first criteria for a PTSD diagnosis includes direct experience of, "actual or threatened death, serious injury, or sexual violence" (American Psychiatric Association, 2013, p. 271), witnessing such acts occurring to others, or learning that a close friend or family member experienced such events. However, the fifth and latest edition of the DSM (DSM-5) adds that those who are repeatedly and indirectly exposed to the details of such events and experiences may also receive a PTSD diagnosis. Although nonlinearly, the DSM-5 therefore equates CF with PTSD, indicating that mental health professionals may be included in those who could develop work-related PTSD.

Currently the only strongly recommended options for treating clients with PTSD according to the American Psychological Association's (APA's; APA, 2017a) treatment guidelines include cognitive behavioral therapy, cognitive processing therapy, cognitive therapy, and prolonged exposure therapy. Additionally, brief eclectic psychotherapy, eye movement desensitization and reprocessing therapy, narrative exposure therapy, and medications are also recommended conditionally when they are offered in conjunction with therapeutic treatment options. Because trauma-focused treatment options incorporate some degree of "direct exposure to, or cognitive focus on, the traumatic event(s)" (The Management of Posttraumatic Stress

Disorder Work Group, 2017, p. 47), some have raised efficacy questions due to the tendency for high dropout rates associated with these options.

A meta-analysis that was conducted by Imel et al. (2013) evaluated dropout rates of 3,652 participants who were in treatment for PTSD across 42 studies between 1991 and 2010. Treatment approaches were divided into three groups, including those with an intentional trauma focus, those that included trauma content though were not entirely focused on trauma—called trauma neutral—and those that avoided trauma content. Trauma-focused approaches included brief cognitive behavioral intervention, cognitive behavioral therapy, cognitive behavior trauma treatment protocol, cognitive processing therapy, eye movement desensitization and reprocessing therapy, exposure, hypnotherapy, imagery rehearsal, imaginal exposure, narrative exposure therapy, prolonged exposure, trauma desensitization, trauma-focused cognitive behavioral therapy, and writing assignments. Neutral therapeutic approaches included behavioral family therapy, brief psychodynamic therapy, cognitive restructuring, cognitive therapy, in vivo exposure, manualized treatment as usual, seeking safety, self-help book use, self-management, stress inoculation training, and trauma counseling (Imel et al., 2013). The trauma content avoidant interventions included approaches such as supportive counseling.

Imel et al. (2013) report that trauma-focused approaches resulted in higher drop-out rates when compared specifically with one type of trauma content avoidant intervention, called present-centered therapy. This approach is also listed as a research-supported treatment option for PTSD by the APA's Society of Clinical Psychology (Division 12 of the APA, 2022b). The organization describes the approach as "altering present maladaptive relation patterns/behaviors, providing psychoeducation regarding the impact of trauma on the client's life, and teaching the use of problem-solving strategies that focus on current issues" (Division 12 of the APA, 2022a,

para. 1). Despite identifying dropout rates ranging widely between studies and between specific treatment orientations (e.g., between narrative exposure therapy at 2.4% and cognitive behavioral therapy at 26.4%), rates were relatively consistent across the three types of therapeutic approaches (Imel et al., 2013). Alternatively, the authors called attention to the significant difference in dropout rates when they narrowed their focus to only one type of non-trauma-focused control intervention approach—present-centered therapy at 22.3%—pointing to a potential alternative primary treatment option for those with an aversion to trauma-focused treatment. The authors indicate that this finding provides preliminary evidence for the need of further research to compare effectiveness and dropout rates between non-trauma-focused and trauma-focused intervention approaches.

An additional meta-analysis by Erford et al. (2015) investigated the PTSD treatment outcomes that were reported 152 articles from 1990 to 2012 and encompassed 11,655 participants. Although no outcome differences were found between treatment options, including trauma-focused and non-trauma-focused therapeutic approaches, the authors found medium to large outcomes supporting the use of therapy to effectively treat PTSD. However, the authors also acknowledged that dropout rates for trauma-focused approaches were higher than those for non-trauma-focused approaches were and therefore recommended careful consideration when choosing to use trauma-focused therapeutic approaches (Erford et al., 2015).

The Department of Veterans Affairs' and Department of Defense's practice guidelines for PTSD also suggests the use of non-trauma-focused therapies when trauma-focused options are not available or clients are unwilling to participate in them (The Management of Posttraumatic Stress Disorder Work Group, 2017). They specify acceptance and commitment therapy (ACT), behavioral activation, couples/family/marital counseling, emotion focused

therapy, interpersonal therapy, meditation, mindfulness, neurolinguistic programming, present-centered therapy, problem-solving therapy, psychoanalysis, psychodynamic, psychotherapy, relaxation, seeking safety, socioenvironmental therapy, stress inoculation therapy, and supportive counseling as examples of research supported non-trauma-focused therapeutic approaches.

Compassion Fatigue

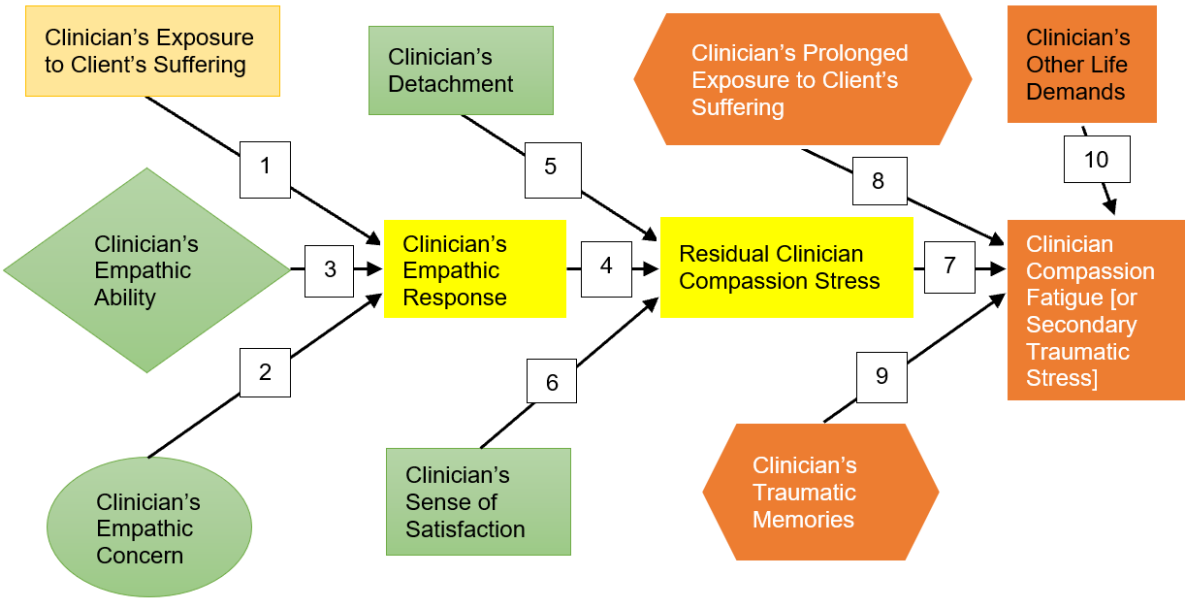
Figley (1995b) proposes that the acronym PTSD should specifically represent the term primary traumatic stress disorder because "every stress reaction is 'post' by definition" (p. 6) and emphasizes the personal, first-hand nature of experiencing the trauma that can result in PTSD. Therefore, he differentiates CF from PTSD by defining it as "the natural, consequent behaviors and emotions resulting from knowledge about a traumatizing event experience by a significant other; it is the stress resulting from helping or wanting to help a traumatized or suffering person" (Figley, 1995b, p. 10). Although similar, the psychodynamic construct of countertransference is explicated from CF in that countertransference is confined within the context of the therapeutic relationship, whereas CF can influence all the clinician's interpersonal relationships (Bride, 2012).

Clinicians experiencing CF can experience the same range of symptoms as those that are associated with a PTSD diagnosis, such as "intrusive imagery, avoidance of reminders and cues, hyper-arousal, distressing emotions, and functional impairments, [and] in the most severe instances, . . . [CF] may warrant a diagnosis of PTSD" (Bride, 2012, p. 600). CF-related symptoms thus reduce a clinician's ability or willingness to empathize with others following exposure to secondary traumatic experiences (Boscarino et al., 2004; Figley, 1995a, 2002; Figley Institute, 2012).

Figley's model of compassion stress and fatigue asserts clinicians are first exposed to client's suffering, which combines with the clinician's level of empathic ability and desire to respond to client's needs—called empathic concern, and results in the degree to which the clinician works on reducing client's suffering—called empathic response (Figley Institute, 2012). Combined with this, is the clinician's ability to distance themselves "from the ongoing misery of the traumatized person" (Figley Institute, 2012, p. 44) and their sense of satisfaction from efforts to assist clients. These forces can then result in a residual level of compassion stress or fatigue, as clinicians feel a pull to further assist clients in reducing suffering. Secondary traumatic stress can then be compounded with prolonged exposure to client suffering or instances of client suffering at a higher level of burden, clinicians' memories of client suffering, and other day-to-day life disruptions and stressors, which result in CF (see Figure 1). From this perspective, when left unaddressed, over time, the consequence of secondary traumatic stress is CF.

Figure 1

Compassion Stress and Fatigue Model



Note. From "Basics of Compassion Fatigue," by Figley Institute, 2012, p. 44 (http://www.figleyinstitute.com/documents/Workbook_AMEDD_SanAntonio_2012July20_RevAugust2013.pdf). Copyright 2012 by Figley Institute. Reprinted with permission (see Appendix A).

Alternatively, in several publications Figley (1995b) and Bride (2012) purport that both secondary traumatic stress and CF can be used interchangeably, with CF being the preferred term, as it is perceived as being less stigmatizing. Additionally, the term vicarious traumatization is sometimes used interchangeably with CF, while others agree that it is a related outcome of secondary exposure to other's trauma, the terms are disambiguated by specifying that vicarious traumatization refers instead to "a transformation in cognitive schemas and belief systems" (Bride, 2012, p. 600). Interestingly, this model is now challenged by a longitudinal study by Shoji et al. (2015) who found that burnout lead instead to CF, though CF did not lead to burnout among behavioral and mental health care providers in the United States and Poland who were experiencing CF. Regardless, based on the orientation of Figley's model for compassion fatigue, burnout and compassion satisfaction are equally important concepts to explore (Figley, 1995a; Bride, 2012).

Burnout

Figley proposes that if CF is experienced for a prolonged time and left untreated, burnout occurs (Bride, 2012). Burnout is characterized by cynicism, emotional exhaustion, depersonalization, depression, feeling overwhelmed, and a reduction in the ability to feel accomplished, which ultimately results in an inability to effectively function in interpersonal relationships within multiple areas of life (Maslach & Jackson, 1981; Stamm, 2010). "With

burnout, increased workload, and institutional stress, not trauma, are the precipitating factors, whereas [CF] arises as a result of exposure to a client's traumatic material" (Bride, 2012, p. 600).

Salvagioni et al. (2017) conducted a meta-analysis of longitudinal studies ranging from 1- to 12-year periods that assessed burnout largely by using the Copenhagen Burnout Inventory, Maslach Burnout Inventory, or Shirom-Melamed Burnout Measure. The results indicated numerous physical, psychological, and occupational negative outcomes for adult workers who experience burnout. Significant physical outcomes included type 2 diabetes, high cholesterol, coronary heart disease, hospitalizations for cardiovascular disease, increases in pain, prolonged fatigue, headaches, respiratory infections, gastrointestinal problems, severe injuries, and death occurring before 45 years of age. The significant psychological consequences identified were insomnia, depressive symptoms, use of psychotropic and antidepressant treatment, and hospitalizations for mental disorders. Finally, job-related negative results involved decreases in job satisfaction, absenteeism, new disability claims, going to work despite feeling sick, a changed perception of an increase in job demands, and a decrease in job resources (Salvagioni et al., 2017).

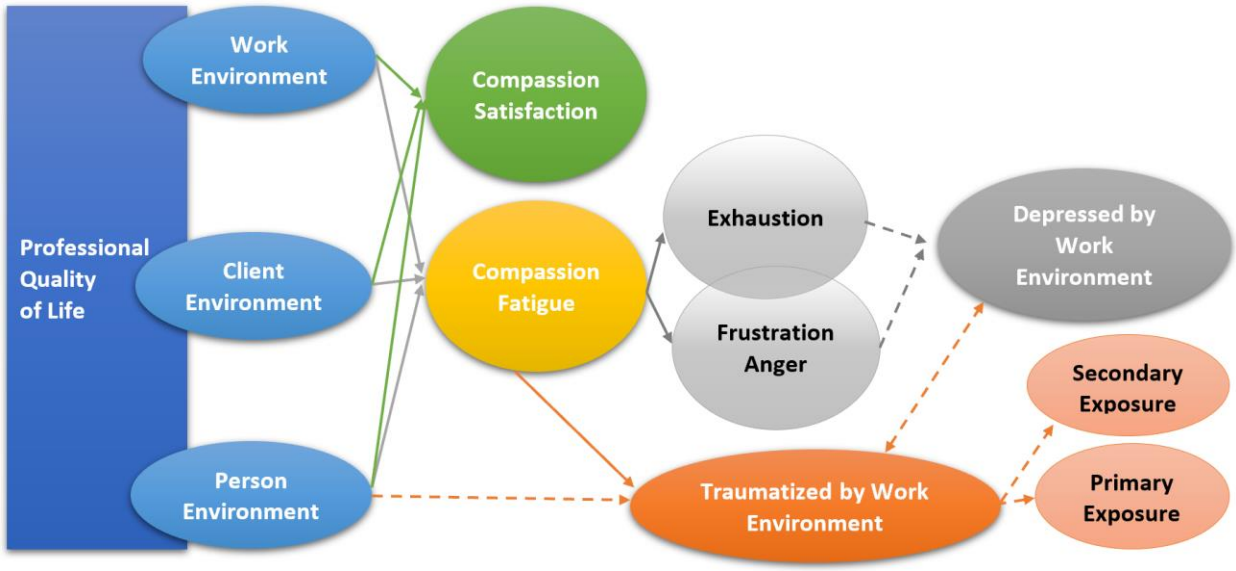
Compassion Satisfaction

Stamm (2010) provides an expanded and slightly differing model from Figley's of the development of CF. Her model takes a step back from Figley's in search of an overarching contextualization of professional quality of life. From this perspective, mental health professionals are simultaneously affected by their interactions with clients, personal factors, and the work environment. One's work environment may combine with interactions with clients to produce a sense of compassion satisfaction. Alternatively, or additionally, the work environment may combine with the other factors to result in CF. If CF is a resulting outcome, from Stamm's

(2010) perspective, it derives from two pathways, one being burnout, depicted in Figure 2 in gray, which the author proposes is comprised of feelings of exhaustion, frustration, anger, and/or depression. The second identified pathway to CF by Stamm is secondary traumatic stress, which is derived from fear and either primary or secondary trauma, depicted in Figure 2 in orange. Therefore, Stamm perceives CF as either a result from prolonged secondary traumatic stress or burnout or a combination of the two.

Figure 2

Theoretical Path Analysis of Professional Quality of Life



Note. From "The Concise ProQOL Manual, 2nd ed.," by Beth Hudnall Stamm, 2010, p. 10 (https://proqol.org/uploads/ProQOLManual.pdf). Copyright 2010 by Beth Hudnall Stamm. Reprinted with permission by the ProQOL Office at The Center for Victims of Torture (see Appendix B).

Stamm (2010) identifies compassion satisfaction as "the positive feelings about . . . [a mental health professional's] ability to help" (p. 8), and perceives it as a protective factor for CF. The author proposes that burnout reflects feelings of emotional overload and exhaustion that

result from a failure to be effectual, whereas compassion satisfaction portrays a sense of self-efficacy and "happiness with what one can do to make the world in which one lives a reflection of what one thinks it should be" (Stamm, 2010, p. 113). Additionally, when levels of secondary traumatic stress and work-related burnout are elevated, there is likely also a low level of compassion satisfaction. Stamm (2002) also suggests that asking about positive compassion satisfaction related symptoms and negative symptoms related to secondary traumatic stress and work-related burnout provides a more complete picture of an individual's professional quality of life.

Compassion Fatigue Prevalence

Research regarding the rates of individuals who work within specific helping professions who meet the full criteria for CF should be interpreted cautiously because the studies found within the relevant literature all incorporate several limitations and results vary widely between them. However, keeping this caveat in mind, research indicates that prevalence rates within helping professions, excluding mental health professionals, ranges between 12.7% and 44.8%, as identified using the Secondary Traumatic Stress Scale. A study conducted by Dominguez-Gomez and Rutledge (2009) reports that 33% (n = 67) of emergency nurse participants met full criteria for CF. Morrison and Joy (2016) identify 39% (n = 80) of the emergency nurses participating in their study as meeting full criteria for CF. McAleese et al. (2016) report that among employees within emergency departments and ambulance bases in Northern Ireland, 30.6% (n = 11) of junior medical doctors and 35.9% (n = 21) of staff nurses met full criteria for CF. Roden-Foreman et al. (2017) found that 12.7% (n = 118) of participating emergency medicine providers working in Texas met full criteria for CF.

Prevalence rates for mental health professionals who meet criteria for CF range widely between 7% and 70%. Bride (2007) identifies 15.2% (*n* = 282) of social workers participating in his study who reported encountering secondary trauma session content as meeting full CF criteria. Research by Dekel et al. (2007) found that 7% (*n* =144) of Israeli hospital social workers providing services to victims following terrorist attacks met criteria for CF. A study by Rossi et al. (2012) reports that among community mental health workers in Italy, the prevalence rates for CF among social workers were 28.6% (*n* = 14), psychiatrists were 16% (*n* = 25), psychiatrists in training were 15.8% (*n* = 19), and psychologists (*n* = 13) and rehabilitation therapists (*n* = 13) were 7.7%. Sodeke-Gregson et al. (2013) identify prevalence rates for UK therapists meeting full criteria for CF as unusually high at 70% (N = 253). Cieslak et al. (2013) report that 19.2% (*n* = 224) of participating mental health professionals working with the military met full criteria for CF. Ewer et al. (2015) report that 19.9% (*n* = 412) of participants working in alcohol and substance use treatment in Australia met full criteria for CF. Salloum et al. (2019) report the rate of CF among child welfare workers as 20.6% (*N* = 177).

Compassion Fatigue Risk Factors

Research that has explored additional risk factors associated with CF has identified workplace level, demographic, individual, and treatment-related factors as influencing one's risk for experiencing CF symptoms. Choi (2011) identified impactful workplace factors on CF levels as including supportive environments, open acknowledgment of the increased risks for negative outcomes unique to specific work, organizational strategic transparency, and supervision. This research did not look at burnout, which Bride (2012) noted is more likely to result from workplace factors than increases in CF.

Demographic Risk Factors

Research results exploring some demographic risk factors associated with CF are mixed and indicate that additional research is needed to provide further clarification. Such factors include age, race, and gender.

Age

For mental health professionals, most research indicates that age does not significantly influence CF symptom risk (Alkema et al., 2008; Badger et al., 2008; Bloomquist et al., 2015; Choi, 2011; Cieslak et al., 2013; Connally, 2012; Dekel et al., 2007; Furlonger & Taylor, 2013; Galek et al., 2011; Kulkarni et al., 2013; Nelson-Gardell & Harris, 2003; Rossi et al., 2012; Sodeke-Gregson et al., 2013). However, Carmel and Friedlander (2009) found a significant negative relationship, indicating that as the age of mental health professionals increases, CF symptom risk decreases. Additional research results report that younger mental health professionals are significantly more likely to experience a larger amount of CF symptoms (Sprang, Craig, & Clark, 2011; Van Hook & Rothenberg, 2009).

Race

Based on minimal existing research exploring race as it relates to CF symptom risk in mental health professionals, results indicate that largely race does not have a significant relationship with symptoms (Choi, 2011; Connally, 2012). However, one study by Sprang, Craig, and Clark (2011) reports that among White, Black, Asian, and Hispanic people, Hispanic child welfare workers are significantly more likely to experience elevated CF symptoms.

Gender

Research indicates that for mental health professionals, gender largely has no significant influence on CF symptom risk (Choi, 2011; Connally, 2012; Furlonger & Taylor, 2013; Galek et

al., 2011; Kulkarni et al., 2013; Nelson-Gardell & Harris, 2003; Salloum et al., 2019; Sodeke-Gregson et al., 2013; Zeidner et al., 2013). However, other researchers identified women as significantly more likely to experience CF symptoms (Rossi et al., 2012; Sprang, Clark, & Whitt-Woosley, 2007; Van Hook & Rothenberg, 2009). Alternatively, Sprang, Craig, and Clark (2011) also counter this research and report that male child welfare workers are instead significantly more likely to experience elevated CF symptoms.

Individual Risk Factors

Like demographic risk factors, results of research exploring individual risk factors for CF are mixed. Such factors include experience level and a personal trauma history. These findings, again, point to the need for additional research to provide clarification.

Experience Level

Research results exploring the relationship between a mental health professional's level of experience and risk for developing CF symptoms are mixed and can be complicated. Some research reports that a mental health professional's experience level does not significantly influence risk for CF symptoms (Alkema et al., 2008; Bride, Jones, & MacMaster, 2007; Cieslak et al., 2013; Dekel et al., 2007; Furlonger & Taylor, 2013; Galek et al., 2011; Nelson-Gardell & Harris, 2003; Olivares et al., 2007; Salloum et al., 2019; Sodeke-Gregson et al., 2013; Van Hook & Rothenberg, 2009). However, this claim is disputed by other studies that report finding a significant negative relationship, indicating that as the professional's experience level increases, CF symptom risk decreases (Badger et al., 2008; Bloomquist et al., 2015; Carmel & Friedlander, 2009; Kulkarni et al., 2013; Shalvi et al., 2011). Alternatively, Rossi et al. (2012) report that community mental health workers who had worked less than 1 year or more than 6 years in the

mental health department or those with previous experience in other health-related services are significantly more likely to experience CF symptoms.

Personal Trauma History

Generally, research results for mental health professionals indicate there is a significant positive relationship between increased exposure to primary trauma experiences and an increased CF symptom risk (Choi, 2011; Cieslak et al., 2013; Ewer et al., 2015; Nelson-Gardell & Harris, 2003; Roden-Foreman et al., 2017; Sodeke-Gregson et al., 2013). More specifically, research by Rossi et al. (2012) found that community mental health workers who experienced one negative life event over the past year were significantly more likely to experience CF symptoms, and those who experienced more than one was significantly more likely to experience work-related burnout. Bober and Regehr (2006) provide an additional finding, which presents some explication for this trend, reporting that only participants who had sought treatment for their personal trauma histories experienced elevated CF symptoms. However, other research results do not support any of these findings and instead report finding no relationship between these factors (Ennis & Home, 2003; Kulkarni et al., 2013).

Exploring trauma-related factors within research is sometimes viewed as being overly risky with respect to the potential for retraumatizing participants, and researchers must carefully consider pertinent ethical concerns and the cost–benefit ratio for participants. Salient ethical factors can include participant vulnerability to coercion and decision-making capabilities (Newman & Kaloupek, 2009). Special protections are mandated for specific groups of people who are considered likely to be particularly vulnerable such as children, prisoners, adults with cognitive disabilities, or those who belong to otherwise marginalized communities (The National

Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979). Protected groups also include those who are financially or scholastically disadvantaged.

Ethical research is also dependent on the participant's capacity to make good decisions (The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979). Of concern, are participants who may meet criteria for PTSD, as research indicates this is likely to negatively affect decision-making capabilities (Dretsch et al., 2012; Fogleman et al., 2017). Similar outcomes are also found in research participants without PTSD, who are experiencing acute stress (Lighthall et al., 2009; Porcelli & Delgado, 2009; Preston et al., 2007; van den Bos et al., 2009). However, there is currently a lack of research regarding potential correlations between CF and decision-making.

After participants are identified as likely having competent decision-making capacity, researchers are required to safeguard projects against perceptions of coercion, show respect for the participants, and encourage participant autonomy by providing informed consent. Per the APA (2017b), informed consent should incorporate the reason for conducting the research; the time that participation is expected to take; what participation will involve—noting that participants may stop participation at any time; contact information for questions; and the potential risks, benefits, and incentives for participating.

Furthermore, researchers should consider the cost–benefit ratio for conducting trauma-related research. Newman & Willard et al. (2001) propose that participants' perceptions of trauma-related research participation include five factors such as beneficial factors, including perceptions of participation, personal benefits, and global research evaluation; and cost factors, including emotional reactions or distress, and research drawbacks. Concepts incorporated into the participation factor include general satisfaction with recruitment and overall participation in

the study. The global research evaluation factor incorporates concepts that are reflected in professional ethical principles, including respect for the dignity of participants, maintenance of participant confidentiality, scientific competence, and informed consent. Personal benefits, perceived drawbacks, and partial participation integrate "with the ethical constructs of benefit and cost–risk ratio" (Newman & Willard et al., 2001, p. 323). The emotional reaction factor encompasses participants' potential distress resulting from participation. This research proposes that although the emotional reaction factor may be elevated, it may not significantly correlate with the factors of personal benefits or perceived drawbacks. However, Newman, Willard, et al. (2001) report that an elevation in the emotional reaction factor will likely have a moderate correlation with a lower perception of general participation.

When considering the potential risks of conducting trauma-related research, Newman, Risch, and Kassam-Adams (2006) propose that support cannot be found in previous research for the common assumption that asking questions related to trauma history harms participants. Some research only reports finding participant benefits (Goossens et al., 2016; Scotti et al., 2012). However, most research that uses formal measures to assess participants' perceptions of and reactions to participating in trauma-related research indicates that the perceived benefits generally outweigh the costs. DePrince and Chu (2008) found the average of participants' perceptions of research participation, personal benefits, and global evaluation of engaging in trauma-related research is higher than neutral. Additionally, average perceptions of emotional reactions and research drawbacks are lower than neutral, resulting in a positive cost–benefit ratio. Gekoski et al. (2009) found that although women participating in research regarding experiences of bereavement due to a homicide are more likely to endorse elevated emotional reactions to the research, they reported that this cost is outweighed by elevated personal benefits,

and no participants reported regretted participating. Several other studies identify similar trends in that the participants endorsed that the cost of elevated emotional reactions to trauma-related research is offset by other benefits (Decker et al., 2011; Gagnon et al., 2015; Lawyer et al., 2021; Massey & Widom, 2013; Overstreet et al., 2018; Robertson et al., 2021; Wager, 2012).

However, despite this tendency in reports about the cost–benefit ratio, additional research indicates that participants in trauma-related studies still experience distress, regret, or other negative outcomes after participating, highlighting the need for continued efforts to minimize these adverse effects (Gekoski et al., 2009). Research by Johnson and Benight (2005) found that among women participating in trauma-related research regarding recent experiences with domestic violence, 45% (n = 25) endorsed elevated personal benefits, 25% (n = 14) elevated emotional reactions, and 6% (n = 3) participation regret. Similarly, Edwards et al. (2009) found that women with histories of sexual assault were more likely to perceive higher levels of emotional reactions (3.5%; n = 33), compared with participants without this history. For some of these women (27%; n = 9) this elevation was outweighed by elevations in perceptions of personal benefits, but for others (85%; n = 28), perceptions of personal costs outweighed the benefits. However, 79% (n = 26) of the 33 women indicated they would still participate in the research if they had known what they learned during participation. Additionally, some research reports an increased likelihood for participants with elevated trauma histories and psychopathology, particularly PTSD and depression, for experiencing elevated costs compared with other groups, most notably emotional reactions (Gagnon et al., 2015; Massey & Widom, 2013; Robertson et al., 2021). However, other research challenges these findings by not finding these associations (Kassam-Adams & Newman, 2005; Newman & Willard et al., 2001).

Although piecing together the results of this tapestry of trauma-related research points to the stronger than previously realized resilience of participants and the identification of potential benefits for participation, there remains a need for continued care to be taken in the development of research plans. Small percentages of participants from many studies continue to experience distress resulting from research participation, and some results are conflicting with nuanced details yet to be identified. Additionally, researchers exploring these concepts may start with this framework, sometimes an older version is used, and it is sometimes modified to suite specific purposes, such as adding and subtracting items and modifying the subscales (Labott et al., 2013; Murphy et al., 2011).

Practice Level Risk Factors

For mental health professionals, there are several treatment-related risk factors for developing CF symptoms. Research results report a significant positive relationship between having a higher percentage of clients with trauma histories and an increased risk for CF symptoms (Cieslak et al., 2013; Ewer et al., 2015; Furlonger & Taylor, 2013). However, research results on several factors remain mixed, indicating the need for additional research to provide clarification such as the potential relationship between CF symptom risk with the frequency of session content related to trauma, trauma-focused treatment client volume, and the overall volume of clients. Additionally, Hensel et al. (2015) speculate that this potential risk factor illuminates a possible protective aspect of working with a percentage of clients without a trauma history and in allotting a portion of work time to engage in nontherapeutic work activities.

Trauma Content Session Frequency

Most research results report that exposure to a higher frequency of a client's trauma history content during sessions does not significantly influence CF symptom risk (Choi, 2011;

Cieslak et al., 2013; Devilly et al., 2009; Ennis & Home, 2003; Furlonger & Taylor, 2013; Kulkarni et al., 2013; Sodeke-Gregson et al., 2013). However, Galek et al. (2011) found the opposite results for professional chaplains in that higher exposure to this type of session content increases CF symptom risk.

Trauma-Focused Treatment Client Volume

Some research reports having a larger number of clients receiving treatment for trauma-focused content does not significantly influence CF symptom risk (Cieslak et al., 2013; Devilly et al., 2009; Furlonger & Taylor, 2013; Sodeke-Gregson et al., 2013). Alternatively, several studies report finding a significant relationship between these factors (Craig & Sprang, 2010; Shalvi et al., 2011; Tosone et al., 2010).

General Caseload Volume

Most research reports finding a significant positive relationship between seeing too many clients and an increased CF symptom risk (Bride, Jones, & MacMaster, 2007; Cieslak et al., 2013; Kulkarni et al., 2013). However, research by Sodeke-Gregson et al. (2013) did not find a significant relationship between these factors.

Compassion Fatigue Protective Factors

Self-Care

Dorociak et al. (2017) define self-care as, "a multidimensional, multifaceted process of purposeful engagement in strategies that promote healthy functioning and enhance well-being" (p. 326). Some research reports a significant negative relationship between engagement in self-care activities and CF symptom risk, indicating that as self-care activity engagement increases, CF symptom risk decreases (Alkema et al., 2008; Salloum et al., 2019). Bloomquist et

al. (2015) break out self-care activities into targeted groups including physical, emotional, spiritual, work-related professional, and psychological activities.

Some examples of physical self-care activities include eating healthy meals, engaging in regular physical activity, and obtaining adequate sleep. Examples of spiritual self-care include attending religious or spiritual events, actively seeking meaning in life, and spending time building a sense of connection with others and community. Illustrations of work-related self-care activities consist of socializing with coworkers, attending pertinent trainings, seeking supervision, and engaging in peer consultation (Bloomquist et al., 2015). Instances of emotional self-care includes spending time with loved ones, taking time to feel emotions and cry, finding humor, and laughing, providing self-encouragement, and encouraging self-compassion (Bloomquist et al., 2015; Nelson et al., 2017). Examples of psychological self-care activities consist of participating in personal therapy, taking time for self-reflection, engaging in mindfulness activities, and again, encouraging self-compassion (Bloomquist et al., 2015; Neff, 2003b).

Alkema et al. (2008) report that all except physical self-care activities are significantly negatively correlated with increased CF symptom risk. These findings are also reflected in research by Bloomquist et al. (2015), who identify a significant positive relationship between perceptions about self-care and engagement in psychological self-care activities, with reductions in CF symptom risk. Additionally, the authors note that mental health professionals who place high value on self-care are significantly more likely to engage in work-related, emotional, spiritual, and psychological self-care activities. Alternatively, Sodeke-Gregson et al. (2013) report finding the opposite trend in their research. The authors speculate that this surprising finding may be due to a limitation of the cross-sectional design to accurately capture reductions

in CF in participants who actively engage in additional self-care efforts. Although research by Kulkarni et al. (2013) also found a lack of support for a significant relationship between engagement in self-care activities and reductions in CF symptoms, their results provide some potential clarification. These results indicate that when mental health professionals experiencing CF symptoms engage in mindless leisure activities, such as entertainment or taking a vacation, instead of intentional self-care activities, there is a significant increased risk they will experience an exacerbation of CF symptoms. The authors suggest that mental health professionals should instead engage in purposefully meaningful self-care plans or attending stress management training opportunities.

An argument can be made for the ethical responsibility of mental health professionals to develop and maintain a self-care practice based on the requirements of professional organizations' ethical codes stipulating that professionals must make efforts to protect against factors that might negatively affect their ability to work effectively with clients. One such example is found within the APA's Ethical Principles of Psychologists and Code of Conduct (APA, 2017b), which in principle A requires that a psychologist's work benefits their clients and does not cause them harm and that psychologists initiate actions to safeguard this work. The psychologist's personal mental and physical health are specified as potential factors to monitor. Later, in standard 2.06, psychologists are required to seek consultation or supervision if they begin to question that a personal problem is negatively affecting their work with clients, to assist them in determining whether "they should limit, suspend, or terminate their work-related duties" (APA, 2017b, p. 5). In principle B, these requirements are extended to the work of colleagues and to the concern that colleagues are also able to comply with the requirements of principle A and standard 2.06. Therefore, regularly engaging in activities and sustaining personal factors that

assist in decreasing CF are ethically important to maintain. Such factors may include trait mindfulness and self-compassion.

Mindfulness as an Intervention

Although derived from Buddhist traditions, a secular framing of mindfulness was brought to Western psychological awareness primarily within the University of Massachusetts Medical School's Stress Reduction Clinic in 1979 in the form of mindfulness-based stress reduction (MBSR; Williams & Kabat-Zinn, 2011). Western definitions of mindfulness generally derive from one given by Jon Kabat-Zinn (2005), the program's founder, which, as previously stated, is "moment-to-moment, non-judgmental awareness, cultivated by paying attention in a specific way, that is, in the present moment, and as non-reactively, as non-judgmentally, and as openheartedly as possible" (p. 108). Shapiro, Siegel, and Neff (2018) further explicated this definition by underscoring the importance of setting an intention for the mindfulness practice; paying attention to and observing external and internal experiences; and approaching this practice with a curious, kind, and open attitude.

Within psychology research, two types of mindfulness are recognized: state and trait (Bishop et al., 2004; Lau et al., 2006). The resulting state after engaging in mindfulness-based activities is called state mindfulness, which includes the cultivation of the aforementioned open, curious, accepting, and nonjudgmental stance—though this is sometimes restricted to reactions to internal experiences, such as physical sensations, thoughts, and emotions (Lau et al., 2006). From this perspective, state mindfulness is measurable immediately following a mindfulness meditative activity or intervention (Bishop et al., 2004; Lau et al., 2006). Vago and Silbersweig (2012) theorize that these mindfulness practices reduce inherent distortions and biases found to varying degrees within perceptions, thoughts, and emotions through continued development of

metacognitive self-awareness, which in turn increases one's self-regulation abilities. The authors propose that these changes then increase one's ability to improve prosocial qualities and transcend personal needs, desires, and psychological distress, which also improves overall mental health and well-being.

Kabbat-Zinn (2005) extends his definition of mindfulness and the characterization of state mindfulness by describing an effortless form that occurs spontaneously, which others have referred to as trait, dispositional, or personality mindfulness. This type of mindfulness refers to a tendency to be able to enter a mindful state consistently "over time and across situations" (Baer, 2011, p. 6). Trait mindfulness is operationalized as comprising of five metacognitive processes or facets including observing (the observe facet), describing (the describe facet), acting with awareness (the actaware facet), accepting without judgment (the nonjudge facet), and adopting a nonreactive stance (the nonreact facet; Baer et al., 2006). The first three facets (observe, describe, and actaware) measure the concept of acceptance and focus on "what one does when being mindful, [and the last two (nonjudge and nonreact) are] related to how one does it" (Baer et al., 2006, p. 28). The observe facet is defined as the ability to observe or attend to external and internal experiences occurring in the present moment, including bodily sensations, thoughts, and emotions (Baer et al., 2006). The describe facet comprises the ability to label and describe internal experiences, and the actaware facet involves acting with awareness in the present moment as opposed to being on autopilot and allowing one's past experiences or worries and thoughts about the future to direct behavior. The nonjudge facet includes nonjudgmental acceptance of external and internal experiences, and the nonreact facet refers to an individual's ability to allow external and internal experiences to "come and go without reacting to them or getting carried away" and fusing or overidentifying with them (Vago & Silbersweig, 2012, p. 5).

There are numerous variations of mindfulness-based interventions for specific types of clients and conditions, including mindfulness-based trauma treatment and a version of MBSR for art therapy with cancer patients. A research base providing evidence supporting the effectiveness of these interventions in improving overall mindfulness and psychological well-being is growing but further work is still needed.

General Psychological Distress and Well-Being

Several studies have found that participants who complete a mindfulness-based intervention program experience significant reductions in general psychological distress (de Vibe et al., 2013; Dobkin & Zhao, 2011; Jain et al., 2007; Labelle et al., 2015; Martín-Asuero & García-Banda, 2010; Phang et al., 2015; Rosenzweig et al., 2003; Shapiro, Schwartz, & Bonner, 1998; Tamagawa et al., 2013). Likewise, multiple studies also point to the effectiveness in using mindfulness-based interventions to significantly reduce perceived stress levels (Brady et al., 2012; Bränström et al., 2010; Danilewitz et al., 2016; de Vibe et al., 2013; Fortney et al., 2013; Oman et al., 2008; Phang et al., 2015; Shapiro, Astin, Bishop, & Cordova, 2005; Shapiro, Brown, & Biegel, 2007; Tamagawa et al., 2013; Warnecke et al., 2011). Additional research attributes particular trait mindfulness facets with significant reductions in stress, including the observe facet (Bränström et al., 2010), the actaware and describe facets (Omid et al., 2017), and the actaware and nonjudge facets (Garland et al., 2013). Bond et al. (2013) found that after completing a mindfulness-based intervention program, participants also experienced a significant increase in emotion regulation. Similarly, Krasner et al. (2009) note that after completing a similar program, participants experienced significant increases in emotional stability, and research by Bränström et al. (2010) and Goodman and Schorling (2012) found significant increases in general mental well-being after participants completed an MBSR program.

Affect, Depression, and Rumination

Much of the research assessing the use of mindfulness-based interventions to significantly reduce negative affect, depression, or depressive rumination report that it is effective (Boden et al., 2012; Dobkin & Zhao, 2011; Fortney et al., 2013; Hassed et al., 2009; Hicks et al., 2018; Jain et al., 2007; Krasner et al., 2009; Labelle et al., 2015; Martín-Asuero & García-Banda, 2010; Shapiro, Brown, & Biegel, 2007; Shapiro, Schwartz, & Bonner, 1998; Tamagawa et al., 2013). Additional research attributes particular trait mindfulness facets with significant reductions in depression, including the nonreact facet (Bränström et al., 2010), the actaware and describe facets (Omid et al., 2017), the actaware and nonjudge facets (Garland et al., 2013), and the describe and nonjudge facets (Boden et al., 2012). Additionally, like the efficacy of using mindfulness-based interventions to reduce depression, Shapiro, Brown, and Biegel (2007) and Jain et al. (2007) found that after completing an MBSR program, participants also experienced significant increases in positive affect. An exception to these significant results is found in research conducted by Oman et al. (2008) who report that after completing an 8-week program on MBSR, undergraduate students experienced a nonsignificant reduction in ruminative symptoms.

Anxiety

The research results of several studies found that mindfulness-based interventions are also effective in significantly reducing anxiety (Barbosa et al., 2016; Fortney et al., 2013; Rosenzweig et al., 2003; Shapiro, Brown, & Biegel, 2007; Shapiro, Schwartz, & Bonner, 1998; Tamagawa et al., 2013; Warnecke et al., 2011). Research by Bränström et al. (2010) further specifies that significant reductions in anxiety have a strong significant relationship with increases in the trait mindfulness nonreact facet. However, these results are countered by

research by Omid et al. (2017) finding that increases in the actaware and describe facets result in significant decreases in anxiety.

Posttraumatic Stress Disorder and Emotion Regulation

Research results report that individuals with higher levels of trait mindfulness experience significantly lower levels of trauma-related symptoms in response to potentially traumatic events (Hicks et al., 2018; Martin-Cuellar et al., 2018; Thompson et al., 2014). Research by Huang et al. (2019) proposes that this is a direct relationship. However, other studies report this as an indirect relationship, mediated by various factors. Some factors identified include increased levels of emotion regulation (Huang et al., 2019; Pow & Cashwell, 2017), improved sleep quality (Huberty et al., 2018), and reductions specific to posttraumatic cognitive processes (Glück et al., 2016). One such cognitive process identified by Nitzan-Assayag, Aderka, and Bernstein (2015) is cognitive fusion, which is described as the overidentification with thoughts and feelings. Another cognitive process described in research by Nitzan-Assayag, Yuval, et al. (2017) is reactivity to and efforts made to suppress thoughts.

The inclusion of emotion regulation when discussing PTSD is particularly important because previous research states that a higher level of emotion regulation is a significant protective factor against the development of PTSD (Bardeen et al., 2013; Burns et al., 2010; Ehring & Quack, 2010; Frewen et al., 2012; Hartwell et al., 2018; Hussain & Bhushan, 2011; McDermott et al., 2009; Weiss et al., 2012). Furthermore, research by Reffi et al. (2019) report finding that a higher level of emotion dysregulation significantly predicts all four PTSD symptom clusters, including intrusive thoughts, avoidance, cognitions and mood, and hyperarousal. The authors also note finding that a higher level of trait mindfulness significantly predicts a lower level of emotion dysregulation, and likewise, a higher level of emotion

dysregulation significantly predicts lower levels of four trait mindfulness facets, including the nonjudge, actaware, describe, and nonreact facets. Additionally, the authors point to a significant relationship between higher levels of the trait mindfulness actaware facet in predicting a lower level of the PTSD-related hyperarousal symptom.

Research results found by Stephenson et al. (2017) identifies a complicated network of interactions. The authors state that after completing an MBSR program, participants who experienced increases in the trait mindfulness actaware facet experienced significant reductions in all PTSD symptoms, except for reductions in the avoidance PTSD symptom cluster, which was only significantly related to the trait mindfulness nonreact facet. The authors also note that increases in the trait mindfulness observe facet are related to significant increases in PTSD symptoms, which is not reported in the results of research conducted by Bränström et al. (2010). However, in the later research by Stephenson et al. (2017) instead found that after completing an MBSR program, those who experienced elevations in the trait mindfulness nonjudge and nonreact facets resulted in significant decreases in PTSD-related avoidance symptoms, and elevations in the nonreact facet resulted in significant decreases in hyperarousal symptoms. Alternatively, other research by Glück et al. (2016) report that the individual trait mindfulness facets do not explain more of the elevation differences found in PTSD symptom changes when compared with using the overarching trait mindfulness level alone.

Research results by Boden et al. (2012) did not find that increases in the level of the trait mindfulness actaware facet following completion of a group trauma-focused CBT program occurred at a significant rate. However, the authors note that when this increase happens, it is significantly related to reductions in PTSD symptom severity. Moreover, when Polusny et al. (2015) compared a similar therapeutic intervention, present-centered group therapy, with

standard MBSR, the authors found that while both groups experienced a significant reduction in PTSD symptoms, the MBSR group experienced a marginally greater reduction. Furthermore, a meta-analysis by Gallegos et al. (2017) analyzing 19 randomized controlled trials using either meditation or yoga to treat adults with PTSD found these treatments yield a significant but small to medium effect on PTSD symptom reduction.

Trait Mindfulness

Several research results indicate that participants who complete a mindfulness-based intervention program experience a significant increase in trait mindfulness (Bränström et al., 2010; Garland et al., 2013; Hicks et al., 2018; Phang et al., 2015; Shapiro, Brown, Thoresen, & Plante, 2011). Alternatively, other research instead points to interactions between trait mindfulness-based interventions producing changes only in specific facets of trait mindfulness, such as research results by Danilewitz et al. (2016) who found that participants experienced a significant increase in the describe and nonreact facets. De Vibe et al. (2013) also found significant increases in two facets of trait mindfulness, one of which included the nonreact facet but the second was instead the nonjudge facet. However, the authors note that these significant increases were only found among female participants. Labelle et al. (2015) note finding a further complication in that during an 8-week MBSR program, the trait mindfulness observe facet significantly increased during the first 4 weeks of the program, and for those who also experienced a significant increase in the nonjudge facet during this time, there was a significant increase in the nonreact facet during the last 4 weeks. Shapiro, Brown, Thoresen, and Plante (2011) also specify that participants with higher levels of trait mindfulness prior to the start of an MBSR program experience a significantly higher increase in trait mindfulness after completion of a program. Furthermore, several studies also report finding that participants who complete

mindfulness-based intervention programs experience a significant increase in self-compassion, another potential protective factor against developing CF symptoms (Bond et al., 2013; Danilewitz et al., 2016; Shapiro, Astin, Bishop, & Cordova, 2005; Shapiro, Brown, & Biegel, 2007).

Self-Compassion as an Intervention

Neff (2003a, 2003b) draws a definition for self-compassion from a Buddhist framework, within which self-compassion derives from self-kindness, common humanity, and maintaining mindfulness of painful thoughts and feelings rather than overidentifying and becoming fused with them. The author proposes that self-compassion is comprised of three dialectical ranges that contextualize the breadth of each self-construct, including self-kindness versus self-judgment, common humanity versus isolation, and mindfulness versus overidentification. The self-kindness and self-judgment range represents one's ability to "extend kindness and understanding to oneself rather than harsh self-criticism and judgment" (Neff, 2003b, p. 224). The common humanity and isolation range represents one's ability to acknowledge "that suffering, failure, and inadequacies are part of the human condition . . . [versus feeling] self-pity . . . [which] typically [results in feeling isolated and] highly disconnected from others" (Neff, 2003b, p. 224). The mindfulness and overidentification range, represents one's ability to maintain a "nonjudgmental, receptive mind state in which individuals observe their thoughts and feelings as they arise without trying to change or push them away, but without running away with them . . . [and becoming] overidentified with their feelings either" (Neff, 2003b, p. 224). Self-compassion is thought to assist in the maintenance of psychological well-being and resilience and to serve as a protective factor against stress, depression, and anxiety (MacBeth & Gumley, 2012). It is specifically identified as a target for therapeutic treatments in orientations such as ACT,

compassion-focused therapy, and mindfulness-based self-compassion (Germer & Neff, 2019; Gilbert, 2010; Hayes et al., 2012).

Several studies report finding a significant relationship between gender and self-compassion level in that women are more likely to experience lower levels of self-compassion when compared with men (Lockard et al., 2014; Neff 2003b; Neff, Hsieh, & Dejitterat, 2005; Yarnell et al., 2018). Additionally, research by Yarnell et al. (2018) found a significant but small influence on self-compassion level based on gender role orientation, reporting that participants who self-identify as men have higher levels of self-compassion compared with those who self-identify as women. Furthermore, the authors note a significant finding of participants with higher levels of "both femininity and masculinity tended to have the highest levels of self-compassion" (Yarnell et al., 2018, p. 499). Moreover, research conducted by Lockard et al. (2014) did not find a significant relationship between self-compassion and race or sexual orientation.

General Psychological Distress and Well-Being

Research by Fong and Loi (2016) found that higher levels of self-compassion have a large significant negative relationship with psychological distress. Research by Finlay-Jones et al. (2017) report that after completing a 6-week self-compassion program, participants experienced a significant large reduction in stress level. Furthermore, research by Rockcliff et al. (2008) found that participants who engaged in a self-compassion activity experienced a decreased cortisol level, a common hormonal elevation response to stress. A similar result was found in research by Breines et al. (2014) who found that individuals with an increased level of self-compassion are also significantly more likely to have lower concentration levels of stress-induced inflammation in their blood.

Research results report there is a significant positive relationship between self-compassion and happiness, life satisfaction, optimism, and psychological well-being (Beaumont et al., 2016; Finlay-Jones et al., 2017; Fong & Loi, 2016; Neff, 2003b; Neff & Germer, 2013; Neff, Kirkpatrick, & Rude, 2007; Neff, Rude, & Kirkpatrick, 2007; Smeets et al., 2014). Furthermore, research by Meyer et al. (2018) found that a combination of trait mindfulness, self-compassion, and psychological flexibility served as a strong significant positive predictor for quality of life. Moreover, research by Van Dam et al. (2011) found that while both level of trait mindfulness and self-compassion significantly contribute to the prediction of quality of life, level of self-compassion is a significantly stronger predictor. This finding was also supported in research by Hollis-Walker and Colosimo (2011), who found that level of self-compassion is also a significantly stronger predictor for level of psychological well-being.

Affect, Depression, and Rumination

Research results report finding a significant negative relationship between self-compassion and depression and rumination, indicating that as self-compassion level increases, levels of depression and rumination decrease (Finlay-Jones et al., 2017; Fong & Loi, 2016; Neff, 2003b; Neff & Germer, 2013; Van Dam et al., 2011). Neff, Kirkpatrick, and Rude (2007) echo these results in finding a significant positive relationship between self-compassion and positive affect and a significant negative relationship with negative affect. Hamrick and Owens (2019) further clarify by reporting that characterological self-blame mediates the relationship between self-compassion and depression. The authors describe characterological self-blame as the blame individuals ascribe to their own personality trait or character. The trend of these results is partially supported in research by Smeets et al. (2014), who found that after

individuals engaged in a brief self-compassion intervention, they experienced a significant decrease in rumination but experienced no change in worry level or affect.

Anxiety

Several studies report finding a significant negative relationship between self-compassion and general anxiety (Finlay-Jones et al., 2017; Neff, Hsieh, & Dejitterat, 2005; Neff & Germer, 2013; Neff, Rude, & Kirkpatrick, 2007; Van Dam et al., 2011). Additionally, Long and Neff (2018) found that specifically related to social anxiety, fear of positive evaluations moderates the significant relationship between lower self-compassion levels and decreased engagement in help-seeking behaviors, and fear of negative evaluations moderates the significantly stronger relationship between lower self-compassion levels and increased social communication anxiety.

Posttraumatic Stress Disorder and Emotion Regulation

Germer and Neff (2015) theorize that the PTSD symptom clusters of hyperarousal, avoidance, and intrusive thoughts are like the fight, flight, or freeze parasympathetic and sympathetic responses to stress. The authors also propose that the symptom clusters are like the negative reactions to stress outlined within their theoretical framework including self-absorption and overidentification, self-isolation, and self-criticism. The authors further state that due to these similarities, interventions focused on increasing the healthy aspects of self-compassion are likely to decrease PTSD symptoms. “Self-kindness can have a calming effect on autonomic hyperarousal, common humanity is an antidote to hiding in shame, and balanced, mindful awareness allows us to disentangle ourselves from intrusive memories and feelings” (Germer & Neff, 2015, p. 45). The author’s tabularized representation of these relationships is found in Table 1.

Table 1

Components of the Stress Response, PTSD, and Self-Compassion

Stress response	Stress response turned inward	PTSD symptom cluster	Self-compassion
Fight	Self-criticism	[Hyper]arousal	Self-kindness
Flight	Self-isolation	Avoidance	Common humanity
Freeze	Self-absorption	Intrusions	Mindfulness

Note. From "Cultivating Self-Compassion in Trauma Survivors," by C. K. Germer and K. D. Neff, in V. M. Follette, J. Briere, D. Rozelle, J. W. Hopper, and D. I. Rome (Eds.), *Mindfulness-Oriented Interventions for Trauma* (p. 46), 2015, The Guilford Press. Copyright 2015 by The Guilford Press. Reprinted with permission (see Appendix C).

Research results support this theory and report a strong significant negative relationship between self-compassion and PTSD symptoms, indicating that those with higher levels of self-compassion are significantly less likely to experience PTSD symptoms (Barlow et al., 2017; Dahm et al., 2015; Hiraoka et al., 2015; Trompetter et al., 2017). Maheux and Price (2015) found continued support for the strong significant negative relationship between self-compassion and PTSD symptoms using DSM-5 criteria. Research by Scoglio et al. (2018) provides further clarification in reporting that emotion regulation mediates the relationship between self-compassion and PTSD symptoms. Furthermore, Dahm et al. (2015) found that trait mindfulness and self-compassion have a significant negative relationship with PTSD symptom severity and functional disability, which affects activities of daily living such as self-care, participation in society, and life activities. The authors speculate that "greater levels of mindfulness and self-compassion may help to minimize the effects of traumatic experiences on veterans' overall functioning" (Dahm et al., 2015, p. 462). Additionally, research by Rabon et al. (2019) found a large, negative, significant relationship between self-compassion and suicidal

behavior in those with PTSD despite the presence of increased depressive symptoms, indicating that self-compassion may be a protective factor against suicidal behaviors in those with PTSD.

Research results report findings that therapeutic interventions that incorporate a focus on self-compassion are effective for reducing PTSD symptom severity (Au et al., 2017; Kearney et al., 2013; Lang et al., 2019). A randomized controlled trial by Lang et al. (2019) comparing a mindful self-compassion focused treatment with a cognitive-behaviorally focused treatment found that after completing the mindful self-compassion treatment participants experienced significant large reductions in PTSD symptom severity and significant large increases in social connectedness. These results differed for those who instead completed the cognitive-behaviorally focused treatment, who experienced significant small reductions in overall PTSD symptom severity and significant large improvements in negative thoughts and mood. However, this group, the cognitive-behaviorally focused treatment participants, also unexpectedly experienced a significant moderate worsening of PTSD-related hyperarousal symptoms and difficulties with sleep. The authors speculate this was likely due to potential increased level of relaxation-induced anxiety prompted by relaxation exercises.

Compassion Fatigue and Work-Related Burnout

Research by Beaumont et al. (2016) found significant negative relationships between self-compassion and CF and work-related burnout, indicating that individuals with higher levels of self-compassion are significantly more likely to have lower levels of CF and work-related burnout. Raab (2014) proposes that providing MBSR with an additional component that incorporates loving-kindness meditation to health care professionals should result in reductions of perceived stress and assist in increasing the effectiveness of patient care. Partial support for this theory is found in research by Scarlet et al. (2017) who report that after completing an

8-week compassion cultivation program, such as incorporation of the loving-kindness meditation, health care professionals experienced significant increases in self-compassion and state mindfulness and significant small increases in job satisfaction. However, the authors did not find that completion of the program resulted in changes in work-related burnout levels. Furthermore, research by Miller et al. (2019) found a significant positive relationship between self-compassion and self-care engagement in clinical social workers. The authors state that out of all the variables explored, self-compassion explained the largest percentage of participants' decision to engage in self-care.

Trait Mindfulness

Conceptually self-compassion and trait mindfulness are strongly related, with Hollis-Walker and Colosimo (2011) reporting a strong significant relationship between trait mindfulness as measured by the Five-Facet Mindfulness Questionnaire and self-compassion as measured by the Self-Compassion Scale. Although the strongest significant relationship occurred between overarching levels of self-compassion and trait mindfulness, there were also strong significant relationships between self-compassion and the trait mindfulness nonjudge, nonreact, and actaware facets. Neff and Germer (2013) found that after individuals completed an 8-week mindfulness-based self-compassion program, they experienced significant increases in self-compassion and trait mindfulness, changes that were maintained 1 year after completion of the program. Research by Smeets et al. (2014) found that after completing a brief self-compassion intervention, participants experienced a significant increase in self-compassion and trait mindfulness levels. Despite the conceptual overlap found in the strength of this relationship, self-compassion and trait mindfulness are considered "distinct constructs that characterize how people relate to emotional distress" (Dahm et al., 2015, p. 460).

CHAPTER III: METHOD

The purpose of this study is to (a) explore the relationships between mental health professionals' demographic, individual, and practice factors (see Appendices D and E) and levels of trait mindfulness, self-compassion, and CF and (b) to discover the participants' perceptions of participating in this research guided by the following research questions (RQs):

RQ1. Is there a relationship between trait mindfulness as measured by the FFMQ and CF as measured by the ProQOL-5 for mental health professionals working with clients with a terminal illness?

RQ1a. What aspects of trait mindfulness as measured by the FFMQ are more effective in moderating CF as measured by the ProQOL-5?

RQ2. Is there a relationship between self-compassion as measured by the SCS and CF as measured by the ProQOL-5 for mental health professionals working with clients with a terminal illness?

RQ2a. What aspects of self-compassion as measured by the SCS are more effective in moderating CF as measured by the ProQOL-5?

RQ3. Do demographic or practice variables moderate the relationship of CF as measured by the ProQOL-5 with trait mindfulness as measured by the FFMQ for mental health professionals working with clients with a terminal illness?

RQ4. Can levels of trait mindfulness as measured by the FFMQ or self-compassion as measured by the SCS be used to help predict risk for CF as measured by the ProQOL-5, via moderated regression analysis?

RQ5. Do participants' perceived benefits outweigh perceived costs of completing this trauma-related research as measured by the RRPQ-R?

Summary of Methodology Design

This project used an online survey to gather nonprobability, nonexperimental, quantitative data. Regression analysis was used to clarify potential factors for reducing risk for developing CF and targeting these factors for remediation after CF-related symptoms occur. The analysis also included the participants' perceptions of the cost–benefit ratio for completing the study. The following instruments were used to explore these themes, including:

- Trait mindfulness instrument: Five-Facet Mindfulness Questionnaire (FFMQ; see Appendix F; Baer et al., 2006)
- Self-compassion instrument: Self-Compassion Scale (SCS; see Appendix G; Neff, 2003b)
- Compassion fatigue instrument: Professional Quality of Life, Version 5 (ProQOL-5; see Appendix H; Stamm, 2009)
- Participant perception of research participation instrument: Reactions to Research Participation Questionnaire–Revised (RRPQ-R; see Appendix I; Newman & Willard et al., 2001)

Simmons (2013) reports that "the FFMQ is available in the public domain, is not copyrighted, and does not require permission [to] reproduce for clinical and research purposes" (p. 153; see Appendix J). Neff (2003c) has provided permission to students to use and publish the SCS within dissertations in a letter prefacing the measure (see Appendix K). Permission to use the ProQOL-5 in research projects is provided on the self-score version of the instrument "as long as author is credited, no changes are made, and it is not sold" (Stamm, 2009, p. 1; see Appendix L). Newman (personal communication, June 13, 2021; see Appendix M) states that the RRPQ-R is freely available for use and in the public domain.

The null hypothesis (H_0) for this project theorizes that none of the predictor variables impact the variance of CF or have a moderator effect on their relationship with CF. There were, however, several alternate hypotheses. The first two speculate that participants who worked more hours per week (H_1) or who held more sessions with clients that included trauma content (H_2) were more likely to have higher CF scores. Additional hypotheses propose that participants who had higher levels of total trait mindfulness would have lower CF scores (H_3) and would also have higher total self-compassion scores (H_4) and compassion satisfaction subscale scores (H_5). Furthermore, professional experience level is anticipated to partially moderate the relationship between CF and total self-compassion scores (H_6). Participant's demographic factors are expected to moderate the relationship between CF and total trait mindfulness scores (H_7), as well as between CF and total self-compassion scores (H_8). This project also speculates that participants who received professional support for a personal history of trauma are more likely to have higher CF scores (H_9) and that level of experience with mindfulness meditation partially moderates the relationship between CF and total trait mindfulness scores (H_{10}). Lastly, averaged RRPQ-R beneficial subscale scores (participation, personal benefit, and global research evaluation), are also expected to exceed the averaged RRPQ-R cost subscale scores (emotional reaction and perceived drawback; H_{11}).

Participants

Participants were prescreened with online questions to confirm that they were 18 years old or older; licensed, practicing mental health professionals; possessed a graduate-level degree in a mental health related field; worked within the United States; and worked with at least one client with a terminal illness within the past 30 days prior to completing the survey (see Appendix D). Participants also needed internet access to complete the online survey.

Data Collection

The data was collected via an online, public survey engine from participants who agree that they meet inclusion criteria. A survey was selected because it allows the researcher to elicit input from a potentially broad range of mental health professionals from disparate geographic areas within the United States with minimal expense. The cross-sectional survey incorporated an informed consent form (see Appendix N), and the entire survey was expected to take approximately 35 minutes. The surveys were self-administered over the internet via a Survey Monkey link (https://www.surveymonkey.com) provided in an emailed invitation sent to participants.

Demographic and Practice Questionnaire

The participants were asked to provide up to 13 potential confounding demographic variables and practice-related factors, from which they are unlikely to be identified (see Appendix E). Demographic variables included age, gender, and race. Practice-related factors included average percentage of clinical work and years spent working with clients with a terminal illness, average percentage of session time focused on content related to the client's terminal illness, years of clinical experience working with all clients, and average hours per week spent with any type of client. Individual factors encompassed personal mindfulness practice history. Finally, participants were invited to share whether they had a personal history of traumatic experience(s), the number of years since the last personal trauma occurred, and to specify whether they received professional support for them.

Professional Quality of Life, Version 5

The potential level of CF among mental health professionals working with clients with a terminal illness was explored using the Professional Quality of Life, version 5 (ProQOL-5). The

ProQOL-5 is a self-report measure with thirty 5-point Likert-type scale items ranging from 1 (*never*) to 5 (*very often*), excluding five reverse score items, higher scores indicating higher levels in the three subscale score areas measuring Compassion Satisfaction, Burnout, and Secondary Traumatic Stress or CF (Stamm, 2009). It measures the frequency of PTSD-related symptoms experienced over the prior 30 days, in mental health professionals, in reaction to indirect exposure to traumatic events experienced by clients. The internal consistency coefficient alphas for the subscales indicate a good to very good reflection of construct reliability, at .75 for Burnout, .81 for Secondary Traumatic Stress, and .88 for Compassion Satisfaction (Stamm, 2010). The result of research by Geoffrion et al. (2019) reports that the construct, convergent, and discriminant validity analyses of the measure, particularly as a bifactor model using the Compassion Satisfaction and Secondary Traumatic Stress subscales, found it is aligned with previous research findings. The authors argue against using the Burnout subscale of the ProQOL, as their findings indicate that it is not related directly with CF. However, this subscale has been preserved due to the stipulations of the permission provided to use the scale as published (Stamm, 2009).

Five-Facet Mindfulness Questionnaire

The level of trait mindfulness as a tendency for experiencing specific metacognitive and observational processes among mental health professionals working with clients with a terminal illness was explored using the Five-Facet Mindfulness Questionnaire (FFMQ). The FFMQ is a self-report measure with thirty-nine 5-point Likert-type scale items ranging from 1 (*never* or *very rarely true*) to 5 (*very often* or *always true*), excluding 19 reverse score items. Higher scores indicate a higher level of proficiency for the mindfulness facet (Baer et al., 2006). It measures the level of trait mindfulness across the five facets previously mentioned, including the observe,

describe, actaware, nonjudge, and nonreact subscales. Per George and Mallery (2016), the internal consistency Cronbach's alpha for the describe facet was excellent at .91, the actaware subscale had good internal consistency at .87, the nonjudge subscale was good at .87, the observe subscale was good at .83, and the nonreact subscale had acceptable internal consistency at .75 (Baer et al., 2006). Additional research by Petrocchi and Ottaviani (2016) found that most subscales had moderately strong test-retest reliability, excluding the observe subscale, which produced unreliable results. However, this subscale has been included to preserve the full trait mindfulness measure integrity.

Self-Compassion Scale

The level of self-compassion among mental health professionals working with clients with a terminal illness was explored using the Self-Compassion Scale (SCS). The SCS is a self-report measure with twenty-six 5-point Likert-type scale items ranging from 1 (*almost never*) to 5 (*almost always*), excluding 13 reverse score items. Higher scores indicate a higher level of self-compassion proficiency (Neff, 2003b). Each of the three dialectical ranges includes two subscales, which are made up of a positive and negative subscale to contextualize the breadth of the range. One range is bounded by a self-kindness subscale on one end and self-judgment subscale at the other, another by a common humanity subscale versus isolation subscale, and the last by a mindfulness subscale versus over-identification subscale. Items within each of the three primary dialectical ranges are combined and a mean score identified for each, these are then combined, and an additional mean score found to represent the overall level of self-compassion. The internal consistency of the items is .92 (Neff, 2003b). Test–retest reliability correlations are good, with the common humanity subscale at .80; the isolation and mindfulness

subscales at .85 each; the self-kindness, self-judgment, and over-identification subscales all at .88; and the full SCS scale at .93.

Reactions to Research Participation Questionnaire–Revised

The participant's reactions to completing this research were gathered using the Reactions to Research Participation Questionnaire–Revised (RRPQ-R). The RRPQ-R is a self-report measure with twenty-three 5-point Likert-type scale items ranging from 1 (*strongly disagree*) to 5 (*strongly agree*), excluding eight reverse-scored items and higher scores indicating a higher level of perceived satisfaction with trauma-related research participation (Newman & Willard et al., 2001). The questionnaire explores five facets of participants' perceptions of trauma-related research participation, including Participation, Personal Benefits, Emotional Reactions, Perceived Drawbacks, and Global Research Evaluation. The Emotional Reactions and Perceived Drawbacks subscales are reverse scored, after which all items are also combined to provide a total RRPQ-R score. The internal consistency Cronbach's alpha for the Participation subscale was questionable at .60; the Personal Benefits, Emotional Reactions, and Global Research Evaluation subscales were all good at .82; the Perceived Drawbacks subscale was acceptable at .73; and the total RRPQ-R score was good at .83 (Newman & Willard et al., 2001).

Procedure

Recruitment

Institutional Review Board approval was granted, and participants self-selected from emailed invitations (see Appendix O) sent to members of professional organizations, over a 5-month timespan. Emailed invitations included a request that the email be forwarded for snowball, convenience sampling to individuals who may be interested in participating and likely met the inclusion criteria (see Appendix D). Nonprobability, convenience sampling is commonly

used in research when the desired result is not used for identifying prevalence rates or to generalize findings to the greater population of the sample group (Etikan et al., 2016).

Invitations to participate in this research project were sent to the following organizations:

- Antioch University of Seattle's Clinical Psychology PsyD program
- Association for Behavioral and Cognitive Therapies
- Association for Contextual Behavioral Science
- Center for Mindfulness Self-Compassion
- Engaged Mindfulness
- Illumination Institute
- International Society for Traumatic Stress Studies
- Mindfulness Center of Atlanta
- Mindfulness Northwest
- Mindfulness Practice Center of Fairfax
- Mindfulness Training Institute
- Mindful-Way
- School of Positive Transformation
- Sounds True
- Spirit Rock Insight Meditation Center
- Institute for Meditation and Psychotherapy
- Trauma Stewardship
- Trauma Research Foundation
- University of California at Berkeley's Greater Good Science Center
- University of California at Los Angeles' Mindful Awareness Research Center

- University of California at San Diego's Center for Mindfulness
- University of Massachusetts Memorial Health's Center for Mindfulness
- Upstream South Carolina
- Valley Mindfulness

Invitations to participate in this research project were also sent out using a commercially available email list to 12,717 licensed mental health professionals with a graduate-level degree who were 18 years old or older and working in the United States, within a Hospice setting. Additionally, the researcher attempted to join all U.S. state psychological associations to obtain authorization to send invitations to participate in this research project via associated listservs. This process was successfully completed for nearly half of the states; however, for the remaining states, student members were not allowed to post on the listserv or were only given access to post on student listservs, state organizations took too long to process membership applications or requests to join listservs, and five state organizations appeared to either have non-functioning websites or information regarding the membership application process could not be located.

Informed Consent

Participants were informed about the goal of this research project within the initial Consent to Participate in Research form to which the internet link brought potential participants (see Appendix N). The participants were informed that their identity would be kept anonymous and only the email address they supplied would be stored temporarily if they decided to enter the drawing for an Amazon gift card (see Appendix P). Participants were reminded that participation was voluntary and that they could decide to discontinue participation at any time by closing their internet browser window.

Participant Benefits

At the end of the survey, participants were offered the opportunity to provide an email address in a second, separate survey to be entered into a drawing for either one of three $100 or one $200 Amazon.com gift cards (see Appendix P). They were also informed that for the first 250 participants who completed the survey, a $2 donation would be made to the International Society of Traumatic Stress Studies to support educational and supportive resources. “The International Society for Traumatic Stress Studies [ISTSS] is a nonprofit organization whose goal is to ensure that everyone affected by trauma receives the best possible professional response, and to reduce traumatic stressors and their immediate and long-term consequences worldwide” (ISTSS, 2016b, para. 11). The organization publishes a bimonthly research journal, newsletters, PTSD treatment guidelines, and psychoeducation pamphlets, and it also provides online training and clinician referrals and promotes “sharing of research, clinical strategies, public policy concerns and theoretical formulations on trauma around the world” (ISTSS, 2023, para. 2; ISTSS, 2016a).

Participant Risks

Because the participants being sought self-report as being adults who hold a graduate degree and license to work as a mental health professional, it is assumed that they will likely understand the topics being explored, are intelligent, are educated, and have good decision-making capabilities. Informed consent will include “reasonably foreseeable factors that may be expected to influence their willingness to participate such as potential risks, discomfort, or adverse effects” (APA, 2017b, p. 11). Potential participants will be warned in the informed consent of a minor increase over minimal risk. Although asking research participants three general, brief questions regarding personal trauma history introduces potential risk into the

framework of this research project, mixed results from previous research involving the potential correlation between personal trauma and CF points to the importance for further research on the interplay of these concepts. The incorporation of the RRPQ-R increases the benefit of increasing the knowledge base on participants' perceptions of and reactions to trauma-related research as it relates to mental health professionals, a participant base that has not yet been explored using this measure. The potentially upsetting nature of questions regarding CF may cause participants to recall unwanted and upsetting thoughts and emotions about clinical work experiences and personal trauma. However, these questions are not anticipated to exceed reactions beyond those that mental health professionals are likely to encounter during day-to-day clinical work with clients who are terminally ill. Additionally, participants will be given access to resources created by the ISTSS including "Indirect Trauma in Professionals Working with Trauma Survivors (for Providers)" that provides psychoeducation around CF and intervention strategies (see Appendix Q) and "Trauma During Adulthood" (see Appendix R; ISTSS, 2016a, 2020). ISTSS has provided permission to use these pamphlets within this research project (see Appendix S).

Participant Protections

No participant data was stored with the research survey and provided survey answers were anonymized with a random participant number and stored on a securely encrypted server that only the research team could access. Email addresses that participants entered for the "Gift Card Drawing" were stored separately on a securely encrypted server that only the research team could access until the end of the data collection period on August 31, 2022, and were deleted after winners were selected the following day.

Power Analysis

A power analysis was conducted to determine the appropriate minimum sample size for this study, which was estimated using the statistical power analysis software G*Power (version 3.1.9.7; Faul et al., 2007). For a priori, fixed models, R^2 deviation from zero linear multiple regression using *F* tests and a potential maximum of 15 predictor variables, the minimal sample size needed is 199 participants with the level of significance being .05 ($\alpha = .05$), power being .95 ($1 - \alpha = .95$), and medium effect size of .15 ($f^2 = .15$). When the power is reduced to .80 ($1 - \alpha = .80$), the lowest acceptable level, the number of participants decreases to 139. The average total number of participants in previous, similarly constructed research studies exploring aspects of relationships among mindfulness, self-compassion, and CF ranged between 205 and 272, strengthening support for use of the estimated sample size for a larger power level (Hensel et al., 2015; MacBeth & Gumley, 2012; Stevenson et al., 2017).

Data Analysis Plan Summary

Incomplete surveys were excluded from data analysis. Descriptive statistics were identified to analyze variables using frequencies, measures of central tendency, and measures of variability. Data was examined to identify multivariate outliers using Mahalanobis distance, and cases with a distance significance greater than 0.001 ($p < .001$) were assessed for transformation or exclusion as needed (Mertler & Vannatta, 2016). Normality of numeric and continuous variables were assessed using skewness, kurtosis, and Q–Q plots. Pearson correlations and scatterplots were conducted to examine bivariate relationships between variables while controlling for demographic and practice variables.

Data was examined for violations of the five parametric assumptions associated with multiple linear regression models, including (a) linearity between predictors and the outcome

variable, (b) normality of the residuals, (c) homogeneity of the residuals, (d) independence of the residuals, and (e) absence of multicollinearity (Field, 2018; Tabachnick & Fidell, 2019). The linearity between predictors and the outcome variable assesses whether there is a linear relationship between the predictor and outcome variables. The normality of residuals assesses where the residuals of the regression model are normally distributed. The homogeneity of residuals assesses whether the variance of residuals is constant across all combinations of the predictor variables (Field, 2018; Tabachnick & Fidell, 2019). Linearity, normality, and homogeneity assumptions were assessed using residual scatterplots (Tabachnick & Fidell, 2019).

The independence of the residuals assumption assesses whether each error term within the model is independent of one another and was assessed using the Durbin-Watson test, and nonsignificant results indicate uncorrelated errors within the model (Hoffman, 2021; Tabachnick & Fidell, 2019). The absence of multicollinearity assumption assesses to what extent predictor variables correlate. In regression analysis, predictor variables should not be strongly correlated or provide overlapping data, otherwise it becomes difficult to discern the effect from each variable individually (Field, 2018; Tabachnick & Fidell, 2019). The absence of the multicollinearity assumption is assessed using variance inflation factor (VIF) values for each predictor. When all predictor variables have VIF values less than 10, the absence of multicollinearity assumption is met. All parametric assumptions were met, and therefore the potential relationships between variables were explored using hierarchical linear regression while controlling for demographic and practice variables.

CHAPTER IV: RESULTS

The purpose of this study was to examine how mindfulness, self-compassion, demographics, and clinical practice variables are associated with participants' CF. This chapter includes a discussion of the data preparation, parametric assumptions associated with the statistical models chosen for data analysis, demographic results, correlation analysis, results from the statistical models chosen to answer the study's research questions, and a brief concluding summary of the study findings.

Descriptive Statistics

A total of 119 people began taking the online survey, 92 of whom endorsed meeting inclusion criteria, only 50 of whom completed the first question, and 43 of whom completed the entire survey. Only fully completed surveys were included for data analysis, and consequently resulting in a final sample size of $N = 43$. Due to the low number of completed surveys, the number of $2 donations to ISTSS was rounded up to 50, resulting in a $100 donation to the ISTSS general fund (see Appendix T). Additionally, given the low sample size, the actual power for this study is approximately 19%, meaning there is about a 19% chance of seeing true positive results. Therefore, some nonsignificant results may have instead been significant had the sample size been between the recommended range of 139 and 199, and the risk for the occurrence of a Type II error is increased, which occurs when research fails to reject a false null hypothesis. Response rates are also unmeasurable due to the sampling methods utilized and results are therefore nongeneralizable.

Participant demographic and practice variable results are presented in Table 2. While each age group was evenly distributed, nearly all participants self-identified as white and female. Additionally, although most participants did not have a formal mindfulness practice, experienced

a personal traumatic event, or received professional support for a personal traumatic event, all practice variables and mindfulness experience levels varied widely.

Table 2

Participant Demographic and Practice Variables

Age	*n*	%		
25–34	9	21%		
35–44	8	19%		
45–54	7	16%		
55–64	10	23%		
65+	9	21%		
Race (self-identified)	*n*	%		
Anglo-European/Ashkenazi Jewish, Eastern European	1	2.3%		
Asian	1	2.3%		
Asian-Hispanic	1	2.3%		
Caucasian/White	37	86%		
Indian	1	2.3%		
White/Hispanic	2	4.7%		
Gender (self-identified)	*n*	%		
Male	8	19%		
Female	34	79%		
Preferred to not disclose	1	2%		
	Mean	Min	Max	SD
Approximate hours per week currently working with all clients (including associated paperwork) [a]	33.08	4	60	12.49
Approximate years of clinical experience working as a mental health professional (including training years)	23.51	1	55	13.76
Approximate years working with clients with a terminal illness (including training years) [b]	15.24	0.5	40	12.44
Approximate percentage of clients with a terminal illness that comprises current clinical work	25.44%	2%	95%	22.72%
Approximate percentage of clients with a terminal illness, with a treatment focus on terminal illness related content	46.26%	1%	100%	31.65%
Approximate percentage of session content with clients with a terminal illness, focused on terminal illness related content	50%	5%	100%	30.14%
Current formal mindfulness meditation practice	*n*	%		
No	29	67.44%		
Yes	14	32.56%		
Approximate years maintaining a formal mindfulness meditation practice	Mean	Min	Max	SD
	17.68	3.5	45	16.85

Table 2

Participant Demographic and Practice Variables

Consent to respond to questions about personal trauma history	*n*	%		
No	4	9.30%		
Yes	39	90.70%		
Experienced a personal traumatic event	*n* = 39	%		
No	8	20.51%		
Yes	31	79.49%		
Years since experiencing the latest personal traumatic event [c]	Mean	Min	Max	SD
	17.93	0.04	45	15.11
Received professional support for a personal traumatic event	*n* = 31	%		
Preferred to not disclose	2	6.45%		
No	10	32.26%		
Yes	19	61.29%		

Note. *N* = 43; SD = Standard deviation;

[a] Due to providing participants the option to provide open-ended responses, one participant responded with "40+" and another with "30+" which were included as 40 and 30 respectively, and two participants provided ranges which were included as the mid-point of these ranges (e.g., 35 to 40 was included as 37.5 and 30 to 40 was included as 35).

[b] One participant responded with "on an off throughout my working life," which was interpreted as 40 clinical practice years noted in a previous question and another participant noted "30 yrs but these are infrequent cases," which was interpreted as 30.

[c] One participant provided the impossible response of 300, which disqualified the answer from inclusion for calculating the mean.

Descriptive statistics for the survey results are presented in Table 3. All variables are considered normally distributed due to skewness values that do not exceed absolute 2 and kurtosis values that do not exceed absolute 7 (Curran et al., 1996; Kline, 2016).

Table 3

Descriptive Statistics for Survey Results

Variables	M	Md	SD	Min	Max	Skew	Kurtosis
FFMQ Observe	3.61	3.63	0.60	1.63	4.75	-0.55	1.19
FFMQ Describe	4.08	4.13	0.64	2.50	5.00	-0.66	-0.08
FFMQ Actaware	3.59	3.63	0.68	1.75	4.75	-0.59	-0.12
FFMQ Nonjudge	3.92	4.10	0.60	2.10	4.60	-1.19	0.90
FFMQ Nonreact	3.61	3.71	0.67	1.71	5.00	-0.57	0.16
FFMQ Total	3.81	3.85	0.46	2.31	4.51	-0.88	1.00
SCS Self-Kindness	3.61	3.80	0.82	1.20	5.00	-0.81	0.40
SCS Self-Judgment	2.49	2.40	0.83	1.00	4.60	0.71	-0.17
SCS Common Humanity	3.71	4.00	0.89	1.25	5.00	-0.93	0.37
SCS Isolation	2.41	2.50	0.99	1.00	5.00	0.60	-0.19
SCS Over Identification	2.48	2.25	0.82	1.25	4.25	0.57	-0.50
SCS Mindfulness	3.88	4.00	0.77	1.75	5.00	-0.75	0.08
SCS Self-Compassion	3.63	3.85	0.71	1.65	4.54	-1.06	0.53
ProQOL-5 Compassion Satisfaction	4.24	4.40	0.76	1.00	5.00	-1.88	5.28
ProQOL-5 Burnout	2.08	2.00	0.53	1.10	3.70	1.00	1.16
ProQOL-5 Compassion Fatigue	1.95	1.90	0.59	1.10	3.80	0.83	0.81

Note. $N = 43$; M = Mean; Md = Median; SD = Standard Deviation.

Data Preparation and Parametric Assumptions

As planned, incomplete surveys were excluded from data analysis. As described within the instructions for each psychometric instrument, reverse scoring for appropriate Likert scale items was applied and total and subscale scores were calculated by averaging respective Likert scale items. For research questions three and four, the numeric continuous predictor variables were mean centered to minimize multicollinearity due to the interactions added into the models. The data was analyzed for potential multivariate outliers using Mahalanobis distance, during which no outliers were identified. Therefore, no transformations or exclusion were made. For all but research question 5, data was examined for violations of the parametric assumptions associated with multiple linear regression models and hierarchical linear regression was used to answer these research questions, which was conducted using R and RStudio (Hanck, 2023).

Correlation Results

Pearson correlation coefficients were conducted to examine the relationships between CF, clinical practice variables, trait mindfulness factors, and self-compassion factors. Results indicate that among participants, CF is shown to be significantly negatively correlated with two clinical practice variables and trait mindfulness and self-compassion (see Tables 4 through 6).

The two significant negative correlations between CF and practice variables included having a higher percentage of clients with a terminal illness, with a treatment focus on terminal illness related content and a higher percentage of session content with clients with a terminal illness, focused on terminal illness related content (see Table 4). This correlation suggests that as these factors increase, CF likely decreases. All trait mindfulness factors as measured by the FFMQ were significantly negatively correlated with CF, excluding the actaware and observe subscales (see Table 5). Some self-compassion factors as measured by the SCS were significantly negatively correlated with CF, including self-kindness, mindfulness, and total self-compassion (see Table 6), and others were significantly positively correlated, including self-judgment, isolation, and over-identification. Common humanity was the only self-compassion factor that was not significantly correlated with CF. The predictor variable with the strongest significant negative correlation to CF was the FFMQ non-judge subscale at –.69 (see Table 5), and the lowest significant negative correlation was the SCS self-kindness subscale at –.30 (see Table 6). Additionally, the only predictor variables with significant positive correlation to CF were the SCS negative subscales of over identification and self-judgment at .55 and isolation at .53. See Tables 4 through 6 for the full variable correlational results.

Table 4

Correlation Matrix for Compassion Fatigue and Clinical Practice Variables

Variables	*1*	*2*	*3*	*4*	*5*	*6*	*7*
1. CF	--						
2. WCH	-.28	--					
3. YCE	-.12	-.14	--				
4. YCETI	-.11	.09	.59**	--			
5. PWTI	.02	.31*	-.09	-.09	--		
6. PCTIF	-.43**	.13	.10	-.06	.19	--	
7. PCTICR	-.40**	.38*	-.09	-.20	.37*	.67**	--

Note. WCH = Approximate hours per week currently working with all clients; YCE = Approximate years of clinical experience working as a mental health; YCETI = Approximate years working with clients with a terminal illness; PWTI = Approximate percentage of clients with a terminal illness that comprises current clinical work; PCTIF = Approximate percentage of clients with a terminal illness, with a treatment focus on terminal illness related content; PCTICR = Approximate percentage of session content with clients with a terminal illness, focused on terminal illness related content;

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

Table 5

Correlation Matrix for Compassion Fatigue and FFMQ Trait Mindfulness Factors

Variables	*1*	*2*	*3*	*4*	*5*	*6*	*7*
1. CF	--						
2. Observe	.03	--					
3. Describe	-.40**	.27	--				
4. Actaware	-.30	.24	.26	--			
5. Nonjudge	-.69**	.13	.36*	.41**	--		
6. Nonreact	-.45**	.32*	.47**	.41**	.55**	--	
7. Total Mindfulness	-.54**	.54**	.68**	.69**	.74**	.79**	--

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

Table 6

Correlation Matrix for Compassion Fatigue and SCS Self-Compassion Factors

Variables	1	2	3	4	5	6	7	8
1. CF	--							
2. Self-Kindness	-.30*	--						
3. Self-Judgment	.55**	-.64**	--					
4. Common Humanity	-.11	.70**	-.40**	--				
5. Isolation	.53**	-.56**	.77**	-.46**	--			
6. Over Identification	.55**	-.56**	.82**	-.34*	.82**	--		
7. Mindfulness	-.31*	.77**	-.54**	.76**	-.60**	-.59**	--	
8. Total Self-Compassion	-.48**	.86**	-.85**	.73**	-.85**	-.83**	.84**	--

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

Research Question 1: Is There a Relationship Between Trait Mindfulness as Measured by the Five Factor Mindfulness Questionnaire and Compassion Fatigue as Measured by the Professional Quality of Life 5 for Mental Health Professionals Working With Clients With a Terminal Illness

Parametric Assumptions

Parametric assumptions for this hierarchical linear regression model were assessed. The linearity assumption was assessed by using a residuals versus predicted or fitted values scatterplot, from which no distinct pattern was discerned between the predictors (demographic variables, practice variables, and FFMQ total score) and the CF outcome variable, whereby indicating that the model fulfills the linearity assumption (see Figure 3; Hoffmann, 2021). However, there is enough of a horizontal line to suggest there is a linear relationship between the variables, such that as changes occur in the level of trait mindfulness, there is a correlating change in the level of the dependent outcome variable, CF. Assessment of the normality of the residuals assumption found that most of the model's residuals were close or on the Q–Q line within the graph and are therefore also considered normally distributed (see Figure 4). The

homogeneity of residuals assumption was assessed using the Breusch-Pagan test, which provided non-statistically significant results and specifying that the homogeneity assumption was met (Hoffman, 2021). Meeting the homogeneity assumption also indicates that data transformations are not required to proceed with data analysis (Hair et al., 2019). The independence of error assumption was assessed using the Durbin-Watson test, resulting in non-statistically significant results and indicating that this assumption was met as well (Hoffman, 2021). The absence of multicollinearity assumption was assessed by reviewing each predictor variables' VIF value, none of which were greater than 10, indicating that this assumption was also met. No parametric assumptions were violated; therefore, no additional modifications or transformations to the hierarchical regression model were conducted.

Figure 3

RQ1 Linearity Assumption Graph

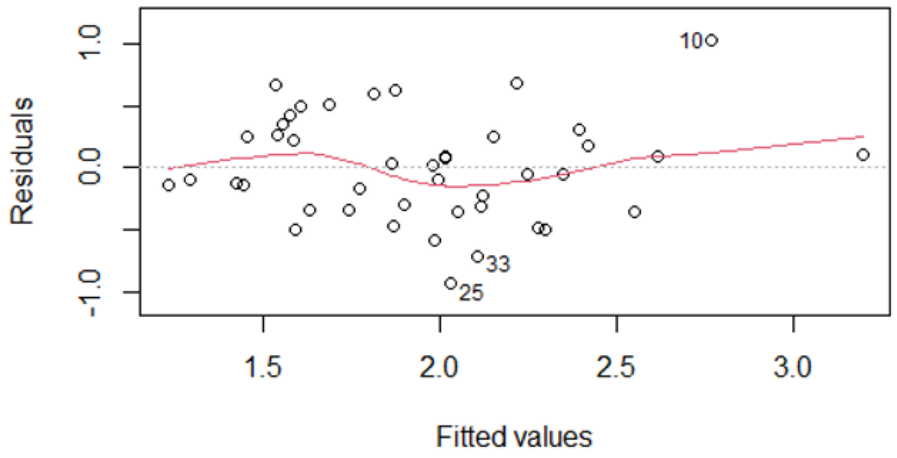
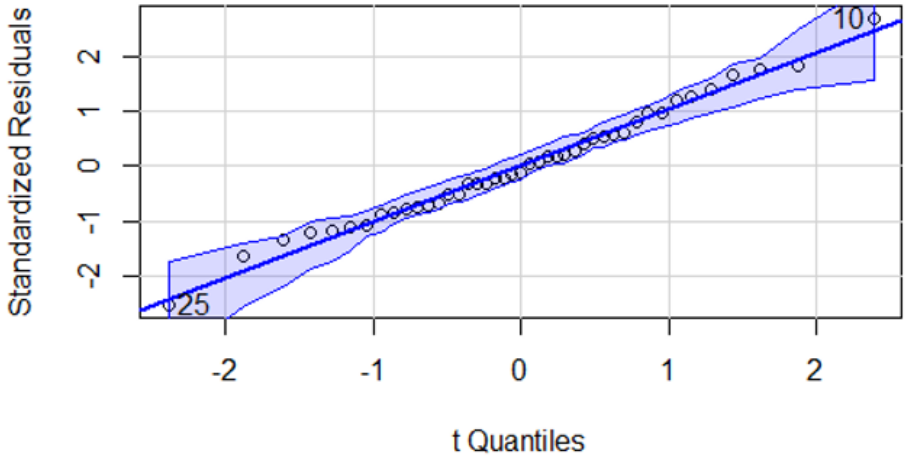


Figure 4

RQ1 Normality Assumption Quantile Plot



Hierarchical Linear Regression

Hierarchical linear regression was used to examine how trait mindfulness can predict CF while controlling for demographic and clinical practice variables. The first 2 steps were used throughout the remaining regressions. In step 1, demographic variables were added to the model (see Table 7). This hierarchical regression model was not statistically significant, therefore suggesting that none of the demographic variables were found to significantly predict CF. In step 2 of the model, the clinical practice variables were added to the model. At this step, despite contributing about 34% of the variance explanation for CF, this model was found to not be statistically significant as well. Therefore, the clinical practice variables contributed approximately an additional 33% of the variance explanation for CF, without achieving statistical significance. In step 3 of the model, trait mindfulness was added to the model. This version of the model was statistically significant and explained about 49% of the variance for CF. Therefore, adding the total FFMQ trait mindfulness scores explained approximately an additional 16% of the variance for CF. The results show that trait mindfulness scores were a

significant negative predictor of CF, indicating that higher levels of trait mindfulness were associated with lower levels of CF among participants.

Table 7

Hierarchical Regression Table of Trait Mindfulness Total Score Predicting Compassion Fatigue

Predictor	*B*	*SE B*	*t*	*p*	95% CI of *B*		R^2	ΔR^2	$F\ (k, df_{Res})$
Step 1 Intercept	1.93	0.31	6.25	< 0.001***	1.31	2.56			
Age	0.09	0.19	0.47	0.644	-0.30	0.47			
Gender	0.03	0.23	0.15	0.885	-0.43	0.50			
Race	-0.05	0.27	-0.19	0.852	-0.60	0.50			
							0.01	0.01	0.09 (3, 39)
Step 2 Intercept	2.88	0.56	5.13	< 0.001***	1.74	4.02			
Age	-0.31	0.39	-0.77	0.45	-1.11	0.50			
Gender	0.24	0.21	0.97	0.34	-0.23	0.65			
Race	0.25	0.25	0.89	0.38	-0.29	0.74			
WCH	-0.01	0.01	-1.43	0.16	-0.03	0.00			
YCE	-0.01	0.01	-0.93	0.36	-0.04	0.01			
YCETI	-0.01	0.01	-0.77	0.45	-0.03	0.01			
PWTI	0.01	0.00	1.44	0.16	-0.00	0.01			
PCTIF	-0.01	0.00	-1.47	0.15	-0.01	0.00			
PCTICR	-0.01	0.00	-1.13	0.27	-0.01	0.00			
							0.34	0.33	1.91 (9, 33)
Step 3 Intercept	4.68	0.77	6.09	< 0.001***	3.11	6.24			
Age	-0.31	0.35	-0.88	0.38	-1.03	0.41			
Gender	0.29	0.19	1.50	0.14	-0.10	0.68			
Race	0.30	0.23	1.30	0.20	-0.17	0.76			
WCH	-0.00	0.01	-0.57	0.58	-0.02	0.01			
YCE	-0.00	0.01	-0.39	0.70	-0.03	0.02			
YCETI	-0.01	0.01	-0.74	0.46	-0.02	0.01			
PWTI	0.00	0.00	0.82	0.42	-0.00	0.01			
PCTIF	-0.01	0.00	-1.89	0.07	-0.01	0.00			
PCTICR	-0.00	0.00	-0.40	0.69	-0.01	0.01			
Mindfulness	-0.63	0.21	-3.08	0.004**	-1.05	-0.22			
							0.49	0.16	3.12 (10, 32)**

Note. B = unstandardized beta regression coefficient; *SE B* = standard error for the unstandardized beta; *t* = *t*-test value; *p* = the probability value; 95% CI = 95% confidence

interval range; R^2 = adjusted R^2; ΔR^2 = the change in R^2 since the previous step; WCH = Approximate hours per week currently working with all clients; YCE = Approximate years of clinical experience working as a mental health professional; YCETI = Approximate years working with clients with a terminal illness; PWTI = Approximate percentage of clients with a terminal illness that comprises current clinical work; PCTIF = Approximate percentage of clients with a terminal illness, with a treatment focus on terminal illness related content; PCTICR = Approximate percentage of session content with clients with a terminal illness, focused on terminal illness related content; Mindfulness = FFMQ total score;

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

Hypothesis 3: Participants Who Have Higher Levels of Total Trait Mindfulness Are More Likely to Have Lower Compassion Fatigue Scores. The data supported this hypothesis. After accounting for confounding and clinical variables, the regression coefficient was significant and negative (see Table 7).

Hypothesis 1: Participants Who Work More Hours Per Week Are More Likely to Have Higher Compassion Fatigue Scores. The data did not fulfill this hypothesis. The correlation between approximate hours per week currently working with all clients and CF was nonsignificant (see Table 4). Additionally, the regression coefficient was nonsignificant after accounting for confounding and other clinical variables (see Table 7).

Hypothesis 2: Participants Who Hold More Sessions With Clients That Include Trauma Content Are More Likely to Have Higher Compassion Fatigue Scores. The data did not fulfill this hypothesis. The correlation between approximate percentage of session content with clients with a terminal illness, focused on terminal illness related content and CF was significant but negative (see Table 4), implying the effect was in the opposite direction to that

which was expected. Additionally, the regression coefficient was nonsignificant after accounting for confounding and other clinical variables (see Table 7).

Research Question 1a: What Aspects of Trait Mindfulness as Measured by the Five Factor Mindfulness Questionnaire Are More Effective in Moderating Compassion Fatigue as Measured by the Professional Quality of Life 5

Parametric Assumptions

Similar results were achieved while assessing the parametric assumptions for exploring the relationship between these predictors (demographic variables, practice variables, and FFMQ subscale scores) and the CF outcome variable, as those found for research question 1. The resulting scatterplot from assessing the linearity assumption is provided in Figure 5, and the Q–Q plot for assessing the normality of the residuals assumption is provided in Figure 6. None of the parametric assumptions were violated, and therefore, no additional modifications or transformations to the hierarchical regression model were conducted.

Figure 5

RQ1a Linearity Assumption Graph

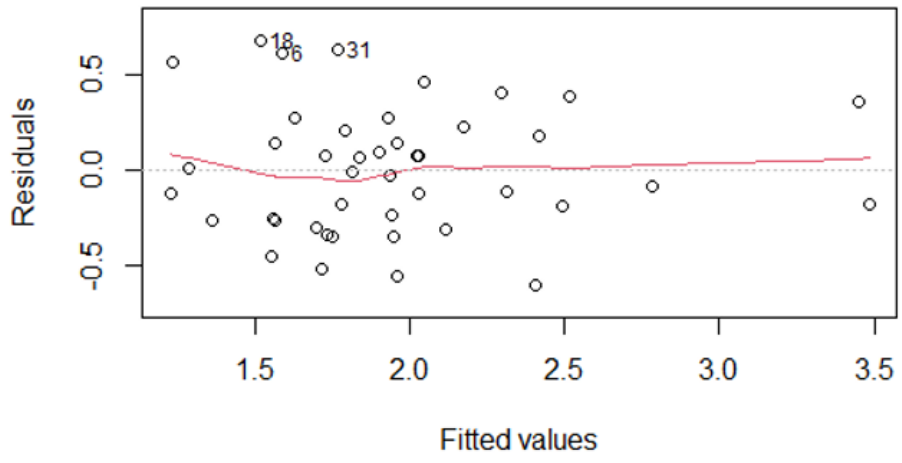
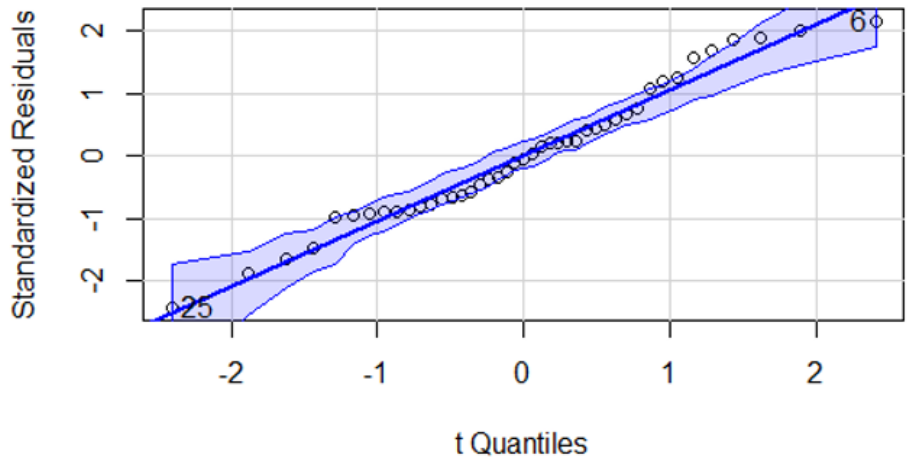


Figure 6

RQ1a Normality Assumption Quantile Plot



Hierarchical Linear Regression

Hierarchical linear regression was conducted to examine how trait mindfulness factors can predict CF while controlling for demographic and clinical practice variables. Steps 1 and 2 were the same as the previous research question. In step 3, the model was statistically significant, and explained about 68% of the variance of CF (see Table 8). Therefore, replacing the total trait mindfulness scores with the scores for the individual trait mindfulness factors explained an additional 34% of the variance of CF, twice as much as the total trait mindfulness scores. Additionally, results show that nonjudge scores were statistically significant and negatively associated with CF, and observe scores were statistically significant and positively associated with CF among participants.

Table 8

Hierarchical Regression Table of Trait Mindfulness Factors Predicting Compassion Fatigue

Predictor	*B*	*SE B*	*t*	*p*	95% CI of *B*		R^2	ΔR^2	$F\ (k, df_{Res})$
Step 3	3.90	0.75	5.24	< 0.001***	2.38	5.43			
Intercept									
Age	0.15	0.34	0.45	0.66	-0.55	0.85			
Gender	0.20	0.17	1.19	0.24	-0.15	0.56			
Race	0.12	0.21	0.61	0.55	-0.30	0.54			
WCH	-0.00	0.01	0.66	0.52	-0.02	0.01			
YCE	-0.00	0.01	-0.24	0.81	-0.02	0.02			
YCETI	0.00	0.01	0.33	0.74	-0.01	0.02			
PWTI	0.00	0.00	0.52	0.61	-0.01	0.01			
PCTIF	-0.01	0.00	-2.04	0.05	-0.01	0.00			
PCTICR	-0.00	0.00	-0.51	0.61	-0.01	0.01			
Observe	0.27	0.14	2.02	0.05	0.00	0.55			
Describe	-0.14	0.13	-1.07	0.29	-0.40	0.13			
Actaware	0.04	0.13	0.31	0.76	-0.22	0.30			
Nonjudge	-0.50	0.15	-3.44	0.002**	-0.80	-0.20			
Nonreact	-0.11	0.13	-0.82	0.42	-0.39	0.17			
							0.68	0.34	4.26 (14, 28)***

Note. B = unstandardized beta regression coefficient; *SE B* = standard error for the unstandardized beta; *t* = *t*-test value; *p* = the probability value; 95% CI = 95% confidence interval range; R^2 = adjusted R^2; ΔR^2 = the change in R^2 since the previous step; WCH = Approximate hours per week currently working with all clients; YCE = Approximate years of clinical experience working as a mental health professional; YCETI = Approximate years working with clients with a terminal illness; PWTI = Approximate percentage of clients with a terminal illness that comprises current clinical work; PCTIF = Approximate percentage of clients with a terminal illness, with a treatment focus on terminal illness related content; PCTICR = Approximate percentage of session content with clients with a terminal illness, focused on terminal illness related content;

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

Research Question 2: Is There a Relationship Between Self-Compassion as Measured by the Self-Compassion Scale and Compassion Fatigue as Measured by the Professional Quality of Life 5 for Mental Health Professionals Working With Clients With a Terminal Illness

Parametric Assumptions

Similar results were achieved while assessing the parametric assumptions for exploring the relationship between these predictors (demographic variables, practice variables, and SCS subscale scores) and the CF outcome variable, as those found for previous research questions. The resulting scatterplot from assessing the linearity assumption is provided in Figure 7, and the Q–Q plot for assessing the normality of the residuals assumption is provided in Figure 8. None of the parametric assumptions were violated, and therefore, no additional modifications or transformations to the hierarchical regression model were conducted.

Figure 7

RQ2 Linearity Assumption Graph

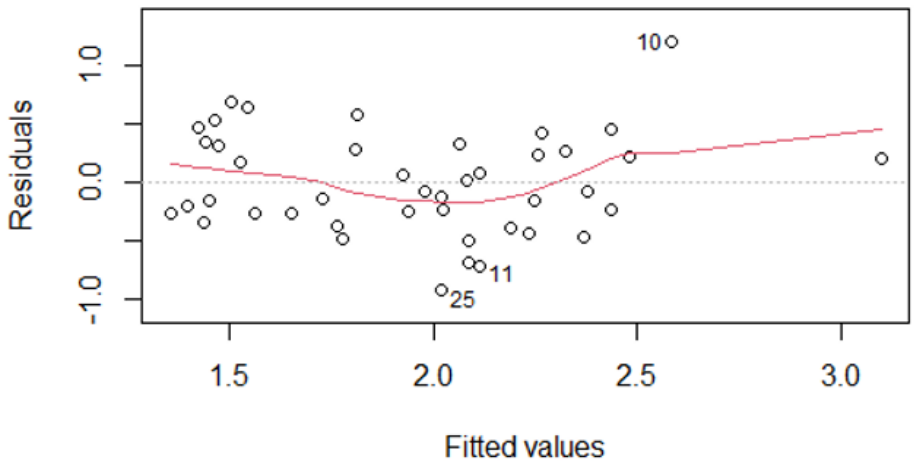
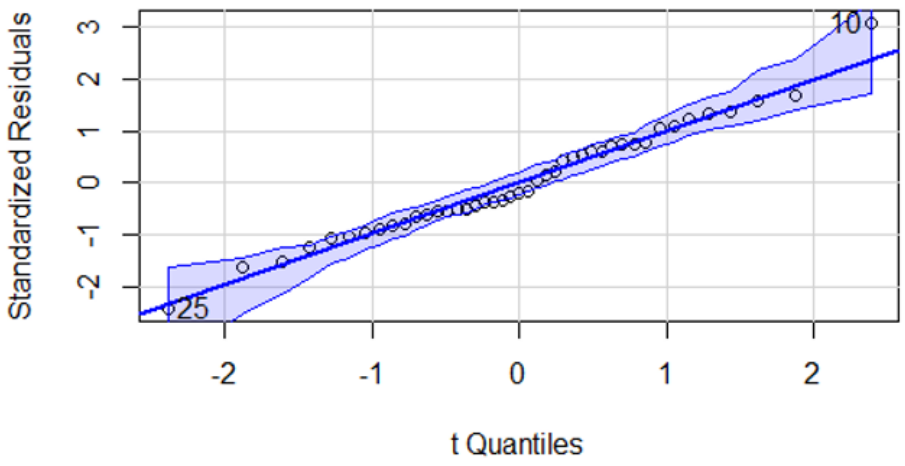


Figure 8

RQ2 Normality Assumption Quantile Plot



Hierarchical Linear Regression

Hierarchical linear regression was conducted to examine how the self-compassion total scores predict CF while controlling for demographic and clinical practice variables. Steps 1 and 2 were the same as research question 1. In step 3, the model was statistically significant and explained about 45% of the variance of CF (see Table 9). Therefore, adding the total SCS self-compassion scores explained an additional 11% of the variance of CF. Additionally, results show that self-compassion scores were statistically significant and negatively associated with CF.

Table 9

Hierarchical Regression Table of Self-Compassion Total Score Predicting Compassion Fatigue

Predictor	*B*	*SE B*	*t*	*p*	95% CI of *B*		R^2	ΔR^2	$F\ (k, df_{Res})$
Step 3 Intercept	3.67	0.60	6.07	< 0.001***	2.44	4.90			
Age	-0.31	0.37	-0.85	0.40	-1.05	0.44			
Gender	0.27	0.20	1.35	0.19	-0.14	0.68			
Race	0.34	0.24	1.43	0.16	-0.15	0.83			
WCH	-0.01	0.01	-0.91	0.37	-0.02	0.01			
YCE	-0.01	0.01	-1.12	0.27	-0.04	0.01			
YCETI	-0.00	0.01	-0.28	0.78	-0.02	0.02			
PWTI	0.00	0.00	1.16	0.25	-0.00	0.01			
PCTIF	0.01	0.00	-1.76	0.09	-0.01	0.00			
PCTICR	-0.00	0.00	-0.54	0.59	-0.01	0.01			
Self-Compassion	-0.33	0.13	-2.56	0.02*	-0.60	-0.07			
							0.45	0.11	2.66 (10, 32)*

Note. *B* = unstandardized beta regression coefficient; *SE B* = standard error for the unstandardized beta; *t* = *t*-test value; *p* = the probability value; 95% CI = 95% confidence interval range; R^2 = adjusted R^2; ΔR^2 = the change in R^2 since the previous step; WCH = Approximate hours per week currently working with all clients; YCE = Approximate years of clinical experience working as a mental health professional; YCETI = Approximate years working with clients with a terminal illness; PWTI = Approximate percentage of clients with a terminal illness that comprises current clinical work; PCTIF = Approximate percentage of clients with a terminal illness, with a treatment focus on terminal illness related content; PCTICR = Approximate percentage of session content with clients with a terminal illness, focused on terminal illness related content; Self-Compassion = SCS total score;

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

Hypothesis 4: Participants Who Have Higher Levels of Total Trait Mindfulness Are More Likely to Have Higher Total Self-Compassion Scores. The data did not fulfill this hypothesis. Participants who had higher trait mindfulness had lower total self-compassion scores (see regression coefficient in Table 9).

Hypothesis 6: Professional Experience Level is Expected to Partially Moderate the Relationship Between Compassion Fatigue and Total Self-Compassion Scores

Parametric Assumptions. Similar results were achieved while assessing the parametric assumptions for exploring the potential moderating effect of professional experience level on the relationship between CF and total self-compassion scores, as those found for previous research questions. The resulting scatterplot from assessing the linearity assumption is provided in Figure 9, and the Q–Q plot for assessing the normality of the residuals assumption is provided in Figure 10. None of the parametric assumptions were violated, and therefore, no additional modifications or transformations to the hierarchical regression model were conducted.

Figure 9

H6 Linearity Assumption Graph

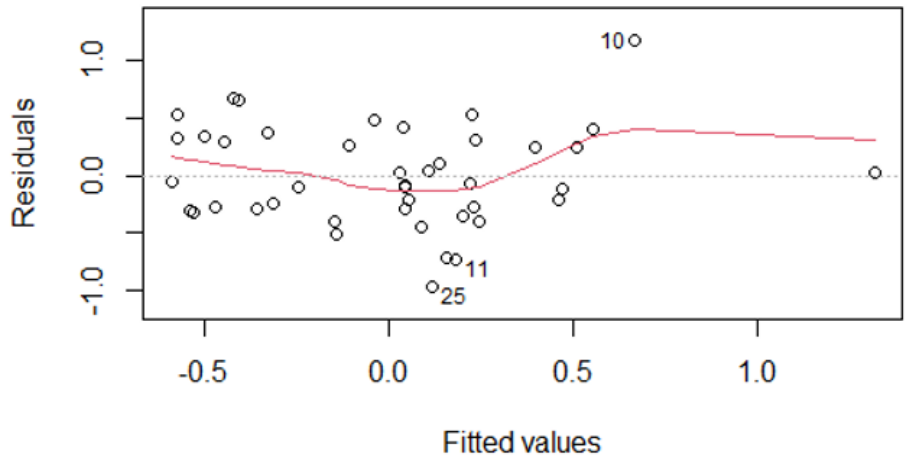
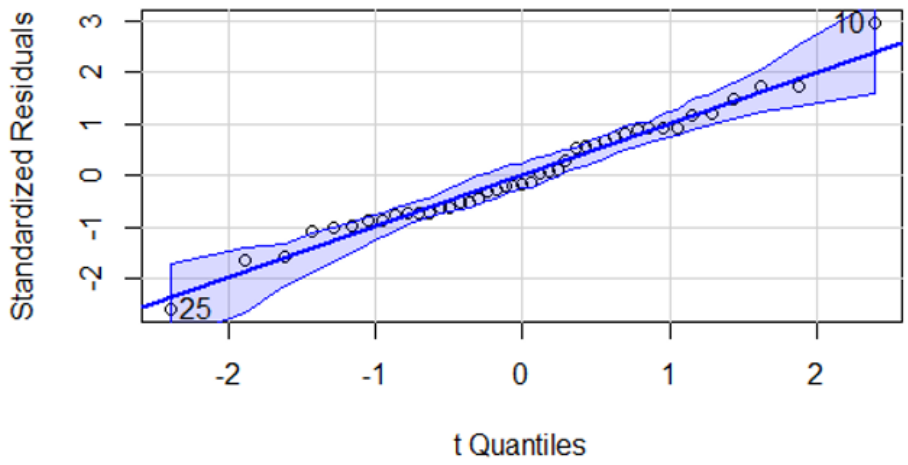


Figure 10

H6 Normality Assumption Quantile Plot



Hierarchical Linear Regression. Hierarchical linear regression was conducted to examine the potential moderating effect of professional experience level on the relationship between total self-compassion scores and CF. Steps 1 through 3 were the same as research question 2 (see Table 9). In step 4, although the model was statistically significant, the addition of the interaction term only added an additional 2% of explained variance and was not statistically significant itself (see Table 10). Therefore, the data did not fulfill this hypothesis.

Table 10

Hierarchical Regression Table of Professional Experience Level Moderating the Relationship Between Self-Compassion Total Score and Compassion Fatigue

Predictor	*B*	*SE*	*t*	*p*	95% CI		R^2	ΔR^2	$F\ (k, df_{Res})$
Step 4 Intercept	-0.00	0.08	-0.06	0.96	-0.16	0.15			
Age	-0.21	0.38	-0.54	0.59	-0.99	0.57			
Gender	0.20	0.21	0.95	0.35	-0.23	0.64			
Race	0.35	0.24	1.45	0.16	-0.14	0.84			
WCH	-0.01	0.01	-0.84	0.41	-0.02	0.01			
YCE	-0.01	0.01	-0.58	0.57	-0.04	0.02			
YCETI	-0.00	0.01	-0.34	0.73	-0.02	0.02			
PWTI	0.00	0.00	0.96	0.36	-0.00	0.01			
PCTIF	-0.01	0.00	-1.90	0.07	-0.01	0.00			
PCTICR	0.00	0.00	-0.21	0.83	-0.01	0.01			
Self-Compassion	-0.32	0.13	-2.41	0.02*	-0.59	-0.05			
YCE*Self-compassion	0.01	0.01	0.90	0.37	-0.01	0.02			
							0.47	0.02	2.48 (11, 31)*

Note. B = unstandardized beta regression coefficient; *SE B* = standard error for the unstandardized beta; *t* = *t*-test value; *p* = the probability value; 95% CI = 95% confidence interval range; R^2 = adjusted R^2; ΔR^2 = the change in R^2 since the previous step; WCH = Approximate hours per week currently working with all clients; YCE = Approximate years of clinical experience working as a mental health professional; YCETI = Approximate years working with clients with a terminal illness; PWTI = Approximate percentage of clients with a terminal illness that comprises current clinical work; PCTIF = Approximate percentage of clients with a terminal illness, with a treatment focus on terminal illness related content; PCTICR = Approximate percentage of session content with clients with a terminal illness, focused on terminal illness related content; Self-Compassion = SCS total score;

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

Research Question 2a: What Aspects of Self-Compassion as Measured by the Self-Compassion Scale Are More Effective in Moderating Compassion Fatigue as Measured by the Professional Quality of Life 5

Parametric Assumptions

Parametric assumptions for this hierarchical linear regression model were assessed. The linearity assumption has been met since the fitted values versus residuals scatterplot shows no distinct relationship or pattern (see Figure 11). The normality assumption has been met since most residuals were close to or on the QQ-Line in the QQ-plot (see Figure 12). The homogeneity of variance assumption has been met since the results for the Bruesh-Pagan test were found to be not statistically significant. The independence of error assumption was found to be met since the results for the Durbin-Watson test were found to be not statistically significant. The absence of multicollinearity assumption was met since none of the predictor variables had VIF values greater than 10. No parametric assumptions were violated, therefore, no additional modifications or transformations to the hierarchical regression model were conducted.

Figure 11

RQ2a Linearity Assumption Graph

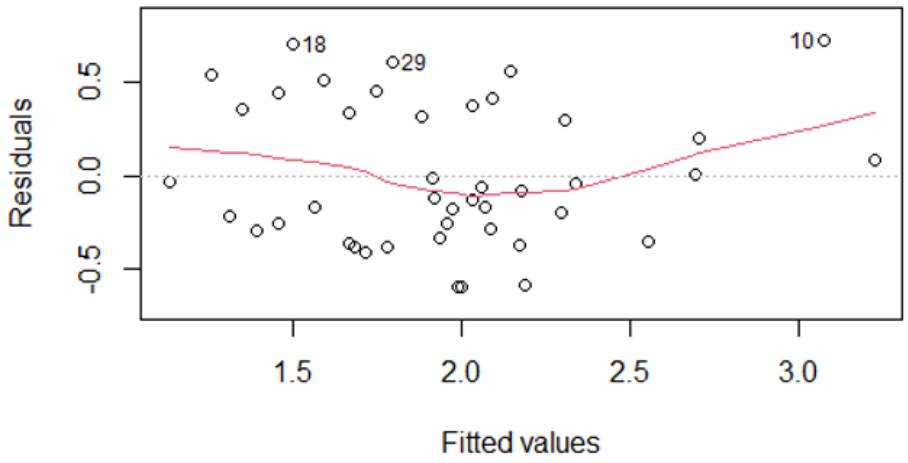
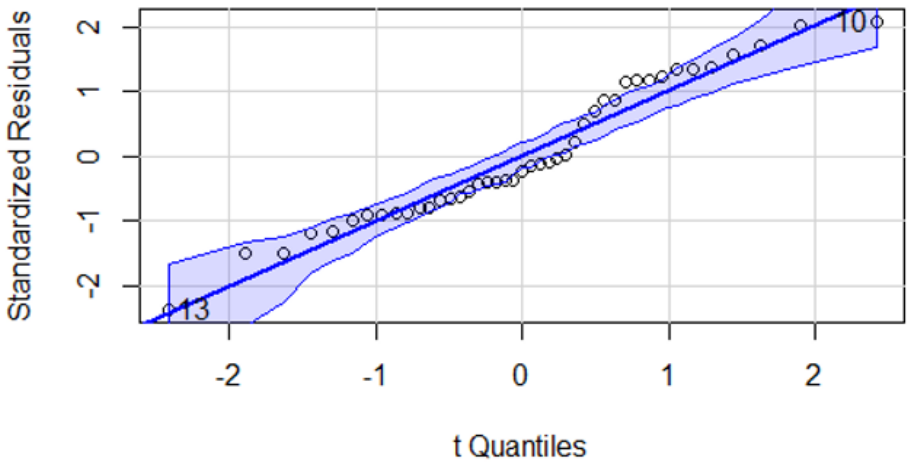


Figure 12

RQ2a Normality Assumption Quantile Plot



Hierarchical Linear Regression

Hierarchical linear regression was conducted to examine how self-compassion factors can predict CF while controlling for demographic and clinical practice variables. Steps 1 and 2 were the same as research question 1 (see Table 7). In step 3, the model was statistically significant and explained about 59% of the variance of CF (see Table 11). However, despite contributing about an additional 26% of the variance explanation for CF, none of the self-compassion factors were significant predictors for CF.

Table 11

Hierarchical Regression Table of Self-Compassion Factors Predicting Compassion Fatigue

Predictor	*B*	*SE B*	*t*	*p*	95% CI of *B*		R^2	ΔR^2	$F\ (k, df_{Res})$
Step 3 Intercept	0.85	0.87	0.99	0.33	-0.92	2.63			
Age	-0.38	0.35	-1.10	0.28	-1.10	0.33			
Gender	0.04	0.21	0.21	0.84	-0.39	0.48			
Race	0.28	0.25	1.11	0.28	-0.24	0.81			
WCH	-0.01	0.01	-1.10	0.28	-0.02	0.01			
YCE	-0.02	0.01	-1.77	0.09	-0.05	0.00			
YCETI	-0.00	0.01	-0.28	0.78	-0.02	0.02			
PWTI	0.00	0.00	0.99	0.33	-0.00	0.01			
PCTIF	-0.00	0.00	-1.23	0.23	-0.01	0.00			
PCTICR	-0.00	0.00	-1.08	0.29	-0.01	0.00			
Self-Kindness	0.09	0.17	0.50	0.62	-0.26	0.43			
Self-Judgment	0.10	0.19	0.52	0.61	-0.29	0.49			
Common-Humanity	0.06	0.16	0.35	0.73	-0.27	0.38			
Isolation	0.17	0.15	1.09	0.29	-0.15	0.48			
Over-Identification	0.22	0.21	1.07	0.29	-0.20	0.65			
Mindfulness	0.11	0.22	0.47	0.64	-0.35	0.56			
							0.59	0.26	2.60 (15, 27)*

Note. B = unstandardized beta regression coefficient; *SE B* = standard error for the unstandardized beta; *t* = *t*-test value; *p* = the probability value; 95% CI = 95% confidence interval range; R^2 = adjusted R^2; ΔR^2 = the change in R^2 since the previous step; WCH = Approximate hours per week currently working with all clients; YCE = Approximate years of clinical experience working as a mental health professional; YCETI = Approximate years working with clients with a terminal illness; PWTI = Approximate percentage of clients with a terminal illness that comprises current clinical work; PCTIF = Approximate percentage of clients with a terminal illness, with a treatment focus on terminal illness related content; PCTICR = Approximate percentage of session content with clients with a terminal illness, focused on

terminal illness related content; Mindfulness = SCS subscale score;

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

Hypothesis 5: Participants Who Have Higher Levels of Total Trait Mindfulness Are More Likely to Have Higher Compassion Satisfaction Subscale Scores. The data did not fulfill this hypothesis. The regression coefficients were not statistically significant (see Table 10).

Research Question 3: Do Demographic or Practice Variables Moderate the Relationship of Compassion Fatigue as Measured by the Professional Quality of Life 5 With Trait Mindfulness as Measured by the Five Factor Mindfulness Questionnaire for Mental Health Professionals Working With Clients With a Terminal Illness

Parametric Assumptions

Parametric assumptions for these hierarchical linear regression models, exploring the potential moderating impact of demographic variables (age, gender, and race) on the relationship between trait mindfulness and CF, were assessed and similar results were achieved as those found for previous research questions. The resulting scatterplots from assessing the linearity assumptions are provided in Figures 13 through 15, and the Q–Q plots for assessing the normality of the residuals assumptions are provided in Figures 16 through 18. None of the parametric assumptions were violated, and therefore, no additional modifications or transformations to the hierarchical regression models were conducted.

Figure 13

RQ3 Linearity Assumption Graph of the Impact of Age on the Trait Mindfulness and Compassion Fatigue Relationship

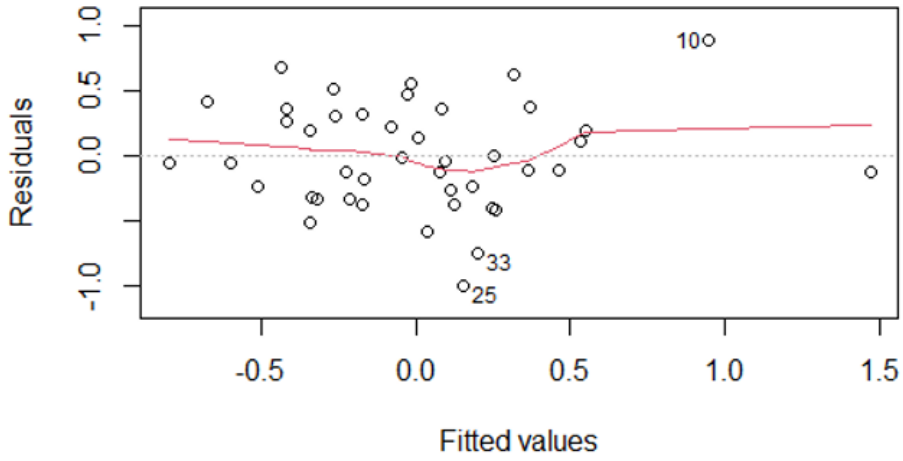


Figure 14

RQ3 Linearity Assumption Graph of the Impact of Gender on the Trait Mindfulness and Compassion Fatigue Relationship

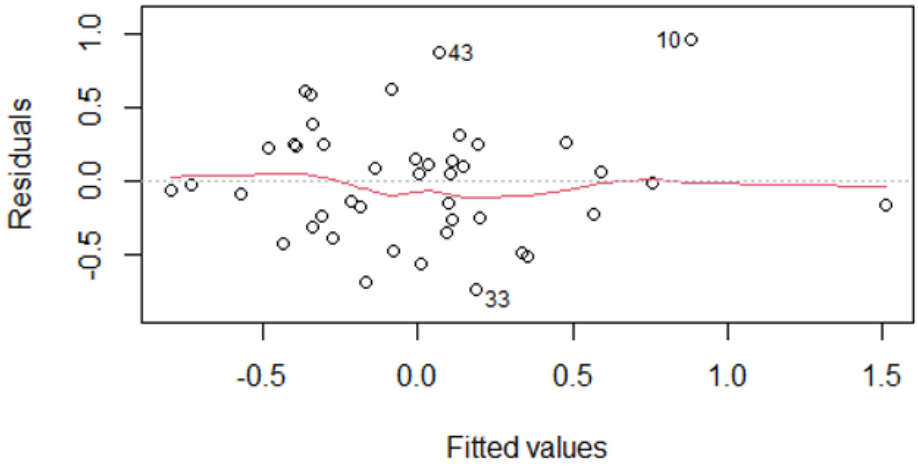


Figure 15

RQ3 Linearity Assumption Graph of the Impact of Race on the Trait Mindfulness and Compassion Fatigue Relationship

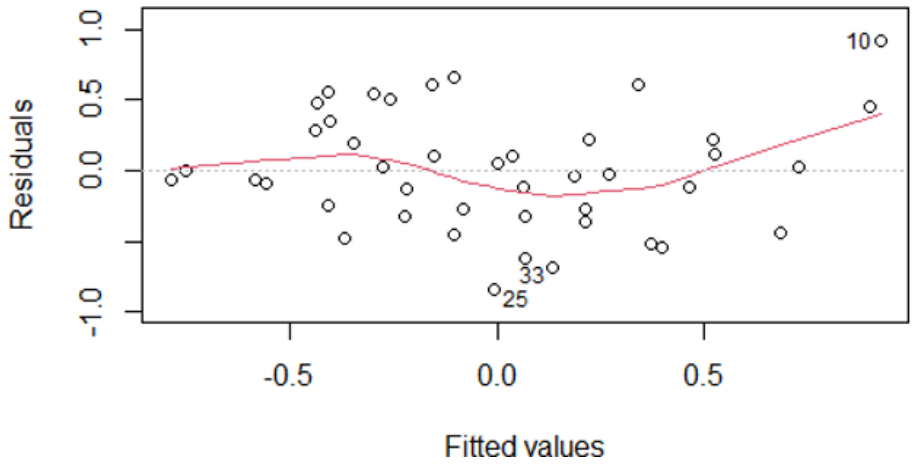


Figure 16

RQ3 Linearity Assumption Graph of the Impact of Weekly Hours Working with all Clients on the Trait Mindfulness and Compassion Fatigue Relationship

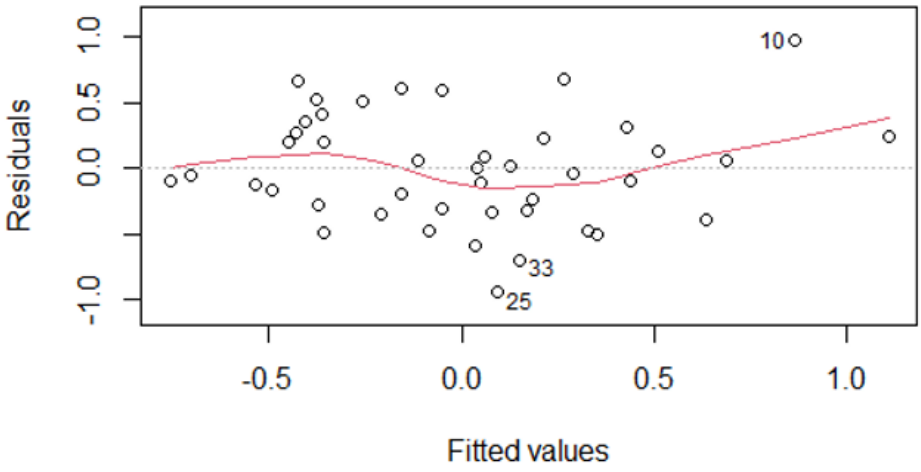


Figure 17

RQ3 Linearity Assumption Graph of the Impact of Years of Clinical Experience on the Trait Mindfulness and Compassion Fatigue Relationship

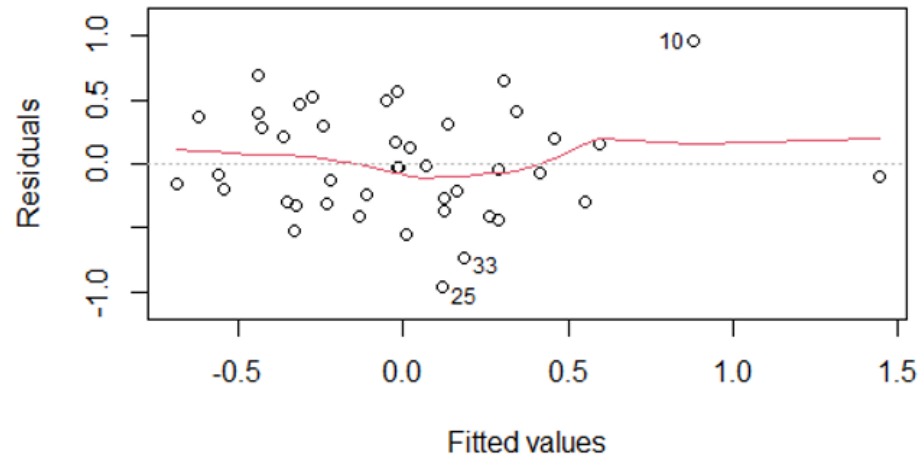


Figure 18

RQ3 Linearity Assumption Graph of the Impact of Years Working with Clients with a Terminal Illness on the Trait Mindfulness and Compassion Fatigue Relationship

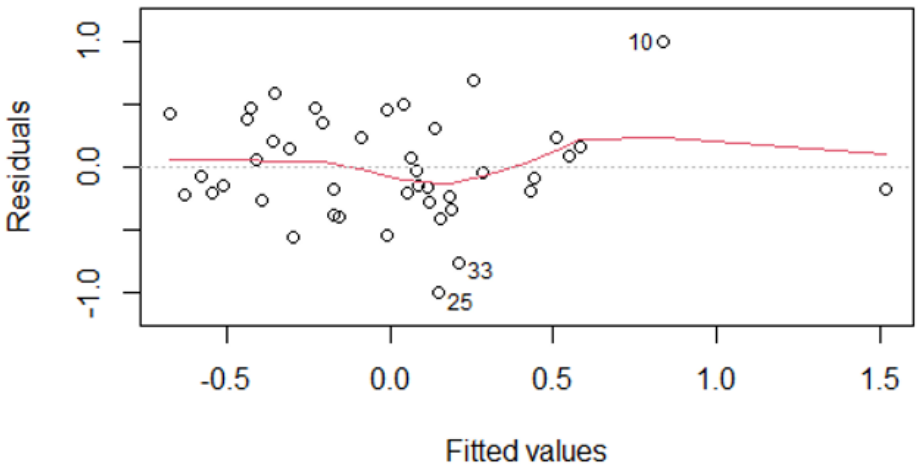


Figure 19

RQ3 Linearity Assumption Graph of the Impact of Percentage of Clients on the Trait Mindfulness and Compassion Fatigue Relationship

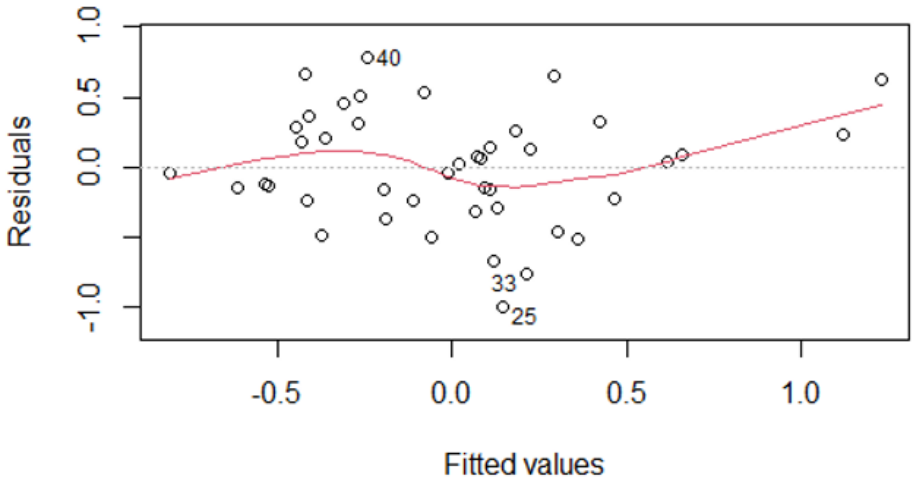


Figure 20

RQ3 Linearity Assumption Graph of the Impact of Percentage of Clients With a Terminal Illness, With a Treatment Focus on Terminal Illness Related Content on the Trait Mindfulness and Compassion Fatigue Relationship

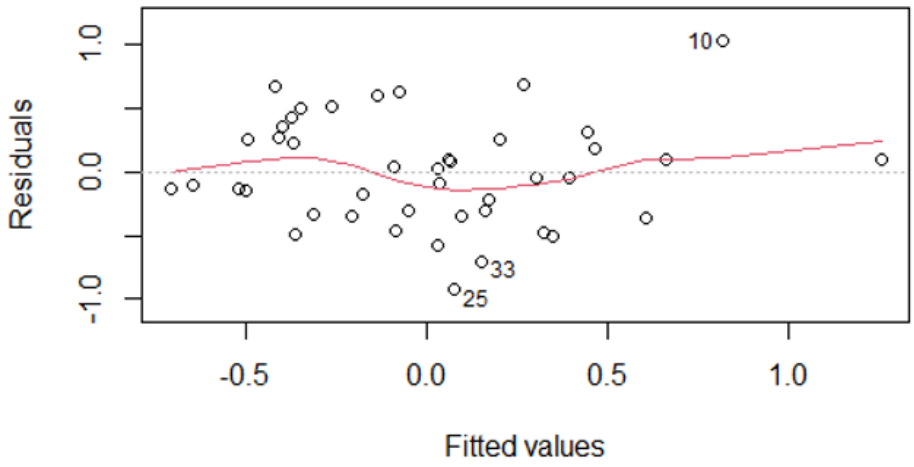


Figure 21

RQ3 Linearity Assumption Graph of the Impact of Percentage of Session Content With Clients With a Terminal Illness, Focused on Terminal Illness Related Content on the Trait Mindfulness and Compassion Fatigue Relationship

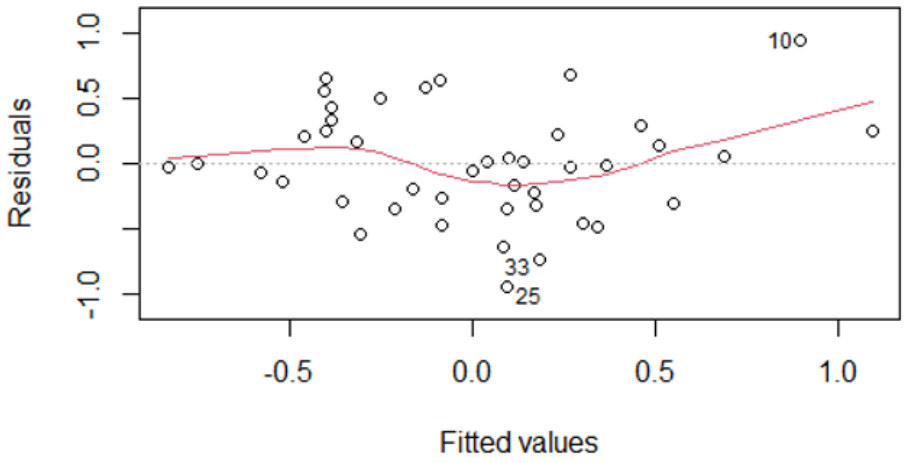


Figure 22

RQ3 Normality Assumption Quantile Plot of the Impact of Age on the Trait Mindfulness and Compassion Fatigue Relationship

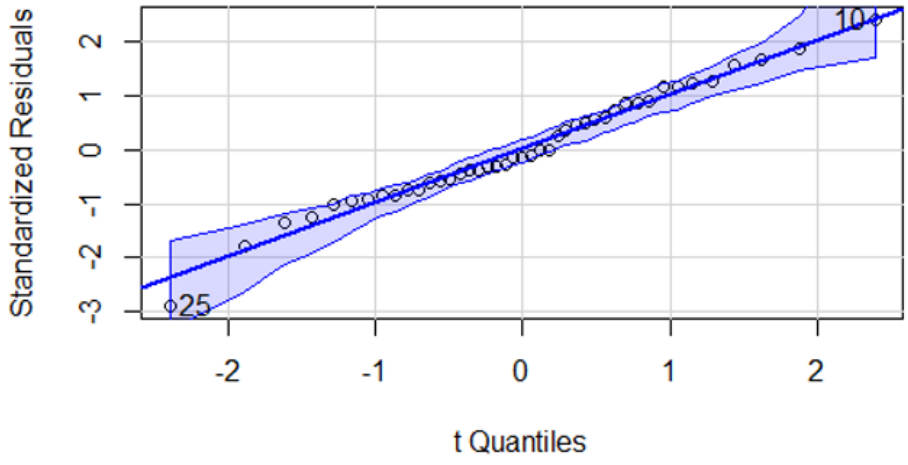


Figure 23

RQ3 Normality Assumption Quantile Plot of the Impact of Gender on the Trait Mindfulness and Compassion Fatigue Relationship

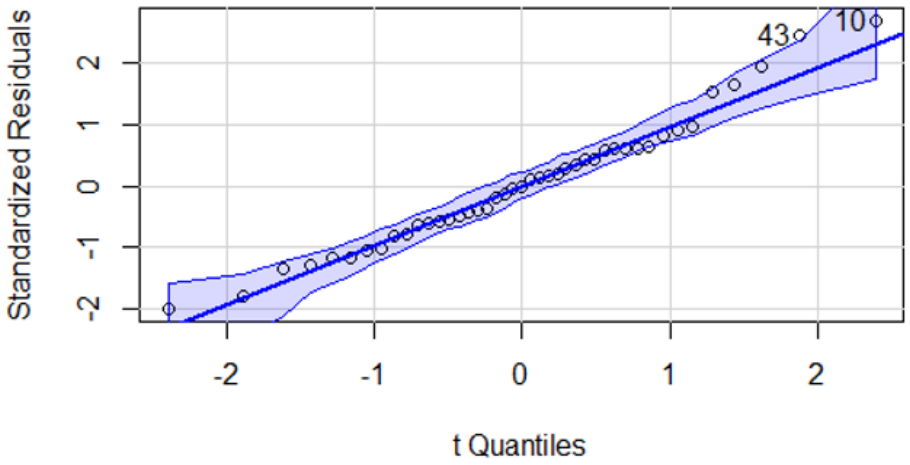


Figure 24

RQ3 Normality Assumption Quantile Plot of the Impact of Race on the Trait Mindfulness and Compassion Fatigue Relationship

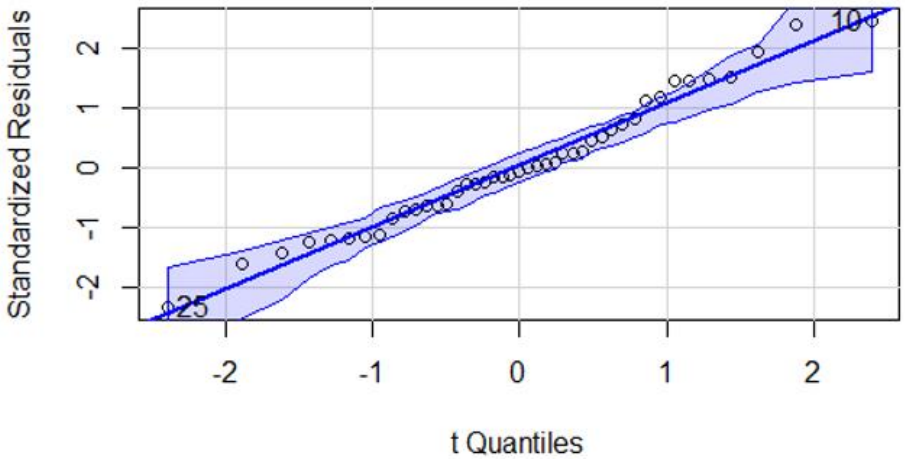


Figure 25

RQ3 Normality Assumption Quantile Plot of the Impact of Weekly Hours Working With all Clients on the Trait Mindfulness and Compassion Fatigue Relationship

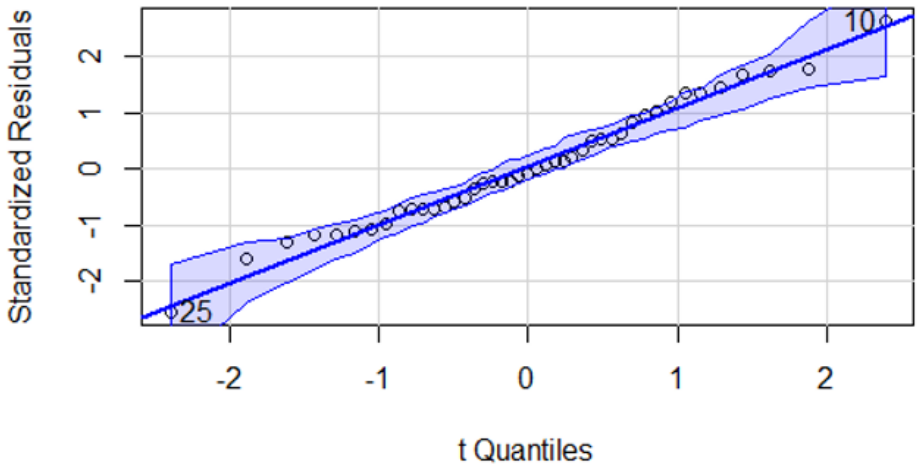


Figure 26

RQ3 Normality Assumption Quantile Plot of the Impact of Years of Clinical Experience on the Trait Mindfulness and Compassion Fatigue Relationship

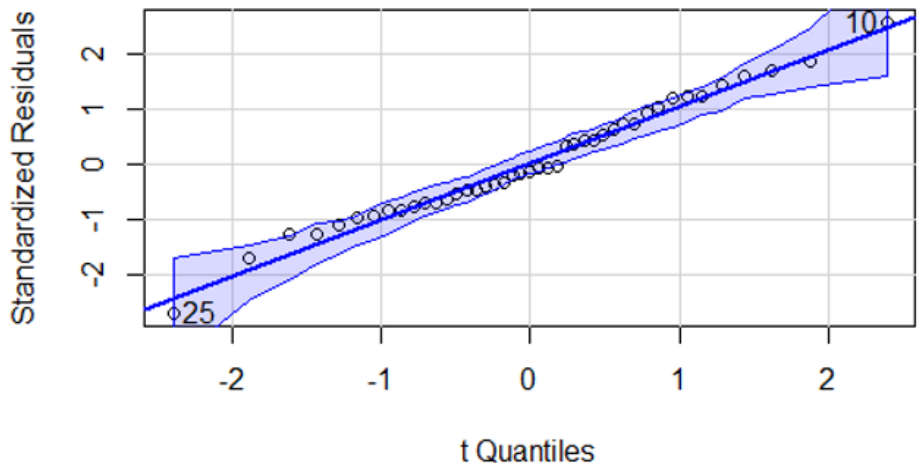


Figure 27

RQ3 Normality Assumption Quantile Plot of the Impact of Years Working With Clients With a Terminal Illness on the Trait Mindfulness and Compassion Fatigue Relationship

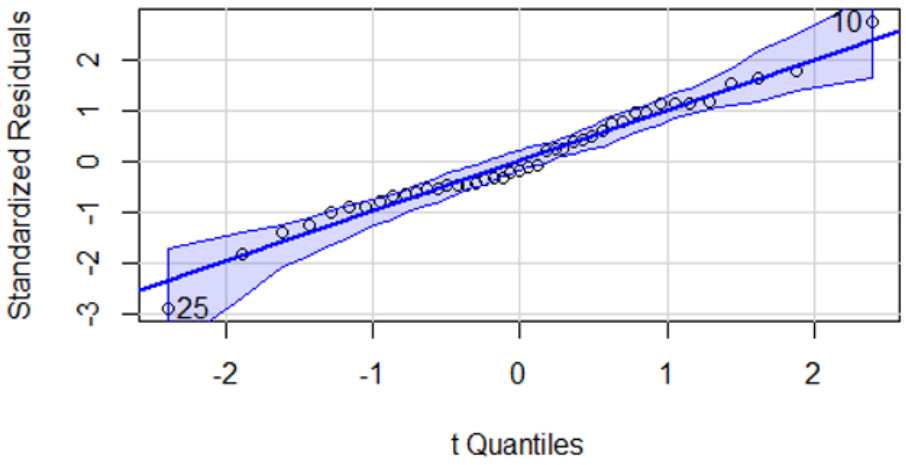


Figure 28

RQ3 Normality Assumption Quantile Plot of the Impact of Percentage of Clients With a Terminal Illness Comprising Clinical Work on the Trait Mindfulness and Compassion Fatigue Relationship

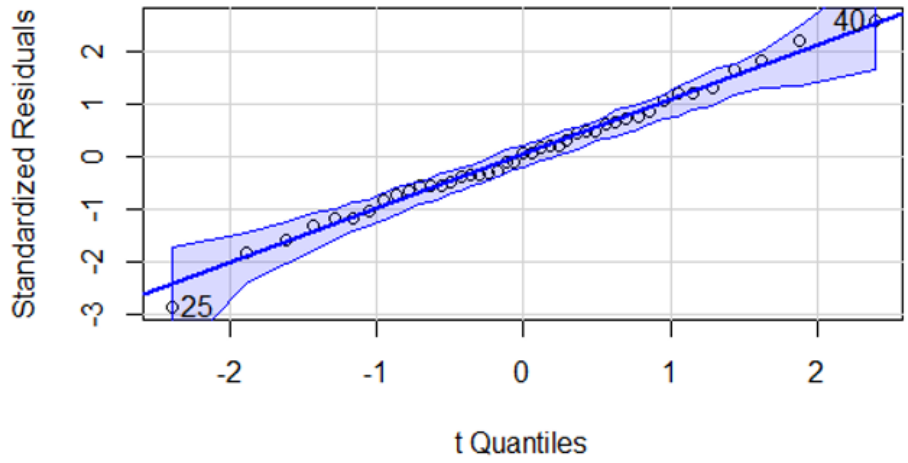


Figure 29

RQ3 Normality Assumption Quantile Plot of the Impact of Percentage of Clients With a Terminal Illness, With a Treatment Focus on Terminal Illness Related Content on the Trait Mindfulness and Compassion Fatigue Relationship

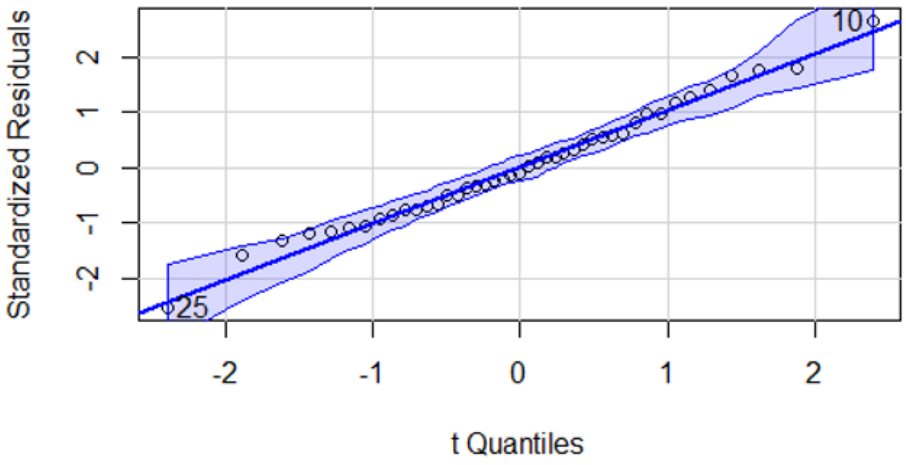
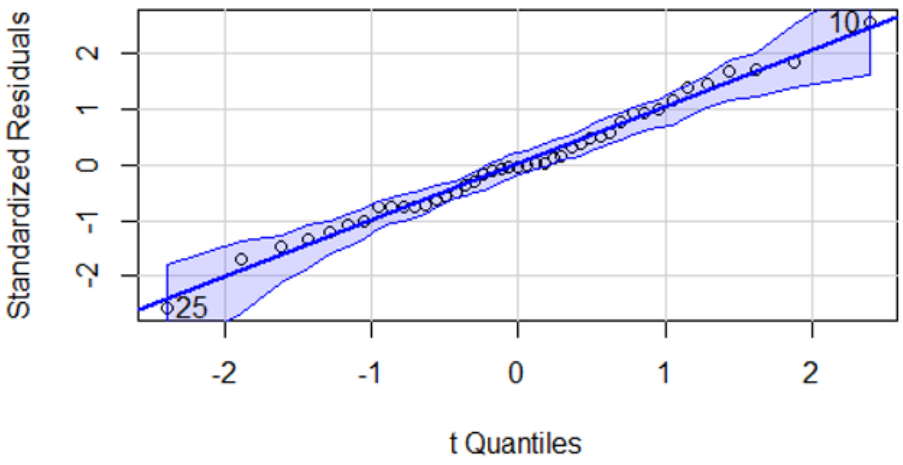


Figure 30

RQ3 Normality Assumption Quantile Plot of the Impact of Percentage of Session Content With Clients With a Terminal Illness, Focused on Terminal Illness Related Content on the Trait Mindfulness and Compassion Fatigue Relationship



Hierarchical Linear Regression

Due to multicollinearity that occurred when all demographic variables were added within a single step, a series of hierarchical linear regressions were conducted to examine how the demographic variables might introduce moderator effects into the relationship between trait mindfulness and CF while controlling for demographic and clinical practice variables. Steps 1 through 3 were the same as research question 1 (see Table 7). The results show that none of the demographic variables moderated the relationship between trait mindfulness and CF (see Tables 12 through 14).

Age. In step 4, when exploring the potential moderator effect of age on the relationship, the model was statistically significant and explained about 52% of the variance of CF and contributed an additional 18% of the variance explained for CF (see Table 12). Therefore, with the addition of the interaction between age and trait mindfulness, trait mindfulness remains a significant predictor for CF, but the interaction is not a significant predictor, which may result from the small sample size.

Table 12

Hierarchical Regression Table of the Impact of Age on the Trait Mindfulness and Compassion Fatigue Relationship

Predictor	*B*	*SE B*	*t*	*p*	95% CI of *B*		R^2	ΔR^2	$F\ (k, df_{Res})$
Step 4 Intercept	-0.04	0.08	-0.53	0.60	-0.20	0.12			
Age	-0.21	0.35	-0.59	0.56	-0.93	0.51			
Gender	0.23	0.19	1.20	0.24	-0.16	0.63			
Race	0.32	0.23	1.42	0.17	-0.14	0.78			
WCH	-0.00	0.01	-0.64	0.52	-0.02	0.01			
YCE	-0.00	0.01	-0.16	0.88	-0.03	0.02			
YCETI	-0.00	0.01	-0.52	0.61	-0.02	0.01			
PWTI	0.00	0.00	-0.52	0.60	-0.01	0.01			
PCTIF	-0.01	0.00	-2.09	0.05*	-0.01	-0.00			
PCTICR	-0.00	0.00	-0.13	0.90	-0.01	0.01			
Mindfulness	-0.54	0.21	-2.54	0.02*	-0.98	-0.11			
Age* Mindfulness	-0.52	0.37	-1.40	0.17	-1.28	0.24			
							0.52	0.18	3.10 (11, 31)**

Note. *B* = unstandardized beta regression coefficient; *SE B* = standard error for the unstandardized beta; *t* = *t*-test value; *p* = the probability value; 95% CI = 95% confidence interval range; R^2 = adjusted R^2; ΔR^2 = the change in R^2 since the previous step; WCH = Approximate hours per week currently working with all clients; YCE = Approximate years of clinical experience working as a mental health professional; YCETI = Approximate years working with clients with a terminal illness; PWTI = Approximate percentage of clients with a terminal illness that comprises current clinical work; PCTIF = Approximate percentage of clients with a terminal illness, with a treatment focus on terminal illness related content; PCTICR = Approximate percentage of session content with clients with a terminal illness, focused on terminal illness related content; Mindfulness = FFMQ total score;

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

Race. In step 4, when exploring the potential moderator effect of race on the relationship between trait mindfulness and CF while controlling for demographic and clinical practice variables, the model was statistically significant and explained about 51% of the variance of CF (see Table 13). This step contributed an additional 17% explanation of the variance for CF. With the addition of the interaction between race and trait mindfulness, trait mindfulness remains a significant predictor for CF, and the interaction is not a significant predictor, which may result from the small sample size.

Table 13

Hierarchical Regression Table of the Impact of Race on the Trait Mindfulness and Compassion Fatigue Relationship

Predictor	*B*	*SE B*	*t*	*p*	95% CI of *B*		R^2	ΔR^2	$F\ (k, df_{Res})$
Step 4 Intercept	0.02	0.07	-0.23	0.82	-0.13	0.17			
Age	-0.32	0.35	-0.92	0.37	-1.04	0.39			
Gender	0.29	0.19	1.52	0.14	-0.10	0.68			
Race	0.23	0.23	0.98	0.34	-0.25	0.71			
WCH	-0.01	0.01	-0.78	0.44	-0.02	0.01			
YCE	-0.01	0.01	-0.45	0.66	-0.03	0.02			
YCETI	-0.01	0.01	-0.74	0.46	-0.02	0.01			
PWTI	0.00	0.00	0.81	0.43	-0.00	0.01			
PCTIF	-0.01	0.00	-1.97	0.06	-0.01	0.00			
PCTICR	-0.00	0.00	-0.40	0.69	-0.01	0.01			
Mindfulness	-0.68	0.21	-3.26	0.002**	-1.11	-0.26			
Race* Mindfulness	-0.43	0.37	-1.15	0.26	-1.20	0.33			
							0.51	0.17	2.98 (11, 31)**

Note. *B* = unstandardized beta regression coefficient; *SE B* = standard error for the unstandardized beta; *t* = *t*-test value; *p* = the probability value; 95% CI = 95% confidence interval range; R^2 = adjusted R^2; ΔR^2 = the change in R^2 since the previous step; WCH = Approximate hours per week currently working with all clients; YCE = Approximate years of clinical experience working as a mental health professional; YCETI = Approximate years

working with clients with a terminal illness; PWTI = Approximate percentage of clients with a terminal illness that comprises current clinical work; PCTIF = Approximate percentage of clients with a terminal illness, with a treatment focus on terminal illness related content; PCTICR = Approximate percentage of session content with clients with a terminal illness, focused on terminal illness related content; Mindfulness = FFMQ total score;

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

Gender. In step 4, when exploring the potential moderator effect of gender on the relationship between trait mindfulness and CF while controlling for demographic and clinical practice variables, the model was statistically significant and explained about 56% of the variance of CF and contributed an additional 22% of the variance explained for CF (see Table 14). With the addition of the interaction between gender and trait mindfulness, trait mindfulness is still a significant predictor for CF, and the interaction is also a significant predictor. As this moderation was significant, simple linear regression was performed separately for each gender, with trait mindfulness predicting CF. For the male identifying participants, trait mindfulness did not significantly predict CF ($B = 0.09$, $SE = 0.58$, $t = 0.157$, $p = 0.881$). Alternatively, among female identifying participants, there was a significant negative impact on this relationship, such that as trait mindfulness level increased, CF level decreased ($B = -0.84$, $SE = 0.16$, $t = -5.402$, $p < .001$). Figure 31 depicts this difference between genders in moderating the trait mindfulness and CF relationship.

Table 14

Hierarchical Regression Table of the Impact of Gender on the Trait Mindfulness and Compassion Fatigue Relationship

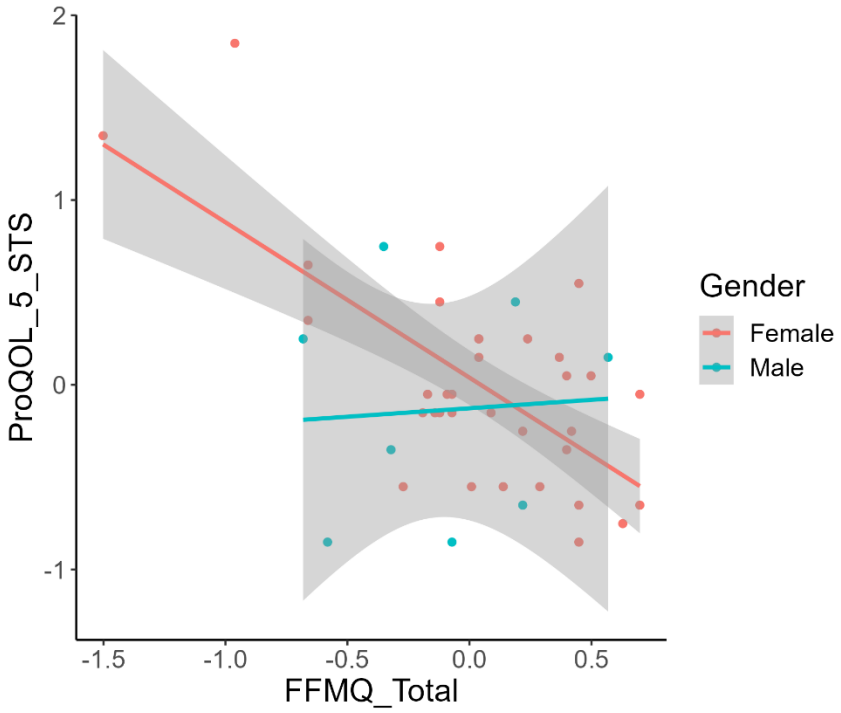
Predictor	*B*	*SE B*	*t*	*p*	95% CI of *B*		R^2	ΔR^2	$F(k, df_{Res})$
Step 4 Intercept	0.03	0.07	0.46	0.65	-0.11	0.18			
Age	-0.23	0.34	-0.70	0.49	-0.92	0.45			
Gender	0.17	0.19	0.88	0.39	-0.22	0.56			
Race	0.19	0.22	0.86	0.39	-0.26	0.65			
WCH	-0.00	0.01	-0.33	0.74	-0.02	0.01			
YCE	0.00	0.01	0.12	0.91	-0.02	0.03			
YCETI	-0.01	0.01	-1.13	0.27	-0.03	0.01			
PWTI	0.00	0.00	0.85	0.40	-0.00	0.01			
PCTIF	-0.01	0.00	-1.54	0.13	-0.01	0.00			
PCTICR	-0.00	0.00	-1.08	0.29	-0.01	0.00			
Mindfulness	-0.56	0.20	-2.79	0.008**	-0.96	-0.15			
Gender* Mindfulness	-1.02	0.49	-2.08	0.046*	-2.01	-0.02			
							0.56	0.22	3.52 (11, 31)**

Note. *B* = unstandardized beta regression coefficient; *SE B* = standard error for the unstandardized beta; *t* = *t*-test value; *p* = the probability value; 95% CI = 95% confidence interval range; R^2 = adjusted R^2; ΔR^2 = the change in R^2 since the previous step; WCH = Approximate hours per week currently working with all clients; YCE = Approximate years of clinical experience working as a mental health professional; YCETI = Approximate years working with clients with a terminal illness; PWTI = Approximate percentage of clients with a terminal illness that comprises current clinical work; PCTIF = Approximate percentage of clients with a terminal illness, with a treatment focus on terminal illness related content; PCTICR = Approximate percentage of session content with clients with a terminal illness, focused on terminal illness related content; Mindfulness = FFMQ total score;

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

Figure 31

Gender Impact Difference on the Trait Mindfulness and Compassion Fatigue Relationship



General Caseload Volume. In step 4, when exploring the potential moderator effect of the approximate hours per week currently working with all clients on the relationship between trait mindfulness and CF while controlling for demographic and clinical practice variables, the model was statistically significant and explained about 50% of the variance of CF (see Table 15). This step contributed an additional 17% explanation of the variance of CF. With the addition of the interaction between this practice variable and trait mindfulness, trait mindfulness remains a significant predictor for CF, and the interaction is not a significant predictor, which may result from the small sample size.

Table 15

Hierarchical Regression Table of the Impact of Weekly Hours Working With all Clients on the Trait Mindfulness and Compassion Fatigue Relationship

Predictor	*B*	*SE B*	*t*	*p*	95% CI of *B*		R^2	ΔR^2	$F\ (k, df_{Res})$
Step 4 Intercept	0.01	0.08	0.12	0.90	-0.15	0.17			
Age	-0.33	0.36	-0.92	0.36	-1.07	0.40			
Gender	0.29	0.20	1.50	0.14	-0.11	0.69			
Race	0.27	0.24	1.12	0.27	-0.22	0.76			
WCH	-0.01	0.01	-0.65	0.52	-0.02	0.01			
YCE	-0.01	0.01	-0.43	0.67	-0.03	0.02			
YCETI	-0.01	0.01	-0.80	0.43	-0.03	0.01			
PWTI	0.00	0.00	0.82	0.42	-0.00	0.01			
PCTIF	-0.01	0.00	-1.90	0.07	-0.01	0.00			
PCTICR	-0.00	0.00	-0.39	0.70	-0.01	0.01			
Mindfulness	-0.64	0.21	-3.07	0.005**	-1.07	-0.21			
WCH* Mindfulness	-0.00	0.01	-0.43	0.67	-0.03	0.02			
							0.50	0.17	2.78 (11, 31)*

Note. B = unstandardized beta regression coefficient; *SE B* = standard error for the unstandardized beta; *t* = *t*-test value; *p* = the probability value; 95% CI = 95% confidence interval range; R^2 = adjusted R^2; ΔR^2 = the change in R^2 since the previous step; WCH = Approximate hours per week currently working with all clients; YCE = Approximate years of clinical experience working as a mental health professional; YCETI = Approximate years working with clients with a terminal illness; PWTI = Approximate percentage of clients with a terminal illness that comprises current clinical work; PCTIF = Approximate percentage of clients with a terminal illness, with a treatment focus on terminal illness related content; PCTICR = Approximate percentage of session content with clients with a terminal illness, focused on terminal illness related content; Mindfulness = FFMQ total score;

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

Experience Level. In step 4, when exploring the potential moderator effect of the approximate years of clinical experience working as a mental health professional on the relationship between trait mindfulness and CF while controlling for demographic and clinical practice variables, the model was statistically significant and explained about 51% of the variance of CF (see Table 16). This step contributed an additional 18% explanation of the variance for CF. With the addition of the interaction between this practice variable and trait mindfulness, trait mindfulness remains a significant predictor for CF, and the interaction is not a significant predictor, which may result from the small sample size.

Table 16

Hierarchical Regression Table of the Impact of Years of Clinical Experience on the Trait Mindfulness and Compassion Fatigue Relationship

Predictor	*B*	*SE B*	*t*	*p*	95% CI of *B*		R^2	ΔR^2	$F\ (k, df_{Res})$
Step 4 Intercept	-0.03	0.08	-0.33	0.74	-0.19	0.13			
Age	-0.25	0.36	-0.69	0.49	-0.98	0.48			
Gender	0.24	0.20	1.17	0.25	-0.18	0.65			
Race	0.32	0.23	1.37	0.18	-0.15	0.78			
WCH	-0.00	0.01	-0.57	0.57	-0.02	0.01			
YCE	-0.00	0.01	-0.19	0.85	-0.03	0.02			
YCETI	-0.01	0.01	-0.66	0.51	-0.02	0.01			
PWTI	0.00	0.00	0.64	0.53	-0.01	0.01			
PCTIF	-0.01	0.00	-2.02	0.05	-0.01	0.00			
PCTICR	-0.00	0.00	-0.18	0.86	-0.01	0.01			
Mindfulness	-0.56	0.22	-2.54	0.02*	-1.01	-0.11			
YCE* Mindfulness	0.01	0.01	0.93	0.36	-0.01	0.04			
							0.51	0.18	2.90 (11, 31)**

Note. *B* = unstandardized beta regression coefficient; *SE B* = standard error for the unstandardized beta; *t* = *t*-test value; *p* = the probability value; 95% CI = 95% confidence interval range; R^2 = adjusted R^2; ΔR^2 = the change in R^2 since the previous step; WCH = Approximate hours per week currently working with all clients; YCE = Approximate years of

clinical experience working as a mental health professional; YCETI = Approximate years working with clients with a terminal illness; PWTI = Approximate percentage of clients with a terminal illness that comprises current clinical work; PCTIF = Approximate percentage of clients with a terminal illness, with a treatment focus on terminal illness related content; PCTICR = Approximate percentage of session content with clients with a terminal illness, focused on terminal illness related content; Mindfulness = FFMQ total score;

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

Trauma-Focused Client Experience Level. In step 4, when exploring the potential moderator effect of the approximate years working with clients with a terminal illness on the relationship between trait mindfulness and CF while controlling for demographic and clinical practice variables, the model was statistically significant and explained about 53% of the variance of CF (see Table 17). This step contributed an additional 20% explanation of the variance for CF. With the addition of the interaction between this practice variable and trait mindfulness, trait mindfulness remains a significant predictor for CF, and the interaction is not a significant predictor, which may result from the small sample size.

Table 17

Hierarchical Regression Table of the Impact of Years Working with Clients with a Terminal Illness on the Trait Mindfulness and Compassion Fatigue Relationship

Predictor	*B*	*SE B*	*t*	*p*	95% CI of *B*		R^2	ΔR^2	$F\ (k, df_{Res})$
Step 4 Intercept	-0.03	0.08	-0.51	0.62	-0.19	0.12			
Age	-0.31	0.35	-0.91	0.37	-1.02	0.39			
Gender	0.25	0.19	1.29	0.21	-0.14	0.64			
Race	0.30	0.22	1.33	0.19	-0.16	0.75			
WCH	-0.00	0.01	-0.30	0.77	-0.02	0.01			
YCE	-0.00	0.01	-0.26	0.79	-0.03	0.02			
YCETI	-0.01	0.01	-0.89	0.38	-0.03	0.01			
PWTI	0.00	0.00	0.31	0.76	-0.01	0.01			
PCTIF	-0.01	0.00	-2.00	0.05	-0.01	0.00			
PCTICR	0.00	0.00	0.00	1.00	-0.01	0.01			
Mindfulness	-0.55	0.21	-2.63	0.01	-0.97	-0.12			
YCETI* Mindfulness	0.03	0.02	1.56	0.13	-0.01	0.06			
							0.53	0.20	3.18 (11, 31)**

Note. *B* = unstandardized beta regression coefficient; *SE B* = standard error for the unstandardized beta; *t* = *t*-test value; *p* = the probability value; 95% CI = 95% confidence interval range; R^2 = adjusted R^2; ΔR^2 = the change in R^2 since the previous step; WCH = Approximate hours per week currently working with all clients; YCE = Approximate years of clinical experience working as a mental health professional; YCETI = Approximate years working with clients with a terminal illness; PWTI = Approximate percentage of clients with a terminal illness that comprises current clinical work; PCTIF = Approximate percentage of clients with a terminal illness, with a treatment focus on terminal illness related content; PCTICR = Approximate percentage of session content with clients with a terminal illness, focused on terminal illness related content; Mindfulness = FFMQ total score;

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

Trauma-Focused Client Caseload. In step 4, when exploring the potential moderator effect of the approximate percentage of clients with a terminal illness comprising current clinical work on the relationship between trait mindfulness and CF while controlling for demographic and clinical practice variables, the model was statistically significant and explained about 53% of the variance of CF (see Table 18). This step contributed an additional 20% explanation of the variance for CF. With the addition of the interaction between this practice variable and trait mindfulness, trait mindfulness remains a significant predictor for CF, and the interaction is not a significant predictor, which may result from the small sample size.

Table 18

Hierarchical Regression Table of the Impact of the Percentage of Clients with a Terminal Illness Comprising Clinical Work on the Trait Mindfulness and Compassion Fatigue Relationship

Predictor	*B*	*SE B*	*t*	*p*	95% CI of *B*		R^2	ΔR^2	$F\ (k, df_{Res})$
Step 4 Intercept	-0.00	0.07	-0.07	0.95	-0.15	0.14			
Age	-0.38	0.35	-1.08	0.29	-1.09	0.33			
Gender	0.23	0.19	1.20	0.24	-0.16	0.63			
Race	0.24	0.23	1.04	0.31	-0.23	0.70			
WCH	-0.01	0.01	-0.70	0.49	-0.02	0.01			
YCE	-0.01	0.01	-0.52	0.60	-0.03	0.02			
YCETI	-0.01	0.01	-0.71	0.48	-0.02	0.01			
PWTI	0.00	0.00	1.02	0.31	-0.00	0.01			
PCTIF	-0.01	0.00	-1.50	0.14	-0.01	0.00			
PCTICR	-0.00	0.00	-0.73	0.47	-0.01	0.01			
Mindfulness	-0.60	0.20	-2.95	0.006**	-1.01	-0.18			
PWTI* Mindfulness	-0.01	0.01	-1.47	0.15	-0.03	0.00			
							0.53	0.20	3.13 (11, 31)**

Note. *B* = unstandardized beta regression coefficient; *SE B* = standard error for the unstandardized beta; *t* = *t*-test value; *p* = the probability value; 95% CI = 95% confidence interval range; R^2 = adjusted R^2; ΔR^2 = the change in R^2 since the previous step; WCH = Approximate hours per week currently working with all clients; YCE = Approximate years of

clinical experience working as a mental health professional; YCETI = Approximate years working with clients with a terminal illness; PWTI = Approximate percentage of clients with a terminal illness that comprises current clinical work; PCTIF = Approximate percentage of clients with a terminal illness, with a treatment focus on terminal illness related content; PCTICR = Approximate percentage of session content with clients with a terminal illness, focused on terminal illness related content; Mindfulness = FFMQ total score;

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

Trauma-Focused Treatment Client Volume. In step 4, when exploring the potential moderator effect of the approximate percentage of clients with a terminal illness, with a treatment focus on terminal illness related content on the relationship between trait mindfulness and CF while controlling for demographic and clinical practice variables, the model was statistically significant and explained about 49% of the variance of CF (see Table 19). This step contributed an additional 16% explanation of the variance for CF. With the addition of the interaction between this practice variable and trait mindfulness, trait mindfulness remains a significant predictor for CF, and the interaction is not a significant predictor, which may result from the small sample size.

Table 19

Hierarchical Regression Table of the Impact of the Percentage of Clients With a Terminal Illness, With a Treatment Focus on Terminal Illness Related Content on the Trait Mindfulness and Compassion Fatigue Relationship

Predictor	*B*	*SE B*	*t*	*p*	95% CI of *B*		R^2	ΔR^2	$F\ (k, df_{Res})$
Step 4 Intercept	-0.00	0.08	-0.02	0.99	-0.16	0.16			
Age	-0.31	0.36	-0.86	0.40	-1.04	0.43			
Gender	0.29	0.20	1.48	0.15	-0.11	0.69			
Race	0.30	0.24	1.24	0.23	-0.20	0.80			
WCH	-0.00	0.01	-0.55	0.58	-0.02	0.01			
YCE	-0.00	0.01	-0.39	0.70	-0.03	0.02			
YCETI	-0.01	0.01	-0.70	0.49	-0.02	0.01			
PWTI	0.00	0.00	0.80	0.43	-0.00	0.01			
PCTIF	-0.01	0.00	-1.84	0.08	-0.01	0.00			
PCTICR	-0.00	0.00	-0.39	0.70	-0.01	0.01			
Mindfulness	-0.63	0.23	-2.76	0.009**	-1.09	-0.16			
PCTIF* Mindfulness	0.00	0.01	0.06	0.96	-0.01	0.01			
							0.49	0.16	2.75 (11, 31)*

Note. *B* = unstandardized beta regression coefficient; *SE B* = standard error for the unstandardized beta; *t* = *t*-test value; *p* = the probability value; 95% CI = 95% confidence interval range; R^2 = adjusted R^2; ΔR^2 = the change in R^2 since the previous step; WCH = Approximate hours per week currently working with all clients; YCE = Approximate years of clinical experience working as a mental health professional; YCETI = Approximate years working with clients with a terminal illness; PWTI = Approximate percentage of clients with a terminal illness that comprises current clinical work; PCTIF = Approximate percentage of clients with a terminal illness, with a treatment focus on terminal illness related content; PCTICR = Approximate percentage of session content with clients with a terminal illness, focused on terminal illness related content; Mindfulness = FFMQ total score;

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

Trauma Content Session Frequency. In step 4, when exploring the potential moderator effect of the approximate percentage of session content with clients with a terminal illness, focused on terminal illness related content on the relationship between trait mindfulness and CF while controlling for demographic and clinical practice variables, the model was statistically significant and explained about 50% of the variance of CF (see Table 20). This step contributed an additional 17% explanation of the variance for CF. With the addition of the interaction between this practice variable and trait mindfulness, trait mindfulness remains a significant predictor for CF, and the interaction is not a significant predictor, which may result from the small sample size.

Table 20

Hierarchical Regression Table of the Impact of the Percentage of Session Content With Clients With a Terminal Illness, Focused on Terminal Illness Related Content on the Trait Mindfulness and Compassion Fatigue Relationship

Predictor	*B*	*SE B*	*t*	*p*	95% CI of *B*		R^2	ΔR^2	$F\ (k, df_{Res})$
Step 4 Intercept	0.02	0.08	0.23	0.82	-0.14	0.18			
Age	-0.36	0.36	-0.99	0.33	-1.10	0.38			
Gender	0.27	0.20	1.35	0.19	-0.14	0.67			
Race	0.25	0.24	1.06	0.30	-0.24	0.74			
WCH	-0.00	0.01	-0.54	0.59	-0.02	0.01			
YCE	-0.01	0.01	-0.43	0.67	-0.03	0.02			
YCETI	-0.01	0.01	-0.91	0.37	-0.03	0.01			
PWTI	0.00	0.00	0.72	0.48	-0.01	0.01			
PCTIF	-0.01	0.00	-1.77	0.09	-0.01	0.00			
PCTICR	-0.00	0.00	-0.40	0.69	-0.01	0.01			
Mindfulness	-0.69	0.23	-3.07	0.004**	-1.15	-0.23			
PCTICR* Mindfulness	-0.00	0.01	-0.66	0.52	-0.02	0.01			
							0.50	0.17	2.82 (11, 31)*

Note. *B* = unstandardized beta regression coefficient; *SE B* = standard error for the unstandardized beta; *t* = *t*-test value; *p* = the probability value; 95% CI = 95% confidence

interval range; R^2 = adjusted R^2; ΔR^2 = the change in R^2 since the previous step; WCH = Approximate hours per week currently working with all clients; YCE = Approximate years of clinical experience working as a mental health professional; YCETI = Approximate years working with clients with a terminal illness; PWTI = Approximate percentage of clients with a terminal illness that comprises current clinical work; PCTIF = Approximate percentage of clients with a terminal illness, with a treatment focus on terminal illness related content; PCTICR = Approximate percentage of session content with clients with a terminal illness, focused on terminal illness related content; Mindfulness = FFMQ total score;

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

Hypothesis 7: Participants' Demographic Factors Are Expected to Moderate the Relationship Between Compassion Fatigue and Total Trait Mindfulness Scores. The data did partially fulfill this hypothesis. Gender moderated the association between CF and total trait mindfulness (Table 14), but age and race did not (see Tables 12 and 14).

Hypothesis 8: Participants' Demographic Factors Are Expected to Moderate the Relationship Between Compassion Fatigue and Total Self-Compassion Scores. The data did not fulfill this hypothesis. To test this, a hierarchical multiple regression was conducted using steps 1 through 3 from the model used for the first research question (see Table 7). In all cases, the total self-compassion score was a significant predictor at step 4, but the interaction terms were not (see Table 21).

Table 21

Hierarchical Regression Table of Demographic Factors Moderating the Relationship Between Trait Mindfulness and Compassion Fatigue

Predictor	*B*	*SE*	*t*	*p*	95% CI		R^2	ΔR^2	$F\ (k, df_{Res})$
Step 4 Intercept	0.02	0.08	0.22	0.83	-0.14	0.18			
Age	-0.01	0.40	-0.04	0.97	-0.83	0.80			
Gender	0.13	0.21	0.62	0.54	-0.30	0.57			
Race	0.17	0.26	0.68	0.50	-0.36	0.71			
WCH	-0.01	0.01	-1.14	0.27	-0.02	0.01			
YCE	-0.00	0.01	-0.20	0.84	-0.03	0.03			
YCETI	-0.00	0.01	-0.00	0.99	-0.02	0.02			
PWTI	0.00	0.00	0.56	0.58	-0.01	0.01			
PCTIF	-0.01	0.00	-2.32	0.03*	-0.02	-0.00			
PCTICR	0.00	0.00	0.25	0.80	-0.01	0.01			
Mindfulness	-0.32	0.13	-2.43	0.02*	-0.59	-0.05			
Age*SCS	-0.55	0.30	-1.85	0.07	-1.15	0.06			
Gender*SCS	-0.12	0.32	-0.38	0.70	-0.79	0.54			
Race*SCS	-0.51	0.32	-1.59	0.12	-1.17	0.15			
							0.52	0.18	2.42 (13, 29)*

Note. B = unstandardized beta regression coefficient; *SE B* = standard error for the unstandardized beta; *t* = *t*-test value; *p* = the probability value; 95% CI = 95% confidence interval range; R^2 = adjusted R^2; ΔR^2 = the change in R^2 since the previous step; WCH = Approximate hours per week currently working with all clients; YCE = Approximate years of clinical experience working as a mental health professional; YCETI = Approximate years working with clients with a terminal illness; PWTI = Approximate percentage of clients with a terminal illness that comprises current clinical work; PCTIF = Approximate percentage of clients with a terminal illness, with a treatment focus on terminal illness related content; PCTICR = Approximate percentage of session content with clients with a terminal illness, focused on terminal illness related content; Mindfulness = FFMQ total score;

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

Hypothesis 9: Participants Who Received Professional Support for a Personal History of Trauma Are More Likely to Have Higher Compassion Fatigue Scores. The data did not fulfill this hypothesis. To test this, a hierarchical multiple regression was conducted using the first two steps from the model used for the first research question (see Table 7). For step 3, a dummy variable for whether the participant had received professional support for a personal history of trauma was added as a predictor variable (see Table 22). All assumptions of regression were met. Although the model explained 35% of the variance in CF scores, this was a 1% increase from the step 2 model and was not statistically significant. Therefore, the predictor variable was not statistically significant, and the data did not support this hypothesis.

Table 22

Hierarchical Regression Table of the Impact of Receiving Professional Support After Experiencing Personal Trauma on Compassion Fatigue

Predictor	*B*	*SE B*	*t*	*p*	95% CI		R^2	ΔR^2	$F\ (k, df_{Res})$
Step 3 Intercept	2.40	0.72	3.34	0.002**	0.93	3.88			
Age	-0.13	0.46	-0.28	0.78	-1.07	0.81			
Gender	0.25	0.24	1.03	0.31	-0.25	0.75			
Race	0.19	0.30	0.64	0.53	-0.42	0.80			
WCH	-0.01	0.01	-1.14	0.26	-0.03	0.01			
YCE	-0.01	0.02	-0.52	0.61	-0.04	0.02			
YCETI	-0.00	0.01	-0.46	0.65	-0.03	0.02			
PWTI	0.01	0.00	1.32	0.20	-0.00	0.01			
PCTIF	-0.01	0.00	-1.36	0.19	-0.02	0.00			
PCTICR	-0.01	0.01	-0.85	0.40	-0.02	0.01			
Professional Support	0.20	0.25	0.82	0.42	-0.31	0.72			
							0.35	0.01	1.49 (10, 28)

Note. B = unstandardized beta regression coefficient; $SE\ B$ = standard error for the unstandardized beta; t = t-test value; p = the probability value; 95% CI = 95% confidence interval range; R^2 = adjusted R^2; ΔR^2 = the change in R^2 since the previous step; WCH

= Approximate hours per week currently working with all clients; YCE = Approximate years of clinical experience working as a mental health professional; YCETI = Approximate years working with clients with a terminal illness; PWTI = Approximate percentage of clients with a terminal illness that comprises current clinical work; PCTIF = Approximate percentage of clients with a terminal illness, with a treatment focus on terminal illness related content; PCTICR = Approximate percentage of session content with clients with a terminal illness, focused on terminal illness related content; Mindfulness = FFMQ total score;

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

Hypothesis 10: Participant's Level of Experience With Mindfulness Meditation Likely Partially Moderates the Relationship Between Compassion Fatigue and Total Trait Mindfulness Scores. The data did not fulfill this hypothesis. Only 12 participants had any experience with mindfulness meditation, so a categorical yes or no variable, coded as 1 and –1 respectively, was used to indicate whether participants had mindfulness meditation experience, as opposed to how much experience they had. All predictor variables were mean centered, and the interaction term to test the moderation was created by multiplying mindfulness experience with trait mindfulness scores. A hierarchical multiple regression was conducted using the first two steps from the model used for the first research question (see Table 7). The step 3 model added experience with mindfulness meditation and trait mindfulness as predictors, and the step 4 model added the interaction term between these two variables (see Table 23). The step 3 model was significant, and identified trait mindfulness as a significant negative predictor for CF. However, mindfulness meditation experience was not a significant predictor. The step 4 model was also significant, but only an additional 2% of the variance for CF was explained. Trait mindfulness remained a significant predictor, but mindfulness meditation experience and the

interaction term were not, indicating that mindfulness meditation experience did not moderate the association between CF and trait mindfulness among participants.

Table 23

Hierarchical Regression Table of the Impact of Formal Mindfulness Meditation Practice on the Trait Mindfulness and Compassion Fatigue Relationship

Predictor	*B*	*SE*	*t*	*p*	95% CI		R^2	ΔR^2	$F\ (k, df_{Res})$
Step 3 Intercept	-0.00	0.07	0.00	1.00	-0.15	-0.15			
Age	-0.20	0.39	-0.52	0.61	-1.01	0.60			
Gender	0.31	0.20	1.57	0.13	-0.09	0.71			
Race	0.30	0.23	1.32	0.20	-0.17	0.77			
WCH	-0.00	0.01	-0.56	0.58	-0.02	0.01			
YCE	-0.00	0.01	-0.22	0.83	-0.03	0.02			
YCETI	-0.00	0.01	-0.55	0.59	-0.02	0.01			
PWTI	0.00	0.00	0.96	0.34	-0.00	0.01			
PCTIF	-0.01	0.00	-1.77	0.09	-0.01	0.00			
PCTICR	-0.00	0.00	-0.53	0.60	-0.01	0.01			
Meditation experience	0.14	0.21	0.64	0.53	-0.30	0.57			
Mindfulness	-0.67	0.21	-3.11	0.004**	-1.11	-0.23			
							0.50	0.16	2.82 (11, 31)*
Step 4 Intercept	-0.04	0.08	-0.45	0.66	-0.20	0.13			
Age	-0.26	0.39	-0.67	0.51	-1.07	0.54			
Gender	0.27	0.20	1.35	0.19	-0.14	0.68			
Race	0.36	0.23	1.52	0.14	-0.12	0.83			
WCH	-0.00	0.01	-0.57	0.57	-0.02	0.01			
YCE	-0.00	0.01	-0.38	0.70	-0.03	0.02			
YCETI	-0.00	0.01	-0.43	0.67	-0.02	0.01			
PWTI	0.00	0.00	1.06	0.30	-0.00	0.01			
PCTIF	-0.01	0.00	-1.77	0.09	-0.01	0.00			
PCTICR	-0.00	0.00	-0.54	0.59	-0.01	0.01			
Meditation experience	0.06	0.22	0.25	0.80	-0.40	0.51			

Table 23

Hierarchical Regression Table of the Impact of Formal Mindfulness Meditation Practice on the Trait Mindfulness and Compassion Fatigue Relationship

Mindfulness	-0.64	0.22	-2.96	0.006**	-1.08	-0.20			
Meditation experience* Mindfulness	0.48	0.42	1.13	0.27	-0.39	1.34			
							0.52	0.02	2.71 (12, 30)*

Note. B = unstandardized beta regression coefficient; $SE\ B$ = standard error for the unstandardized beta; t = t-test value; p = the probability value; 95% CI = 95% confidence interval range; R^2 = adjusted R^2; ΔR^2 = the change in R^2 since the previous step; WCH = Approximate hours per week currently working with all clients; YCE = Approximate years of clinical experience working as a mental health professional; YCETI = Approximate years working with clients with a terminal illness; PWTI = Approximate percentage of clients with a terminal illness that comprises current clinical work; PCTIF = Approximate percentage of clients with a terminal illness, with a treatment focus on terminal illness related content; PCTICR = Approximate percentage of session content with clients with a terminal illness, focused on terminal illness related content; Mindfulness = FFMQ total score;

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

Research Question 4: Can Levels of Trait Mindfulness as Measured by the Five Factor Mindfulness Questionnaire or Self-Compassion as Measured by the Self-Compassion Scale be Used to Help Predict Risk for Compassion Fatigue as Measured by the Professional Quality of Life 5, via Moderated Regression Analysis

Parametric Assumptions

Similar results were achieved while assessing the parametric assumptions for exploring the relationship between these predictors (demographic variables, practice variables, trait

mindfulness total score, self-compassion total score, and trait mindfulness total score multiplied by self-compassion total score) and the CF outcome variable, as those found for previous research questions. The resulting scatterplot from assessing the linearity assumption is provided in Figure 32, and the Q–Q plot for assessing the normality of the residuals assumption is provided in Figure 33. None of the parametric assumptions were violated, and therefore, no additional modifications or transformations to the hierarchical regression model were conducted.

Figure 32

RQ4 Linearity Assumption Graph

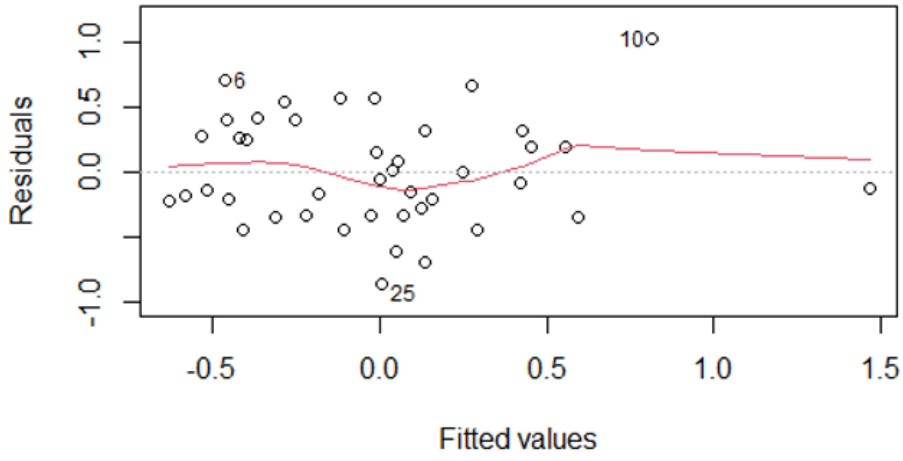
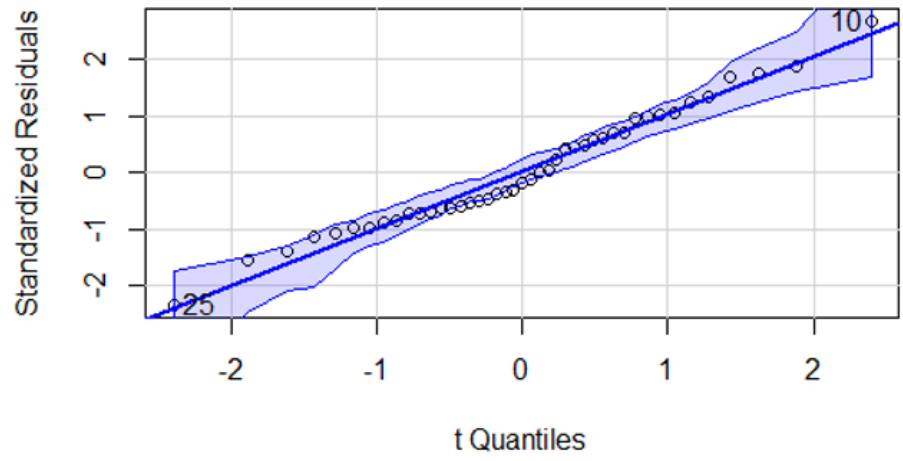


Figure 33

RQ4 Normality Assumption Quantile Plot



Hierarchical Linear Regression

A series of hierarchical linear regressions were conducted to examine how self-compassion traits predict CF while controlling for demographic and clinical practice variables. Steps 1 and 2 were the same as research question 1 (see Table 7). At step 3, mindfulness and self-compassion scores were added to the model, which was statistically significant and explained about 50% of the variance for CF (see Table 24). However, despite contributing about an additional 16% of the variance explanation for CF, none of the independent variables were significant predictors for CF. Step 4 added the interaction between total trait mindfulness and self-compassion scores to the model to identify a potential moderating effect. However, the total variance explained by the model did not change with the addition of these interactions, which were not statistically significant moderators in their relationships with CF.

Table 24

Hierarchical Regression Table for the Impact of Self-Compassion on the Trait Mindfulness and Compassion Fatigue Relationship

Predictor	*B*	*SE B*	*t*	*p*	95% CI of *B*		R^2	ΔR^2	$F\ (k, df_{Res})$
Step 3 Intercept	-0.00	0.07	0.00	1.00	-0.15	0.15			
Age	-0.31	0.36	-0.87	0.39	-1.04	0.42			
Gender	0.29	0.20	1.49	0.15	-0.11	0.69			
Race	0.32	0.23	1.35	0.19	-0.16	0.80			
WCH	-0.00	0.01	-0.57	0.58	-0.02	0.01			
YCE	-0.01	0.01	-0.51	0.61	-0.03	0.02			
YCETI	-0.01	0.01	-0.58	0.57	-0.02	0.01			
PWTI	0.00	0.00	0.83	0.41	-0.01	0.01			
PCTIF	-0.01	0.00	-1.87	0.07	-0.01	0.00			
PCTICR	-0.00	0.00	-0.36	0.72	-0.01	0.01			
Mindfulness	-0.52	0.32	-1.62	0.11	-1.17	0.13			
Self-Compassion	-0.09	0.20	-0.47	0.64	-0.49	0.31			
							0.50	0.16	2.79 (11, 31)*
Step 4 Intercept	-0.04	0.09	-0.39	0. 70	-0.22	0.15			
Age	-0.28	0.36	-0.76	0.45	-1.02	0.47			
Gender	0.26	0.20	1.30	0.20	-0.15	0.68			
Race	0.35	0.24	1.45	0.16	-0.14	0.85			
WCH	-0.00	0.01	-0.61	0.55	-0.02	0.01			
YCE	-0.01	0.01	-0.40	0.70	-0.03	0.02			
YCETI	-0.00	0.01	-0.43	0.67	-0.02	0.02			
PWTI	0.00	0.00	0.80	0.43	-0.00	0.01			
PCTIF	-0.01	0.00	-1.83	0.08	-0.01	0.00			
PCTICR	-0.00	0.00	-0.23	0.82	-0.01	0.01			
Mindfulness	-0.48	0.33	-1.44	0.16	-1.15	0.20			
Self-Compassion	-0.07	0.20	-0.36	0.72	-0.48	0.34			
Mindfulness* Self-Compassion	0.15	0.22	0.65	0.52	-0.31	0.60			
							0.50	0.00	2.54 (12, 30) *

Note. B = unstandardized beta regression coefficient; *SE B* = standard error for the unstandardized beta; *t* = *t*-test value; *p* = the probability value; 95% CI = 95% confidence

interval range; R^2 = adjusted R^2; ΔR^2 = the change in R^2 since the previous step; WCH = Approximate hours per week currently working with all clients; YCE = Approximate years of clinical experience working as a mental health professional; YCETI = Approximate years working with clients with a terminal illness; PWTI = Approximate percentage of clients with a terminal illness that comprises current clinical work; PCTIF = Approximate percentage of clients with a terminal illness, with a treatment focus on terminal illness related content; PCTICR = Approximate percentage of session content with clients with a terminal illness, focused on terminal illness related content; Mindfulness = FFMQ total score;

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

Research Question 5: Do Participants' Perceived Benefits Outweigh Perceived Costs of Completing This Trauma-Related Research as Measured by the Reactions to Research Participation Questionnaire–Revised

Results from the RRPQ-R support the hypothesis that overall perceived benefits from participating in this research project generally outweigh perceived negative costs associated with participation. Except for a single participant (2.33%) who strongly disagreed, all participants (97.67%) agreed or strongly agreed that they freely made the choice to participate in this research project. Again, barring the aforementioned participant and three others who endorsed feeling neutral, most (90.69%, $n = 39$) felt they could stop participating at any time and liked the idea they were contributing to science, and most (69.76%, $n = 30$) were glad to be asked to participate. More than half (58.14%, $n = 25$) agreed or strongly agreed finding participation in this research project personally meaningful and (53.48%, $n = 23$) endorsed gaining insight about their experiences through participation. However, while slightly more than half of participants (55.81%, $n = 24$) felt neutral about having gained something positive from participating

(53.49%, *n* = 23) and found participation personally beneficial, less than half of participants agreed or strongly agreed with these outcomes (34.88%, *n* = 15 and 39.53%, *n* = 17 respectively).

Apart from a single participant (2.33%) who strongly disagreed with all Global Research Evaluation subscale items, all other participants (97.67%) endorsed feeling they understood the consent form. Most participants (93.02%, *n* = 40) trusted that their participation would be kept private, agreed they were treated with respect and dignity (90.69%, *n* = 39), thought this research was for a good cause (88.37%, *n* = 38), and believed the results from this research project would be useful to others (76.74%, *n* = 33). Additionally, all but six participants (13.95%, *N* = 43) indicated they would still have chosen to participate in this research project after completing the survey, with five of these participants (11.63%, *n* = 6) indicating they felt neutral, and the final participant (2.33%) reporting they felt strongly they would not have chosen to participate.

In contrast to the overall positive reactions to the research participation, one participant (2.33%, *N* = 43) provided overwhelmingly negative feedback without an identifiable cause. Additionally, three participants (6.98%) reported they experienced unexpected emotional reactions, two (4.65%) of whom were also reminded about things they did not want to think about during participation. Another participant (2.33%) noted experiencing intense emotions during participation, a second participant (2.33%) felt questions were too personal, three participants (6.98%) felt participation was boring, three other participants (6.98%) felt the survey was too long, and one (2.33%) noted that participation was inconvenient. Four of these participants (36.36%, *n* = 11) also disagreed or strongly disagreed experiencing something positive from participation, three (27.27%) disagreed or strongly disagreed gaining insight about

experiences, two (18.18%) disagreed or strongly disagreed finding participation beneficial, and five (45.45%) disagreed or strongly disagreed finding participation personally meaningful.

Among participant feedback providing negative reactions, eight of these participants (72.73%, *n* = 11) also agreed or strongly agreed they were glad to be asked to participate, 10 (90.91%) agreed or strongly agreed they liked the idea of contributing to science, and three (27.27%) agreed or strongly agreed they gained something positive from participating. Additionally, four of these participants (36.36%, *n* = 11) agreed or strongly agreed they gained insight about their experiences from participating, two (18.18%) agreed or strongly agreed they found participation beneficial to them, and four (36.36%) agreed or strongly agreed they found participation personally meaningful. Six of these participants (54.55%, *n* = 11) also agreed or strongly agreed they would have still participated if they knew the content of the survey prior to participation and that the results would be useful to others. And eight of these participants (72.73%, *n* = 11) agreed or strongly agreed they were treated with respect and dignity and that the research is for a good cause.

Hypothesis 11: Averaged Research Participation Questionnaire–Revised Beneficial Subscale Scores (Participation, Personal Benefit, and Global Research Evaluation), Exceeds the Averaged Research Participation Questionnaire–Revised Cost Subscale Scores (Emotional Reaction and Perceived Drawback)

The RRPQ-R mean result scores and overall benefit-to-cost comparisons are presented in Table 16. The benefit-to-cost ratios were obtained by subtracting negative subscale mean scores from positive subscale mean scores, which produced positive ratios across all categories, indicating that overall, the perceived benefits or positive reactions outweighed the costs or negative reactions (see Table 25).

Table 25

Reactions to Research Participation

Subscale	Mean	SD
RRPQ-R positive scales		
Personal benefit	3.26	0.85
Global evaluation	4.39	0.68
Participation	4.34	0.68
RRPQ-R negative scales		
Emotional reactions	1.59	0.73
Perceived drawbacks	1.87	0.52
Benefit-to-cost ratios		
Personal benefit / Emotional reaction	2.27	0.86
Personal benefit / Perceived drawbacks	1.93	0.91
Global evaluation / Emotional reaction	3.14	1.24
Global evaluation / Perceived drawbacks	2.55	0.99
Participation / Emotional reaction	3.11	1.23
Participation / Perceived drawbacks	2.53	1.00

Note. $N = 43$; Subscale score values incorporate a 5-point Likert-type scale (1 = strongly disagree, 3 = neutral, 5 = strongly agree). A positive scale score closer to a 5 is indicative of more favorable reactions, and a negative scale score closer to a 1 is representative of more favorable reactions. The positive benefit-to-cost ratios indicate that generally, positive reactions outweighed negative reactions. SD = Standard deviation;

CHAPTER V: DISCUSSION

The purpose of this research was to explore the relationship between trait mindfulness, self-compassion, and CF in mental health professionals currently working with clients with a terminal illness. Following the enactment of the Affordable Care Act, mental health professionals in the United States continue to be incorporated within primary care and specialty healthcare settings (APA, 2022). According to the U.S. Bureau of Labor Statistics (n.d.), excluding education support services, new employment positions for psychologists occurring within healthcare related settings are also projected to see the largest rate increases over the next decade. Within these settings, mental health professionals may be more likely to encounter clients with a terminal illness, which could result in increased risk for developing CF due to potential repeated exposure to the details of the client's impending death. If left unaddressed long term, CF in mental health professionals increases the risk for developing barriers for establishing a therapeutic alliance and one's ability to work effectively with clients. Therefore, mental health professionals could benefit from increased awareness of personal CF levels and strengthening protective factors. Consequently, the purpose of this project was to explore the potential relationship between levels of trait mindfulness, self-compassion, and CF in adult U.S. mental health professionals who were currently working with clients with a terminal illness. This research project incorporated a cross-sectional, relational quantitative approach, completed using survey data obtained from self-selected, qualifying volunteers. The hope is that this research could provide support for informing future CF prevention and intervention strategies and programs for mental health professionals working with clients with a terminal illness. An additional goal of this research is to discover the participants' perceptions of participating in this research.

Significant Negative Correlations With Compassion Fatigue

This research found significant negative relationships between CF and several variables, including trait mindfulness, self-compassion, percentage of session content focused on a client's terminal illness, and the FFMQ nonjudge subscale score. Most of which supports previous research. Elevations in trait mindfulness levels correlated with lower CF levels (RQ1), which also supports the third hypothesis (H_3) that speculated this finding. This finding is aligned with previous research reporting that individuals with higher levels of trait mindfulness experience significantly lower levels of trauma-related symptoms in response to potentially traumatic events (Hicks et al., 2018; Martin-Cuellar et al., 2018; Thompson et al., 2014).

Higher total SCS self-compassion scores correlated with lower CF scores (RQ2), which also supports the fourth hypothesis (H_4) that speculated this finding. This result reinforces previous research reporting a strong significant relationship between higher levels of self-compassion and lower levels of PTSD symptoms or CF and work-related burnout (Barlow et al., 2017; Beaumont et al., 2016; Dahm et al., 2015; Hiraoka et al., 2015; Trompetter et al., 2017).

Participants with a greater percentage of session content focused on a client's terminal illness correlated with lower CF scores. Although this outcome is counter to the second hypothesis (H_2) it is not unexpected. While research by Galek et al. (2011) found that as this session content increased, CF levels also increased, most other prior research did not find this correlation (Choi, 2011; Cieslak et al., 2013; Furlonger & Taylor, 2013; Kulkarni et al., 2013; Sodeke-Gregson et al., 2013). Therefore, results from this research contributes to the later findings that do not correlate elevations in session content focused on a client's terminal illness with elevations in CF levels.

Higher FFMQ nonjudge subscale scores correlated with lower CF scores (RQ1a). This finding partially supports previous research by Stephenson et al. (2017) who found a significant correlation between elevated nonjudge and nonreact scores with decreased PTSD-related avoidance symptom endorsements.

Significant Positive Correlations With Compassion Fatigue

This research found a significant positive relationship between the FFMQ observe subscale scores and CF (RQ1a), suggesting that higher observe scores correlated with higher CF scores. This finding reinforces previous research by Stephenson et al. (2017) who found elevations in observe scores significantly correlated with elevated PTSD symptom endorsement.

Significant Moderator

Results from this research project found that gender was a significant moderator of the relationship between CF and trait mindfulness, which provides partial support for the seventh hypothesis (H_7) that speculated demographic factors moderated this relationship (RQ3). Results indicate that among male identifying participants, trait mindfulness level did not significantly predict CF level, which alternatively, for female identifying participants, as trait mindfulness level increased, CF level decreased significantly. These results provide further input into the understanding of the impact of gender on this relationship, which has yielded mixed results (Connally, 2012; Furlonger & Taylor, 2013; Kulkarni et al., 2013; Rossi et al., 2012; Salloum et al., 2019; Sodeke-Gregson et al., 2013; Zeidner et al., 2013). This finding suggests that the potential impact of gender warrants further investigation within studies researching similar themes.

Nonsignificant Key Findings

One of the key research questions (RQ2a) asked what aspects of self-compassion were more effective in moderating CF. Results from this research project did not find that individual self-compassion factors contributed a statistically significant explanation in variance of CF among participants. However, although not to a significant extent, larger overidentification and isolation subscale scores had a larger impact on elevations in CF than other self-compassion factors.

Another key research question (RQ3) and hypothesis (H_7) asked if and speculated that demographic or practice variables would have a moderating effect on the relationship between CF and trait mindfulness. Most research regarding the interplay of age and CF level among mental health professionals reports no statistically significant correlation (Bloomquist et al., 2015; Cieslak et al., 2013; Connally, 2012; Furlonger & Taylor, 2013; Kulkarni et al., 2013; Rossi et al., 2012; Sodeke-Gregson et al., 2013). Although race has been minimally researched as it relates to CF among mental health professionals, current findings are mixed (Choi, 2011; Connally, 2012; Sprang, Craig, & Clark, 2011). Similarly, mixed results are also found within prior research exploring the impact of mental health professional's practice variables on CF level. Practice variables that have been explored include general caseload volume, the volume of clients receiving trauma-focused treatment, and the frequency of sessions focused on trauma-related content. Most research reports finding a significant positive relationship between seeing too many clients and an increased CF symptom risk (Bride, Jones, & MacMaster, 2007; Cieslak et al., 2013; Kulkarni et al., 2013). Most research also reports finding a significant positive relationship between having a higher percentage of clients with trauma histories and an increased risk for CF symptoms (Cieslak et al., 2013; Ewer et al., 2015; Furlonger & Taylor,

2013). Alternatively, most research results found that exposure to a higher frequency of a client's trauma history content during sessions does not significantly influence CF symptom risk (Choi, 2011; Cieslak et al., 2013; Furlonger & Taylor, 2013; Kulkarni et al., 2013; Sodeke-Gregson et al., 2013). Other research yielded mixed results regarding whether having a larger number of clients receiving treatment for trauma-focused content does or does not significantly increase CF symptom risk (Cieslak et al., 2013; Craig & Sprang, 2010; Furlonger & Taylor, 2013; Shalvi et al., 2011; Sodeke-Gregson et al., 2013; Tosone et al., 2010). Results from this research project found that nearly all of them did not significantly moderate the relationship between CF and trait mindfulness. As mentioned previously, the exception to this was gender.

Lastly, another key research question (RQ4) asked if trait mindfulness or self-compassion levels had moderator effect impacts on their relationships with CF. Results from this research project found that neither significantly moderated the relationship between CF and the other variable. Meaning that self-compassion did not moderate the relationship between trait mindfulness and CF and trait mindfulness did not moderate the relationship between self-compassion and CF.

Participant Reactions

Overall, results from this research found that participants' perceived benefits from participating generally outweighed the perceived costs (RQ5), which supported the 11th hypothesis (H_{11}) speculating this finding and reinforces the outcomes of prior research with similar findings with other populations (Gagnon et al., 2015; Goossens et al., 2016; Lawyer et al., 2021; Massey & Widom, 2013; Overstreet et al., 2018; Robertson et al., 2021; Scotti et al., 2012; Wager, 2012). Items with the highest scores were comprised of positive perceptions, including procedural items, such as understanding the consent form and trusting that replies

would be kept private, and participation items, such as feeling that they made the choice to participate freely and feeling that they could stop participating at any time. Items with the highest scores exploring negatively perceived costs of participation included finding participation boring, feeling that the surveys took too long, and finding participation inconvenient. The generally reported positive reactions to participation in this research project calls attention to the overall resilience of participants and the identification of potential benefits for participation. However, despite precautions taken for this project some participants still reported experiencing distress, regret, and other negative outcomes after participation. This highlights the need for continued care and efforts to be taken in developing research plans to minimize potential adverse reactions to participation in trauma related research.

Unexpected Findings

Some of the speculated hypothesis did not find support within outcomes of this research. Despite this, it is worth reiterating that due to the low participation rate, some findings identified as nonsignificant may have been significant had there been a larger sample size. Regardless, unsupported hypotheses included the expectation that working more hours per week would correlate with elevated CF (H_1), higher trait mindfulness would correlate with higher compassion satisfaction (H_5), and demographic factors (H_8) or formal mindfulness meditation practices (H_{10}) would moderate the relationship between CF and total self-compassion. Although most of the nonsignificant findings did not have support from prior research, a few did but were not found within the outcomes of this study. One such result involves levels of trait mindfulness correlating with levels of self-compassion, which were anticipated to yield a significant positive correlation (H_4). Prior research by Hollis-Walker and Colosimo (2011) reported finding a strong significant relationship between trait mindfulness and self-compassion. However, results from this research

project did not find support for this outcome or hypothesis among participants. Instead, although not to a significant level, higher levels of trait mindfulness were associated with lower levels of self-compassion.

Another unexpected outcome involves professional experience level partially moderating the relationship between CF and total self-compassion (H_6). Largely, prior research has yielded mixed results (Bloomquist et al., 2015; Carmel & Friedlander, 2009; Cieslak et al., 2013; Furlonger & Taylor, 2013; Kulkarni et al., 2013; Salloum et al., 2019; Shalvi et al., 2011; Sodeke-Gregson et al., 2013). However, research by Rossi et al. (2012) bridged these perspectives by finding that participants who had worked as a mental health professional for less than 1-year or more than 6-years were significantly more likely to experience elevated CF levels. However, results from this research project did not find statistical support for this hypothesis among participants. Level of professional experience was not a statically significant moderator of the relationship between CF and total self-compassion.

A final unexpected outcome involves participants who received professional support for a personal history of trauma who did not have higher CF levels (H_9). Prior research by Bober and Regehr (2006) found a significant correlation among mental health professionals between seeking treatment for personal trauma histories and elevated CF symptoms. However, results from this research project did not find support for this hypothesis among participants. Receiving professional support for a personal trauma history was not a statistically significant predictor for CF.

Limitations

Because the constructs of this project were obtained at a single point in time, the cross-sectional and correlational methodological orientation of this project prevents causality and

the direction of effect in relationships between variables to be identified. Because of the snowball sampling method employed, it is also impossible to determine the response rate. This combined with self-selection also precludes efforts to ascertain whether participants differ from those who chose not to participate. The collection of some of the participants' demographic characteristics potentially protected external validity. However, despite the nonrandom data sample, because the purpose of this project is to explore the potential relationships between the variables and was not focused on reporting prevalence rates within this population, it is "good enough for our purpose" (Kruskal & Mosteller, 1979, p. 259).

Because the number of participants was 43, the maximum power level for this project was low, at approximately 19%. To reach the ideal minimum level of 80%, the minimum number of participants needed to reach statistical significance would have been 139. Therefore, in addition to recruitment limitations negatively impacting the low sample size, this has contributed to the lack in confidence in the external validity and ability of these results to represent trends in the general population and the findings and hypothesis cannot be confirmed other than to note the trends found among this group of participants.

The data analysis plan also originally incorporated the utilization of instrumental variable regression (IVR) to correct for potential unmeasured confounding bias. However, upon further research, IVR can only account for the effects of variables already included within the data, rather than correct for unaccounted confounding variables (Mertler & Vannatta, 2016). Therefore, it is possible that potential unaccounted for confounding factors cannot be ruled out, which may also have impacted the relationship between variables. Despite these shortcomings, all parametric assumptions were met, and hierarchical linear regression attempts to control for confounding factors by exploring the amount of variance in CF that is explained by various

independent variables throughout the stepwise process, within which remaining variance is attributed to confounding factors (Hair et al., 2019). Additionally, the small sample size and resulting low power effect likely had the largest impact on the statistical significance of results, more so than potential additional confounding factors. Therefore, the choice was made to not include IVR or other strategies to remediate for unaccounted confounding factors.

The surveys used for this research were self-report, which is reliant upon the honesty and self-awareness of the individuals taking them, which presents a potential threat to internal validity. Additionally, because the targeted participants were mental health professionals, they were likely aware of the themes being explored within this project and may have experienced social desirability bias by providing answers that supported an idealized self-concept such as answering survey questions in a way that supports having elevated levels of mindfulness and self-compassion or lower levels of burnout and CF. However, both the SCS and ProQOL-5 contain reverse score items and present both positively and negatively framed items and subscale scores as an effort to present an unbiased and balanced understanding of the variables. Had the instrument authors explored a single side of the continuums, the results would more likely reflect "a response bias producing a response set that artificially inflated or deflated [responses skewed positively or negatively, respectively]" (Stamm, 2002, p. 109).

Implications for Future Research

One overarching issue for this project was participant recruitment. Future projects exploring similar themes could likely benefit from arranging a formal agreement with an organization, possibly such as the National Hospice and Palliative Care Organization, to assist in recruitment efforts. Having a targeted list for participants would improve clarity around prevalence rates, generalizability of findings, and may improve response rate. Increasing

response rate would improve data analysis efforts and efforts to remediate unaccounted confounding factors. Future research could also benefit from providing open-ended space for participants to provide qualitative feedback both for choosing not to complete the surveys and as well as after completing all the surveys. The former could have provided elucidation on the reason why only 43 people fully completed the surveys out of the 92 people who started the surveys and endorsed meeting inclusion criteria, and the latter may have provided clarity around the overwhelming negative feedback provided within the RRPQ-R by one participant.

The incorporation or exploration of the relationship of the themes explored within this research project with work-related burnout, as well as the interplay between compassion satisfaction, work-related burnout, and CF would provide further illumination of additional important factors. Additional potential important factors would be to compare and contrast differences in job roles, organization related factors, and expanding to different types of client trauma-related session content. Another seemingly important factor that warrants further research is when or for whom the mindfulness observe factor is and is not beneficial. Additionally, despite the inability to generalize from the findings of this research project, these results suggest that interventions that assist in increasing levels of trait mindfulness and self-compassion are likely important to integrate into educational programs for mental health professionals as well as to encourage within workplaces for mental health professionals.

Conclusion

This research project sought to explore the relationship between trait mindfulness, self-compassion, and CF levels among mental health professionals working with clients with a terminal illness and to look at participant's reactions to taking part in this research. This research project found significant support for individual relationships between elevated trait mindfulness

levels, self-compassion levels, percentage of session content focused on a client's terminal illness, and FFMQ nonjudge subscale scores with lower CF levels. Outcomes from this study also identified significant support for a relationship between higher FFMQ observe subscale scores with higher CF levels, and a moderating effect from gender, such that among female identifying participants, as trait mindfulness level increased, CF level decreased significantly. Additionally, the exploration into participant's reactions to taking part in this research yielded support for the perceived benefits generally outweighing the perceived costs. However, due to the low number of participants, further research is warranted. Unexpected outcomes that did not support prior research included not finding a significant correlation between elevated trait mindfulness and self-compassion levels or between seeking treatment for personal trauma histories and CF level, and level of professional experience was not a significant moderator of the relationship between self-compassion and CF. This research project provides support for additional research to explore intervention strategies into bolstering trait mindfulness and self-compassion, as well as the impact of mindful observation and the moderating effect of gender on these processes, which could benefit trainees and mental health professionals working with clients with a terminal illness.

References

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

American Psychiatric Association. (1980). *Diagnostic and statistical manual of mental disorders* (3rd ed.). American Psychological Association.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). American Psychological Association.

APA. (2017a). *Clinical practice guidelines for the treatment of PTSD*. American Psychological Association. https://www.apa.org/ptsd-guideline/ptsd.pdf

APA. (2017b). *Ethical principles of psychologists and code of conduct*. American Psychological Association. http://www.apa.org/ethics/code/ethics-code-2017.pdf

APA. (2022). *Browse center for workforce studies publications*. American Psychological Association. https://www.apa.org/workforce/search?CWSPopulation=APA+Members&sort=ContentDateSort+desc

Au, T. M., Sauer-Zavala, S., King, M. W., Petrocchi, N., Barlow, D. H., & Litz, B. T. (2017). Compassion-based therapy for trauma-related shame and posttraumatic stress: Initial evaluation using a multiple baseline design. *Behavior Therapy*, *48*(2), 207–221. https://doi.org/10.1016/j.beth.2016.11.012

Badger, K., Royse, D., & Craig, C. (2008). Hospital social workers and indirect trauma exposure: An exploratory study of contributing factors. *Health and Social Work*, *33*(1), 63–71. https://doi.org/10.1093/hsw/33.1.63

Baer, R. A. (2011). Measuring mindfulness. *Contemporary Buddhism*, *12*(1), 241–261. https://doi.org/10.1080/14639947.2011.564842

Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment*, *13*(1), 27–45. https://doi.org/10.1177/1073191105283504

Barbosa, P., Raymond, G., Zlotnick, C., Wilk, J., Toomey, R., III, & Mitchell, J., III. (2016). Mindfulness-based stress reduction training is associated with greater empathy and reduced anxiety for graduate healthcare students. *Education for Health*, *26*(1), 9–14. https://doi.org/10.4103/1357-6283.112794

Bardeen, J. R., Kumpula, M. J., & Orcutt, H. K. (2013). Emotion regulation difficulties as a prospective predictor of posttraumatic stress symptoms following a mass shooting. *Journal of Anxiety Disorders*, *27*(2), 188–196. https://doi.org/10.1016/j.janxdis.2013.01.003

Barlow, M. R., Turow, R. E. G., & Gerhart, J. (2017). Trauma appraisals, emotion regulation difficulties, and self-compassion predict posttraumatic stress symptoms following childhood abuse. *Child Abuse and Neglect*, *65*, 37–47. https://doi.org/10.1016/J.CHIABU.2017.01.006

Beach, M. C., Roter, D., Korthuis, P. T., Epstein, R. M., Sharp, V., Ratanawongsa, N., Cohn, J., Eggly, S., Sankar, A., Moore, R. D., & Saha, S. (2013). A multicenter study of physician mindfulness and health care quality. *Annals of Family Medicine*, *11*(5), 421–428. https://doi.org/10.1370/afm.1507

Beaumont, E., Durkin, M., Martin, C. J. H., & Carson, J. (2016). Measuring relationships between self-compassion, compassion fatigue, burnout and well-being in student counsellors and student cognitive behavioural psychotherapists: A quantitative survey. *Counselling and Psychotherapy Research*, *16*(1), 15–23. https://doi.org/10.1002/capr.12054

Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., Segal, Z. V., Abbey, S., Speca, M., Velting, D., & Devins, G. (2004). Mindfulness: A proposed operational definition. *Clinical Psychology: Science and Practice*, *11*(3), 230–241. https://doi.org/10.1093/clipsy/bph077

Bloomquist, K. R., Wood, L., Friedmeyer-Trainor, K., & Hea-Won, K. (2015). Self-care and professional quality of life: Predictive factors among MSW practitioners. *Advances in Social Work*, *16*(2), 292–311. https://doi.org/10.18060/18760

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

Boden, M. T., Bernstein, A., Walser, R. D., Bui, L., Alvarez, J., & Bonn-Miller, M. O. (2012). Changes in facets of mindfulness and posttraumatic stress disorder treatment outcome. *Psychiatry Research*, *200*(2–3), 609–613. https://doi.org/10.1016/j.psychres.2012.07.011

Bond, A. R., Mason, H. F., Lemaster, C. M., Shaw, S. E., Mullin, C. S., Holick, E. A., & Saper, R. B. (2013). Embodied health: The effects of a mind-body course for medical students. *Medical Education Online*, *18*(1), 1–8. https://doi.org/10.3402/meo.v18i0.20699

Boscarino, J. A., Figley, C. R., & Adams, R. E. (2004). Compassion fatigue following the September 11 terrorist attacks: A study of secondary trauma among New York City social workers. *International Journal of Emergency Mental Health*, *6*(2), 57–66. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2713725/pdf/nihms116415.pdf

Brady, S., O'Connor, N., Burgermeister, D., & Hanson, P. (2012). The impact of mindfulness meditation in promoting a culture of safety on an acute psychiatric unit. *Perspectives in Psychiatric Care, 48*(3), 129–137. https://doi.org/10.1111/j.1744-6163.2011.00315.x

Bränström, R., Kvillemo, P., Brandberg, Y., & Moskowitz, J. T. (2010). Self-report mindfulness as a mediator of psychological well-being in a stress reduction intervention for cancer patients: A randomized study. *Annals of Behavioral Medicine*, *39*(2), 151–161. https://doi.org/10.1007/S12160-010-9168-6

Breines, J. G., Thoma, M. V., Gianferante, D., Hanlin, L., Chen, X., & Rohleder, N. (2014). Self-compassion as a predictor of interleukin-6 response to acute psychosocial stress. *Brain, Behavior, and Immunity, 37*, 109–114. https://doi.org/10.1016/j.bbi.2013.11.006

Breland, J. Y., Hundt, N. E., Barrera, T. L., Mignogna, J., Petersen, N. J., Stanley, M. A., & Cully, J. A. (2015). Identification of anxiety symptom clusters in patients with COPD: Implications for assessment and treatment. *International Journal of Behavioral Medicine*, *22*(5), 590–596. https://doi.org/10.1007/s12529-014-9450-2

Bride, B. E. (2007). Prevalence of secondary traumatic stress among social workers. *Social Work*, *52*(1), 63–70. https://doi.org/10.1093/sw/52.1.63

Bride, B. E. (2012). Secondary traumatic stress. In C. R. Figley (Ed.), *Encyclopedia of trauma: An interdisciplinary guide* (pp. 600–602). SAGE Publications. https://doi.org/10.4135/9781452218595

Bride, B. E., Jones, J. L., & MacMaster, S. A. (2007). Correlates of secondary traumatic stress in child protective services workers. *Journal of Evidence-Based Social Work, 4*(3–4), 69–80. https://doi.org/10.1300/J394v04n03_05

Bride, B. E., Robinson, M. M., Yegidis, B., & Figley, C. R. (2004). Development and validation of the Secondary Traumatic Stress Scale. *Research on Social Work Practice*, *14*(1), 27–35. https://doi.org/10.1177/1049731503254106

Burns, E. E., Jackson, J. L., & Harding, H. G. (2010). Child maltreatment, emotion regulation, and posttraumatic stress: The impact of emotional abuse. *Journal of Aggression, Maltreatment and Trauma*, *19*(8), 801–819. https://doi.org/10.1080/10926771.2010.522947

Carmel, M. J. S., & Friedlander, M. L. (2009). The relation of secondary traumatization to therapists' perceptions of the working alliance with clients who commit sexual abuse. *Journal of Counseling Psychology*, *56*(3), 461–467. https://doi.org/10.1037/a0015422

Choi, G.-Y. (2011). Organizational impacts on the secondary traumatic stress of social workers assisting family violence or sexual assault survivors. *Administration in Social Work, 35*(3), 225–242. https://doi.org/10.1080/03643107.2011.575333

Chung, L. P., Lake, F., Hyde, E., McCamley, C., Phuangmalai, N., Lim, M., Waterer, G., Summers, Q., & Moodley, Y. (2016). Integrated multidisciplinary community service for chronic obstructive pulmonary disease reduces hospitalisations. *Internal Medicine Journal*, *46*(4), 427–434. https://doi.org/10.1111/IMJ.12984

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

Connally, D. (2012). The relationship between clinician sex, ethnicity, sexual identity and secondary traumatic stress. *Journal of Gay and Lesbian Mental Health*, *16*(4), 306–321. https://doi.org/10.1080/19359705.2012.697002

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

Curran, P. J., West, S. G., & Finch, J. F. (1996). The robustness of test statistics to nonnormality and specification error in confirmatory factor analysis. *Psychological Methods*, *1*(1), 16–29. https://doi.org/10.1037/1082-989X.1.1.16

Dahm, K. A., Meyer, E. C., Neff, K. D., Kimbrel, N. A., Gulliver, S. B., & Morissette, S. B. (2015). Mindfulness, self-compassion, posttraumatic stress disorder symptoms, and functional disability in U.S. Iraq and Afghanistan war veterans. *Journal of Traumatic Stress*, *28*(5), 460–464. https://doi.org/10.1002/jts.22045

Danilewitz, M., Bradwejn, J., & Koszycki, D. (2016). A pilot feasibility study of a peer-led mindfulness program for medical students. *Canadian Medical Education Journal*, *7*(1), e31–e37. https://doi.org/10.36834/cmej.36643

Decker, S. E., Naugle, A. E., Carter-Visscher, R., Bell, K., & Seifert, A. (2011). Ethical issues in research on sensitive topics: Participants' experiences of distress and benefit. *Journal of Empirical Research on Human Research Ethics*, *6*(3), 55–64. https://doi.org/10.1525/jer.2011.6.3.55

Dekel, R., Hantman, S., Ginzburg, K., & Solomon, Z. (2007). The cost of caring? Social workers in hospitals confront ongoing terrorism. *British Journal of Social Work*, *37*(7), 1247–1261. https://doi.org/10.1093/bjsw/bcl081

DeMaris, A. (2014). Combating unmeasured confounding in cross-sectional studies: Evaluating instrumental-variable and Heckman selection models. *Psychological Methods*, *19*(3), 380–397. https://doi.org/10.1037/a0037416

DePrince, A. P., & Chu, A. (2008). Perceived benefits in trauma research: Examining methodological and individual difference factors in response to research participation. *Journal of Empirical Research on Human Research Ethics*, *3*(1), 35–47. https://doi.org/10.1525/JER.2008.3.1.35

de Vibe, M., Solhaug, I., Tyssen, R., Friborg, O., Rosenvinge, J. H., Sørlie, T., & Bjørndal, A. (2013). Mindfulness training for stress management: A randomised controlled study of medical and psychology students. *BMC Medical Education*, *13*(107), 1–11. https://doi.org/10.1186/1472-6920-13-107

Devilly, G. J., Wright, R., & Varker, T. (2009). Vicarious trauma, secondary traumatic stress or simply burnout: Effect of trauma therapy on mental health professionals. *Australia and New Zealand Journal of Psychiatry*, *43*(4), 373–385. https://doi.org/10.1080/00048670902721079

Division 12 of the APA. (2022a). *Present-centered therapy for post-traumatic stress disorder*. https://div12.org/treatment/present-centered-therapy-for-post-traumatic-stress-disorder/

Division 12 of the APA. (2022b). *Treatment target: Posttraumatic stress disorder*. https://div12.org/diagnosis/posttraumatic-stress-disorder/

Dobkin, P. L., & Zhao, Q. (2011). Increased mindfulness: The active component of the mindfulness-based stress reduction program? *Complementary Therapies in Clinical Practice*, *17*(1), 22–27. https://doi.org/10.1016/J.CTCP.2010.03.002

Dominguez-Gomez, E., & Rutledge, D. N. (2009). Prevalence of secondary traumatic stress among emergency nurses. *Journal of Emergency Nursing*, *35*(3), 199–204. https://doi.org/10.1016/j.jen.2008.05.003

Dorociak, K. E., Rupert, P. A., Bryant, F. B., & Zahniser, E. (2017). Development of a self-care assessment for psychologists. *Journal of Counseling Psychology*, *64*(3), 325–334. https://doi.org/10.1037/cou0000206

Dretsch, M. N., Thiel, K. J., Athy, J. R., Born, S., & Prue-Owens, K. (2012). Posttraumatic stress disorder in the U.S. warfighter: Sensitivity to punishment and antidepressant use contribute to decision-making performance. *Traumatology*, *19*(2), 118–125. https://doi.org/10.1177/1534765612455228

Dunn, R., Callahan, J. L., Swift, J. K., & Ivanovic, M. (2013). Effects of pre-session centering for therapists on session presence and effectiveness. *Psychotherapy Research*, *23*(1), 78–85. https://doi.org/10.1080/10503307.2012.731713

Edwards, K. M., Kearns, M. C., Calhoun, K. S., & Gidycz, C. A. (2009). College women's reactions to sexual assault research participation: Is it distressing? *Psychology of Women Quarterly*, *33*(2), 225–234. https://doi.org/10.1002/jts.20428

Ehde, D. M., Alschuler, K. N., Sullivan, M. D., Molton, I. P., Ciol, M. A., Bombardier, C. H., Curran, M. C., Gertz, K. J., Wundes, A., & Fann, J. R. (2018). Improving the quality of depression and pain care in multiple sclerosis using collaborative care: The MS-care trial protocol. *Contemporary Clinical Trials*, *64*, 219–229. https://doi.org/10.1016/j.cct.2017.10.001

Ehring, T., & Quack, D. (2010). Emotion regulation difficulties in trauma survivors: The role of trauma type and PTSD symptom severity. *Behavior Therapy*, *41*(4), 587–598. https://doi.org/10.1016/j.beth.2010.04.004

Elklit, A., Reinholt, N., Nielsen, L. H., Blum, A., & Lasgaard, M. (2010). Posttraumatic stress disorder among bereaved relatives of cancer patients. *Journal of Psychosocial Oncology*, *28*(4), 399–412. https://doi.org/10.1080/07347332.2010.488142

Elwood, L. S., Mott, J., Lohr, J. M., & Galovski, T. E. (2011). Secondary trauma symptoms in clinicians: A critical review of the construct, specificity, and implications for trauma-focused treatment. *Clinical Psychology Review*, *31*(1), 25–36. https://doi.org/10.1016/j.cpr.2010.09.004

Engs, R. C. (1980). The drug-use patterns of helping-profession students in Brisbane, Australia. *Drug and Alcohol Dependence*, *6*(4), 231–246. https://doi.org/10.1016/0376-8716(80)90328-2

Ennis, L., & Home, S. (2003). Predicting psychological distress in sex offender therapists. *Sexual Abuse*, *15*(2), 149–157. https://doi.org/10.1177/107906320301500205

Erford, B. T., Gunther, C., Duncan, K., Bardhoshi, G., Dummett, B., Kraft, J., Deferio, K., Falco, M., & Ross, M. (2015). Meta-analysis of counseling outcomes for the treatment of posttraumatic stress disorder. *Journal of Counseling and Development*, *94*(1), 13–30. https://doi.org/10.1002/jcad.12058

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, *5*(1), 1–4. https://doi.org/10.11648/j.ajtas.20160501.11

Ewer, P. L., Teesson, M., Sannibale, C., Roche, A., & Mills, K. L. (2015). The prevalence and correlates of secondary traumatic stress among alcohol and other drug workers in Australia. *Drug and Alcohol Review*, *34*(3), 252–258. https://doi.org/10.1111/dar.12204

Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, *39*(2), 175–191. https://doi.org/10.3758/BF03193146

Field, A. (2018). *Discovering statistics using IBM SPSS statistics* (5th ed.). SAGE Publications, Inc.

Figley, C. R. (Ed.). (1995a). *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized*. Taylor and Francis.

Figley, C. R. (1995b). Compassion fatigue: Toward a new understanding of the costs of caring. In B. H. Stamm (Ed.), *Secondary traumatic stress: Self-care issues for clinicians, researchers, and educators* (2nd ed., pp. 3–28). The Sidran Press.

Figley, C. R. (Ed.). (2002). *Treating compassion fatigue*. Brunner-Routledge.

Figley Institute. (2012). *Basics of compassion fatigue*. http://www.figleyinstitute.com/documents/Workbook_AMEDD_SanAntonio_2012July20_RevAugust2013.pdf

Finlay-Jones, A., Kane, R., & Rees, C. (2017). Self-compassion online: A pilot study of an internet-based self-compassion cultivation program for psychology trainees. *Journal of Clinical Psychology*, *73*(7), 797–816. https://doi.org/10.1002/jclp.22375

Fogleman, N. D., Naaz, F., Knight, L. K., Stoica, T., Patton, S. C., Olson-Madden, J. H., Barnhart, M. C., Hostetter, T. A., Forster, J., Brenner, L. A., Banich, M. T., & Depue, B. E. (2017). Reduced lateral prefrontal cortical volume is associated with performance on the modified Iowa Gambling Task: A surface based morphometric analysis of previously deployed veterans. *Psychiatry Research: Neuroimaging*, *267*, 1–8. https://doi.org/10.1016/j.pscychresns.2017.06.014

Fong, M., & Loi, N. M. (2016). The mediating role of self-compassion in student psychological health. *Australian Psychologist*, *51*(6), 431–441. https://doi.org/10.1111/ap.12185

Fortney, L., Luchterhand, C., Zakletskaia, L., Zgierska, A., & Rakel, D. (2013). Abbreviated mindfulness intervention for job satisfaction, quality of life, and compassion in primary care clinicians: A pilot study. *Annals of Family Medicine*, *11*(5), 412–420. https://doi.org/10.1370/afm.1511

Frewen, P. A., Dozois, D. J. A., Neufeld, R. W. J., & Lanius, R. A. (2012). Disturbances of emotional awareness and expression in posttraumatic stress disorder: Meta-mood, emotion regulation, mindfulness, and interference of emotional expressiveness. *Psychological Trauma: Theory, Research, Practice, and Policy*, *4*(2), 152–161. https://doi.org/10.1037/a0023114

Furlonger, B., & Taylor, W. (2013). Supervision and the management of vicarious traumatisation among Australian telephone and online counsellors. *Journal of Psychologists and Counsellors in Schools*, *23*(1), 82–94. https://doi.org/10.1017/jgc.2013.3

Gagnon, K. L., DePrince, A. P., Srinivas, T., & Hasche, L. K. (2015). Perceptions of participation in trauma research among older adults. *Traumatology*, *21*(3), 237–243. https://doi.org/10.1037/trm0000032

Galek, K., Flannelly, K. J., Greene, P. B., & Kudler, T. (2011). Burnout, secondary traumatic stress, and social support. *Pastoral Psychology*, *60*(5), 633–649. https://doi.org/10.1007/s11089-011-0346-7

Gallegos, A. M., Crean, H. F., Pigeon, W. R., & Heffner, K. L. (2017). Meditation and yoga for posttraumatic stress disorder: A meta-analytic review of randomized controlled trials. *Clinical Psychology Review*, *58*, 115–124. https://doi.org/10.1016/j.cpr.2017.10.004

Garland, S. N., Tamagawa, R., Todd, S. C., Speca, M., & Carlson, L. E. (2013). Increased mindfulness is related to improved stress and mood following participation in a mindfulness-based stress reduction program in individuals with cancer. *Integrative Cancer Therapies*, *12*(1), 31–40. https://doi.org/10.1177/1534735412442370

Gekoski, A., Gray, J. M., & Adler, J. R. (2009). Interviewing women bereaved by homicide: Assessing the impact of trauma-focused research. *Psychology, Crime, and Law*, *18*(2), 177–189. https://doi.org/10.1080/10683161003718692

Geoffrion, S., Lamothe, J., Morizot, J., & Giguère, C. E. (2019). Construct validity of the Professional Quality of Life (ProQoL) scale in a sample of child protection workers. *Journal of Traumatic Stress*, *32*(4), 566–576. https://doi.org/10.1002/JTS.22410

George, D., & Mallery, P. (2016). *IBM SPSS statistics 23 step by step: A simple guide and reference* (14th ed.). Routledge.

Germer, C. K., & Neff, K. D. (2015). Cultivating self-compassion in trauma survivors. In V. M. Follette, J. Briere, D. Rozelle, J. W. Hopper, & D. I. Rome (Eds.), *Mindfulness-oriented interventions for trauma* (pp. 43–58). The Guilford Press.

Germer, C. K., & Neff, K. D. (2019). *Teaching the mindful self-compassion program: A guide for professionals*. The Guilford Press.

Gilbert, P. (2010). An introduction to compassion focused therapy in cognitive behavior therapy. *International Journal of Cognitive Psychotherapy*, *3*(2), 97–112. https://doi.org/10.1521/ijct.2010.3.2.97

Glück, T. M., Tran, U. S., Raninger, S., & Lueger-Schuster, B. (2016). The influence of sense of coherence and mindfulness on PTSD symptoms and posttraumatic cognitions in a sample of elderly Austrian survivors of World War II. *International Psychogeriatrics*, *28*(3), 435–441. https://doi.org/10.1017/S104161021500143X

Goodman, M. J., & Schorling, J. B. (2012). A mindfulness course decreases burnout and improves well-being among healthcare providers. *The International Journal of Psychiatry in Medicine*, *43*(2), 119–128. https://doi.org/10.2190/pm.43.2.b

Goossens, I., Nicholls, T. L., Torchalla, I., Brink, J., & de Ruiter, C. (2016). The perceived impact of trauma-focused research on forensic psychiatric patients with lifetime victimization histories. *Journal of Empirical Research on Human Research Ethics*, *11*(4) 334–345. https://doi.org/10.1177/1556264616670769

Greenberg, D., Rabinowitz, C., Blumen, H., & Ceide, M. (2016). Behavioral health collaborative care: Diagnosis and treatment in geriatric practice an outcome study. *The Gerontologist*, *56*(3), 331–332. https://doi.org/10.1093/geront/gnw162.1352

Grepmair, L., Mitterlehner, F., Loew, T., Bachler, E., Rother, W., & Nickel, M. (2007). Promoting mindfulness in psychotherapists in training influences the treatment results of their patients: A randomized, double-blind, controlled study. *Psychotherapy and Psychosomatics*, *76*(6), 332–338. https://doi.org/10.1159/000107560.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). Multivariate data analysis (8th ed.). Cengage.

Hamrick, L. A., & Owens, G. P. (2019). Exploring the mediating role of self-blame and coping in the relationships between self-compassion and distress in females following the sexual assault. *Journal of Clinical Psychology*, *75*(4), 766–779. https://doi.org/10.1002/JCLP.22730

Hanck, C., Arnold, M., Gerber, A., & Schmelzer, M. (2023). *Introduction to econometrics with R*. University of Duisburg-Essen.

Hartwell, S., Allison, J., Jones, B., Rodrigues, R., Chery, C., Andrews, J., & Fulwiler, C. (2018). Feasibility and acceptability of mindfulness for survivors of homicide and their providers. *Explore*, *14*(1), 66–75. https://doi.org/10.1016/j.explore.2017.04.021

Hassed, C., de Lisle, S., Sullivan, G., & Pier, C. (2009). Enhancing the health of medical students: Outcomes of an integrated mindfulness and lifestyle program. *Advances in Health Sciences Education, 14*(3), 387–398. https://doi.org/10.1007/s10459-008-9125-3

Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (2012). *Acceptance and commitment therapy: The process and practice of mindful change* (2nd ed.). The Guilford Press.

Hensel, J. M., Ruiz, C., Finney, C., & Dewa, C. S. (2015). Meta-analysis of risk factors for secondary traumatic stress in therapeutic work with trauma victims. *Journal of Traumatic Stress*, *28*(2), 83–91. https://doi.org/10.1002/jts.21998

Hicks, L. M., Dayton, C. J., & Victor, B. G. (2018). Depressive and trauma symptoms in expectant, risk-exposed, mothers and fathers: Is mindfulness a buffer? *Journal of Affective Disorders*, *238*, 179–186. https://doi.org/10.1016/J.JAD.2018.05.044

Hiraoka, R., Meyer, E. C., Kimbrel, N. A., DeBeer, B. B., Gulliver, S. B., & Morissette, S. B. (2015). Self-compassion as a prospective predictor of PTSD symptom severity among trauma-exposed U.S. Iraq and Afghanistan war veterans. *Journal of Traumatic Stress*, *28*(2), 127–133. https://doi.org/10.1002/jts.21995

Hoffmann, J. P. (2021). *Linear regression models: Applications in R*. CRC Press.

Hollis-Walker, L., & Colosimo, K. (2011). Mindfulness, self-compassion, and happiness in non-meditators: A theoretical and empirical examination. *Personality and Individual Differences*, *50*(2), 222–227. https://doi.org/10.1016/J.PAID.2010.09.033

Huang, Q., Zhang, Q., An, Y., & Xu, W. (2019). The relationship between dispositional mindfulness and PTSD/PTG among firefighters: The mediating role of emotion regulation. *Personality and Individual Differences*, *151*(1), 109492. https://doi.org/10.1016/j.paid.2019.07.002

Huberty, J., Green, J., Cacciatore, J., Buman, M. P., & Leiferman, J. (2018). Relationship between mindfulness and posttraumatic stress in women who experienced stillbirth. *Journal of Obstetric, Gynecologic and Neonatal Nursing*, *47*(6), 760–770. https://doi.org/10.1016/j.jogn.2018.09.002

Hussain, D., & Bhushan, B. (2011). Posttraumatic stress and growth among Tibetan refugees: The mediating role of cognitive-emotional regulation strategies. *Journal of Clinical Psychology*, *67*(7), 720–735. https://doi.org/10.1002/jclp.20801

Imel, Z. E., Laska, K., Jakupcak, M., & Simpson, T. L. (2013). Meta-analysis of dropout in treatments for posttraumatic stress disorder. *Journal of Consulting and Clinical Psychology*, *81*(3), 394–404. https://doi.org/10.1037/a0031474

ISTSS. (2016a). *Indirect traumatization in professionals working with trauma survivors (for providers)* [Pamphlet]. International Society for Traumatic Stress Studies. https://istss.org/ISTSS_Main/media/Documents/ISTSS_IndirectTrauma_FNL.pdf

ISTSS. (2016b). What is ISTSS? https://istss.org/ISTSS_Main/media/Documents/ISTSS_WhatIsISTSS_FNL.pdf

ISTSS. (2020). *Trauma during adulthood*. https://istss.org/ISTSS_Main/media/Documents/Trauma-During-Adulthood-12-6-20.pdf

ISTSS. (2023). *About ISTSS*. https://istss.org/about-istss

Jain, S., Shapiro, S. L., Swanick, S., Roesch, S. C., Mills, P. J., Bell, I., & Schwartz, G. E. R. (2007). A randomized controlled trial of mindfulness meditation versus relaxation training: Effects on distress, positive states of mind, rumination, and distraction. *Annals of Behavioral Medicine*, *33*(1), 11–21. https://doi.org/10.1207/s15324796abm3301_2

Johnson, L. E., & Benight, C. C. (2003). Effects of trauma-focused research on recent domestic violence survivors. *Journal of Traumatic Stress*, *16*(6), 567–571. https://doi.org/10.1023/B:JOTS.0000004080.50361.f3

Kabat-Zinn, J. (2005). *Coming to our senses: Healing ourselves and the world through mindfulness*. Hyperion.

Kassam-Adams, N., & Newman, E. (2005). Child and parent reactions to participation in clinical research. *General Hospital Psychiatry*, *27*(1), 29–35. https://doi.org/10.1016/j.genhosppsych.2004.08.007

Kearney, D. J., Malte, C. A., McManus, C., Martinez, M. E., Felleman, B., & Simpson, T. L. (2013). Loving-kindness meditation for posttraumatic stress disorder: A pilot study. *Journal of Traumatic Stress*, *26*(4), 426–434. https://doi.org/10.1002/jts.21832

Kilpatrick, D. G., Resnick, H. S., Milanak, M. E., Miller, M. W., Keyes, K. M., & Friedman, M. J. (2013). National estimates of exposure to traumatic events and PTSD prevalence using DSM-IV and DSM-5 criteria. *Journal of Traumatic Stress*, *26*(5), 537–547. https://doi.org/10.1002/jts.21848

Kline, R. B. (2016). *Principles and practice of structural equation modeling* (4th ed.). The Guilford Press.

Krasner, M. S., Epstein, R. M., Beckman, H., Suchman, A. L., Chapman, B., Mooney, C. J., & Quill, T. E. (2009). Association of an educational program in mindful communication with burnout, empathy, and attitudes among primary care physicians. *JAMA*, *302*(12), 1284–1293. https://doi.org/10.1001/jama.2009.1384

Kruskal, W., & Mosteller, F. (1979). Representative sampling III: The current statistical literature. *International Statistical Review*, *47*(3), 245–265. https://doi.org/10.2307/1402647

Kulkarni, S., Bell, H., Hartman, J. L., & Herman-Smith, R. L. (2013). Exploring individual and organizational factors contributing to compassion satisfaction, secondary traumatic stress, and burnout in domestic violence service providers. *Journal of the Society for Social Work and Research*, *4*(2), 114–130. https://doi.org/10.5243/jsswr.2013.8

Labelle, L. E., Campbell, T. S., Faris, P., & Carlson, L. E. (2015). Mediators of mindfulness-based stress reduction (MBSR): Assessing the timing and sequence of change in cancer patients. *Journal of Clinical Psychology*, *71*(1), 21–40. https://doi.org/10.1002/jclp.22117

Labott, S. M., Johnson, T. P., Fendrich, M., & Feeny, N. C. (2013). Emotional risks to respondents in survey research: Some empirical evidence. *Journal of Empirical Research on Human Research Ethics*, *8*(4), 53–66. https://doi.org/10.1525/JER.2013.8.4.53

Lang, A. J., Malaktaris, A. L., Casmar, P., Baca, S. A., Golshan, S., Harrison, T., & Negi, L. (2019). Compassion meditation for posttraumatic stress disorder in veterans: A randomized proof of concept study. *Journal of Traumatic Stress*, *32*(2), 299–309. https://doi.org/10.1002/JTS.22397

Lau, M. A., Bishop, S. R., Segal, Z. V., Buis, T., Anderson, N. D., Carlson, L., Shapiro, S., Carmody, J., Abbey, S., & Devins, G. (2006). The Toronto Mindfulness Scale: Development and validation. *Journal of Clinical Psychology*, *62*(12), 1445–1467. https://doi.org/10.1002/jclp.20326

Lawyer, S. R., Holcomb, B. M., & Příhodová, K. (2021). Immediate and delayed reactions to trauma-related laboratory research among rape survivors and controls. *Journal of Empirical Research on Human Research Ethics, 16*(3), 312–324. https://doi.org/10.1177/1556264621996102

Lighthall, N. R., Mather, M., & Gorlick, M. A. (2009). Acute stress increases sex differences in risk seeking in the balloon analogue risk task. *PLoS ONE*, *4*(7), 1–6. https://doi.org/10.1371/journal.pone.0006002

Lockard, A. J., Hayes, J. A., Neff, K. D., & Locke, B. D. (2014). Self-compassion among college counseling center clients: An examination of clinical norms and group differences. *Journal of College Counseling*, *17*(3), 249–259. https://doi.org/10.1002/j.2161-1882.2014.00061.x

Long, P., & Neff, K. D. (2018). Self-compassion is associated with reduced self-presentation concerns and increased student communication behavior. *Learning and Individual Differences, 67*, 223–231. https://doi.org/10.1016/j.lindif.2018.09.003

MacBeth, A., & Gumley, A. (2012). Exploring compassion: A meta-analysis of the association between self-compassion and psychopathology. *Clinical Psychology Review*, *32*(6), 545–552. https://doi.org/10.1016/j.cpr.2012.06.003

Maheux, A., & Price, M. (2015). Investigation of the relation between PTSD symptoms and self-compassion: Comparison across DSM IV and DSM 5 PTSD symptom clusters. *Self and Identity, 14*(6), 627–637. https://doi.org/10.1080/15298868.2015.1037791

Markman, E. S., Moore, D. A., & McMahon, C. E. (2018). Integrated behavioral medicine in cancer care: Utilizing a training program model to provide psychological services in an urban cancer center. *Current Oncology Reports*, *20*(4), 31–35. https://doi.org/10.1007/s11912-018-0677-y

Martín-Asuero, A. S., & García-Banda, G. (2010). The mindfulness-based stress reduction program (MBSR) reduces stress-related psychological distress in healthcare professionals. *The Spanish Journal of Psychology*, *13*(2), 897–905. https://doi.org/10.1017/S1138741600002547

Martin-Cuellar, A., Atencio, D. J., Kelly, R. J., & Lardier, D. T., Jr. (2018). Mindfulness as a moderator of clinician history of trauma on compassion satisfaction. *The Family Journal*, *26*(3), 358–368. https://doi.org/10.1177/1066480718795123

Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Occupational Behaviour*, *2*(2), 99–113. https://doi.org/10.1002/job.4030020205

Massey, C., & Widom, C. S. (2013). Reactions to research participation in victims of childhood sexual abuse: A comparison of court-substantiated and retrospectively self-reported cases. *Journal of Empirical Research on Human Research Ethics*, *8*(4). https://doi.org/10.1525/JER.2013.8.4.77

McAleese, A., Diamond, A., & Curran, D. (2016). An assessment of psychological need in emergency medical staff in the northern health and social care trust area. *The Ulster Medical Journal*, *85*(2), 92–98. https://www.ums.ac.uk/umj085/085(2)092.pdf

McDermott, M. J., Tull, M. T., Gratz, K. L., Daughters, S. B., & Lejuez, C. W. (2009). The role of anxiety sensitivity and difficulties in emotion regulation in posttraumatic stress disorder among crack/cocaine dependent patients in residential substance abuse treatment. *Journal of Anxiety Disorders*, *23*(5), 591–599. https://doi.org/10.1016/j.janxdis.2009.01.006

McHugh, P. R., & Treisman, G. (2007). PTSD: A problematic diagnostic category. *Journal of Anxiety Disorders*, *21*(2), 211–222. https://doi.org/10.1016/j.janxdis.2006.09.003

Mechanic, D. (2012). Seizing opportunities under the Affordable Care Act for transforming the mental and behavioral health system. *Health Affairs*, *31*(2), 376–382. https://doi.org/10.1377/hlthaff.2011.0623

Mertler, C. A. & Vannatta, R. A. (2016). *Advanced and multivariate statistical methods: Practical application and interpretation* (6th ed.). Routledge. https://doi.org/10.4324/9781315266978

Meyer, E. C., Frankfurt, S. B., Kimbrel, N. A., DeBeer, B. B., Gulliver, S. B., & Morrisette, S. B. (2018). The influence of mindfulness, self-compassion, psychological flexibility, and posttraumatic stress disorder on disability and quality of life over time in war veterans. *Journal of Clinical Psychology*, *74*(7), 1272–1280. https://doi.org/10.1002/jclp.22596

Miller, J. J., Lee, J., Niu, C., Grise-Owens, E., & Bode, M. (2019). Self-compassion as a predictor of self-care: A study of social work clinicians. *Clinical Social Work Journal*, *47*(4), 321–331. https://doi.org/10.1007/S10615-019-00710-6

Morrison, L. E., & Joy, J. P. (2016). Secondary traumatic stress in the emergency department. *Journal of Advanced Nursing*, *72*(11), 2894–2906. https://doi.org/10.1111/jan.13030

Murphy, M. J., Edwards, K. M., Merrill, J. C., & Gidycz, C. A. (2011). Undergraduate women's reactions to body image and eating disorder research. *Accountability in Research*, *18*(1), 55–69. https://doi.org/10.1080/08989621.2011.542686

Neff, K. D. (2003a). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity*, *2*(2), 85–101. https://doi.org/10.1080/15298860309032

Neff, K. D. (2003b). The development and validation of a scale to measure self-compassion. *Self and Identity*, *2*(3), 223–250. https://doi.org/10.1080/15298860309027

Neff, K. D. (2003c). *To whom it may concern*. https://self-compassion.org/wp-content/uploads/2015/06/Self_Compassion_Scale_for_researchers.pdf

Neff, K. D., & Germer, C. K. (2013). A pilot study and randomized controlled trial of the mindful self-compassion program. *Journal of Clinical Psychology*, *69*(1), 28–44. https://doi.org/10.1002/jclp.21923

Neff, K. D., Hsieh, Y.-P., & Dejitterat, K. (2005). Self-compassion, achievement goals, and coping with academic failure. *Self and Identity*, *4*(3), 263–287. https://doi.org/10.1080/13576500444000317

Neff, K. D., Kirkpatrick, K. L., & Rude, S. S. (2007). Self-compassion and adaptive psychological functioning. *Journal of Research in Personality*, *41*(1), 139–154. https://doi.org/10.1016/j.jrp.2006.03.004

Neff, K. D., Rude, S. S., & Kirkpatrick, K. L. (2007). An examination of self-compassion in relation to positive psychological functioning and personality traits. *Journal of Research in Personality*, *41*(4), 908–916. https://doi.org/10.1016/j.jrp.2006.08.002

Nelson, J. R., Hall, B. S., Anderson, J. L., Birtles, C., & Hemming, L. (2017). Self-compassion as self-care: A simple and effective tool for counselor educators and counseling students. *Journal of Creativity in Mental Health*, *13*(1), 121–133. https://doi.org/10.1080/15401383.2017.1328292

Nelson-Gardell, D., & Harris, D. (2003). Childhood abuse history, secondary traumatic stress, and child welfare workers. *Child Welfare*, *82*(1), 5–26.

Newman, E., & Kaloupek, D. (2009). Overview of research addressing ethical dimensions of participation in traumatic stress studies: Autonomy and beneficence. *Journal of Traumatic Stress*, *22*(6), 595–602. https://doi.org/10.1002/jts.20465

Newman, E., Risch, E., & Kassam-Adams, N. (2006). Ethical issues in trauma-related research: A review. *Journal of Empirical Research on Human Research Ethics*, *1*(3), 29–46. https://doi.org/10.1525/jer.2006.1.3.29

Newman, E., Willard, T., Sinclair, R., & Kaloupek, D. (2001). Empirically supported ethical research practice: The costs and benefits of research from the participants' view. *Accountability in Research*, *8*(4), 309–329. https://doi.org/10.1080/08989620108573983

Nitzan-Assayag, Y., Aderka, I. M., & Bernstein, A. (2015). Dispositional mindfulness in trauma recovery: Prospective relations and mediating mechanisms. *Journal of Anxiety Disorders*, *36*, 25–32. https://doi.org/10.1016/j.janxdis.2015.07.008

Nitzan-Assayag, Y., Yuval, K., Tanay, G., Aderka, I. M., Vujanovic, A. A., Litz, B., & Bernstein, A. (2017). Reduced reactivity to and suppression of thoughts mediate the effects of mindfulness training on recovery outcomes following exposure to potentially traumatic stress. *Mindfulness*, *8*(4), 920–932. https://doi.org/10.1007/S12671-016-0666-X

Olivares, R. B., Messerer, G. M., Ureta, K. R., & Vio, C. G. (2007). La frecuencia de emisión de conductas de autocuidado y su relación con los niveles de estrés traumático secundario y de depresión en psicólogos clínicos. *Pensamiento Psicológico, 3*(9), 9–19. https://doi.org/10.11144/58

Oman, D., Shapiro, S. L., Thoresen, C. E., Plante, T. G., & Flinders, T. (2008). Meditation lowers stress and supports forgiveness among college students: A randomized controlled trial. *Journal of American College Health*, *56*(5), 569–578. https://doi.org/10.3200/JACH.56.5.569-578

Omid, A., Mohammadi, A. S., Jalaeikhoo, H., & Taghva, A. (2017). Dispositional mindfulness, psychological distress, and posttraumatic growth in cancer patients. *Journal of Loss and Trauma*, *22*(8), 681–688. https://doi.org/10.1080/15325024.2017.1384783

Overstreet, N. M., Okuyan, M., & Fisher, C. B. (2018). Perceived risks and benefits in IPV and HIV research: Listening to the voices of HIV-positive African American women. *Journal of Empirical Research on Human Research Ethics*, *13*(5), 511–524. https://doi.org/10.1177/1556264618797557

Petrocchi, N., & Ottaviani, C. (2016). Mindfulness facets distinctively predict depressive symptoms after two years: The mediating role of rumination. *Personality and Individual Differences*, *93*, 92–96. https://doi.org/10.1016/j.paid.2015.08.017

Phang, C. K., Mukhtar, F., Ibrahim, N., Keng, S.-L., & Sidik, S. M. (2015). Effects of a brief mindfulness-based intervention program for stress management among medical students: The mindful-gym randomized controlled study. *Advances in Health Sciences Education, Theory, and Practice*, *20*(5), 1115–1134. https://doi.org/10.1007/s10459-015-9591-3

Polusny, M. A., Erbes, C. R., Thuras, P., Moran, A., Lamberty, G. J., Collins, R. C., Rodman, J. L., & Lim, K. O. (2015). Mindfulness-based stress reduction for posttraumatic stress disorder among veterans: A randomized clinical trial. *JAMA*, *314*(5), 456–465. https://doi.org/10.1001/jama.2015.8361

Porcelli, A. J., & Delgado, M. R. (2009). Acute stress modulates risk taking in financial decision making. *Psychological Science*, *20*(3), 278–283. https://doi.org/10.1111/j.1467-9280.2009.02288.x

Pow, A. M., & Cashwell, C. S. (2017). Posttraumatic stress disorder and emotion-focused coping among disaster mental health counselors. *Journal of Counseling and Development*, *95*(3), 322–331. https://doi.org/10.1002/jcad.12146

Preston, S. D., Buchanan, T. W., Stansfield, R. B., & Bechara, A. (2007). Effects of anticipatory stress on decision making in a gambling task. *Behavioral Neuroscience*, *121*(2), 257–263. https://doi.org/10.1037/0735-7044.121.2.257

Raab, K. (2014). Mindfulness, self-compassion, and empathy among health care professionals: A review of the literature. *Journal of Health Care Chaplaincy*, *20*(3), 95–108. https://doi.org/10.1080/08854726.2014.913876

Rabon, J. K., Hirsch, J. K., Kaniuka, A. R., Sirois, F. M., Brooks, B. D., & Neff, K. D. (2019). Self-compassion and suicide risk in veterans: When the going gets tough, do the tough benefit more from self-compassion? *Mindfulness, 10*(12), 2544–2554. https://doi.org/10.1007/s12671-019-01221-8

Reffi, A. N., Pinciotti, C. M., Darnell, B. C., & Orcutt, H. K. (2019). Trait mindfulness and PTSD symptom clusters: Considering the influence of emotion dysregulation. *Personality and Individual Differences, 137*, 62–70. https://doi.org/10.1016/j.paid.2018.08.010

Robertson, R. A., Nester, M. S., & Dardis, C. M. (2021). Emotional consequences of participating in research: How does a history of non-suicidal self-injury and trauma exposure affect participants' experiences? *Journal of Empirical Research on Human Research Ethics, 16*(1–2), 105–116. https://doi.org/10.1177/1556264620979618

Rockcliff, H., Gilbert, P., McEwan, K., Lightman, S., & Glover, D. (2008). A pilot exploration of heart rate variability and salivary cortisol responses to compassion-focused imagery. *Clinical Neuropsychiatry, 5*(3), 132–139.

Roden-Foreman, J. W., Bennett, M. M., Rainey, E. E., Garrett, J. S., Powers, M. B., & Warren, A. M. (2017). Secondary traumatic stress in emergency medicine clinicians. *Cognitive Behaviour Therapy, 46*(6), 522–532. https://doi.org/10.1080/16506073.2017.1315612

Rosenzweig, S., Reibel, D. K., Greeson, J. M., Brainard, G. C., & Hojat, M. (2003). Mindfulness-based stress reduction lowers psychological distress in medical students. *Teaching and Learning in Medicine, 15*(2), 88–92. https://doi.org/10.1207/S15328015TLM1502_03

Rossi, A., Cetrano, G., Pertile, R., Rabbi, L., Donisi, V., Grigoletti, L., Curtolo, C., Tansella, M., Thornicroft, G., & Amaddeo, F. (2012). Burnout, compassion fatigue, and compassion satisfaction among staff in community-based mental health services. *Psychiatry Research, 200*(2–3), 933–938. https://doi.org/10.1016/j.psychres.2012.07.029

Salloum, A., Choi, M. J., & Stover, C. S. (2019). Exploratory study on the role of trauma-informed self-care on child welfare workers' mental health. *Children and Youth Services Review, 101*, 299–306. https://doi.org/10.1016/j.childyouth.2019.04.013

Salvagioni, D. A. J., Melanda, F. N., Mesas, A. E., González, A. D., Gabani, F. L., & de Andrade, S. M. (2017). Physical, psychological, and occupational consequences of job burnout: A systematic review of prospective studies. *PLoS ONE, 12*(10), e0185781. https://doi.org/10.1371/journal.pone.0185781

Scarlet, J., Altmeyer, N., Knier, S., & Harpin, R. E. (2017). The effects of compassion cultivation training (CCT) on health-care workers. *Clinical Psychologist, 21*(2), 116–124. https://doi.org/10.1111/cp.12130

Scoglio, A. A. J., Rudat, D. A., Garvert, D., Jarmolowski, M., Jackson, C., & Herman, J. L. (2018). Self-compassion and responses to trauma: The role of emotion regulation. *Journal of Interpersonal Violence*, *33*(13), 2016–2036. https://doi.org/10.1177/0886260515622296

Scotti, J. R., Stevens, S. B., Jacoby, V. M., Bracken, M. R., Freed, R., & Schmidt, E. (2012). Trauma in people with intellectual and developmental disabilities: Reactions of parents and caregivers to research participation. *Intellectual and Developmental Disabilities*, *50*(30), 199–206. https://doi.org/10.1352/1934-9556-50.3.199

Serrano, N., & Monden, K. (2011). The effect of behavioral health consultation on the care of depression by primary care clinicians. *WMJ: Official publication of the State Medical Society of Wisconsin*, *110*(3), 113–118. https://wmjonline.org/wp-content/uploads/2011/110/3/113.pdf

Shalvi, S., Shenkman, G., Handgraaf, M. J. J., & De Dreu, C. K. W. (2011). The danger of unrealistic optimism: Linking caregivers' perceived ability to help victims of terror with their own secondary traumatic stress. *Journal of Applied Social Psychology*, *41*(11), 2656–2672. https://doi.org/10.1111/j.1559-1816.2011.00844.x

Shapiro, S. L., Astin, J. A., Bishop, S. R., & Cordova, M. (2005). Mindfulness-based stress reduction for health care professionals: Results from a randomized trial. *International Journal of Stress Management*, *12*(2), 164–176. https://doi.org/10.1037/1072-5245.12.2.164

Shapiro, S. L., Brown, K. W., & Biegel, G. (2007). Teaching self-care to caregivers: Effects of mindfulness-based stress reduction on the mental health of therapists in training. *Training and Education in Professional Psychology*, *1*(2), 105–115. https://doi.org/10.1037/1931-3918.1.2.105

Shapiro, S. L., Brown, K. W., Thoresen, C., & Plante, T. G. (2011). The moderation of mindfulness-based stress reduction effects by trait mindfulness: Results from a randomized controlled trial. *Journal of Clinical Psychology*, *67*(3), 267–277. https://doi.org/10.1002/jclp.20761

Shapiro, S. L., Schwartz, G. E., & Bonner, G. (1998). Effects of mindfulness-based stress reduction on medical and premedical students. *Journal of Behavioral Medicine*, *21*(6), 581–599. https://doi.org/10.1023/A:1018700829825

Shapiro, S. L., Siegel, R., & Neff, K. D. (2018). Paradoxes of mindfulness. *Mindfulness*, *9*(1), 1693–1701. https://doi.org/10.1007/s12671-018-0957-5

Shoji, K., Lesnierowska, M., Smoktunowicz, E., Bock, J., Luszczynska, A., Benight, C. C., & Cieslak, R. (2015). What comes first, job burnout or secondary traumatic stress? Findings from two longitudinal studies from the U.S. and Poland. *PLoS ONE*, *10*(8), e0136730. https://doi.org/10.1371/journal.pone.0136730

Simmons, C. A. (2013). Acceptance, mindfulness, and situational affect. In C. A. Simmons & P. Lehmann, *Tools for strengths-based assessment and evaluation* (pp. 149–153). Springer Publishing Company, LLC.

Smeets, E., Neff, K. D., Alberts, H., & Peters, M. (2014). Meeting suffering with kindness: Effects of a brief self-compassion intervention for female college students. *Journal of Clinical Psychology*, *70*(9), 794–807. https://doi.org/10.1002/jclp.22076

Sodeke-Gregson, E. A., Holttum, S., & Billings, J. (2013). Compassion satisfaction, burnout, and secondary traumatic stress in UK therapists who work with adult trauma clients. *European Journal of Psychotraumatology*, *4*(1). https://doi.org/10.3402/ejpt.v4i0.21869

Sprang, G., Clark, J. J., & Whitt-Woosley, A. (2007). Compassion fatigue, compassion satisfaction, and burnout: Factors impacting a professional's quality of life. *Journal of Loss and Trauma*, *12*(3), 259–280. https://doi.org/10.1080/15325020701238093

Sprang, G., Craig, C., & Clark, J. J. (2011). Secondary traumatic stress and burnout in child welfare workers: A comparative analysis of occupational distress across professional groups. *Child Welfare*, *90*(6), 149–168.

Stamm, B. H. (2002). Measuring compassion satisfaction as well as fatigue: Developmental history of the Compassion Satisfaction and Fatigue Test. In C. R. Figley (Ed.), *Treating compassion fatigue* (pp. 107–119). Brunner-Routledge.

Stamm, B. H. (2009). *Professional quality of life scale (PROQOL): Compassion satisfaction and compassion fatigue (PROQOL) version 5*. https://img1.wsimg.com/blobby/go/dfc1e1a0-a1db-4456-9391-18746725179b/downloads/ProQOL_5_English.pdf?ver=1682438385713

Stamm, B. H. (2010). *2010: The concise ProQOL manual* (2nd ed.). https://img1.wsimg.com/blobby/go/dfc1e1a0-a1db-4456-9391-18746725179b/downloads/ProQOL%20Manual.pdf?ver=1622839353725

Stamm, B. H., Varra, E. M., Pearlman, L. A., & Giller, E. (2002). The helper's power to heal and to be hurt, or helped, by trying. *Register Report: A Publication of the National Register of Health Service Providers in Psychology*.

Stephenson, K. R., Simpson, T. L., Martinez, M. E., & Kearney, D. J. (2017). Changes in mindfulness and posttraumatic stress disorder symptoms among veterans enrolled in mindfulness-based stress reduction. *Journal of Clinical Psychology*, *73*(3), 201–217. https://doi.org/10.1002/jclp.22323

Stevenson, J. C., Emerson, L.-M., & Millings, A. (2017). The relationship between adult attachment orientation and mindfulness: A systematic review and meta-analysis. *Mindfulness*, *8*(6), 1438–1455. https://doi.org/10.1007/s12671-017-0733-y

Swartzman, S., Booth, J. N., Munro, A., & Sani, F. (2017). Posttraumatic stress disorder after cancer diagnosis in adults: A meta-analysis. *Depression and Anxiety*, *34*(4), 327–339. https://doi.org/10.1002/da.22542

Tabachnick, B. G., & Fidell, L. S. (2019). *Using multivariate statistics* (7th ed.). Pearson.

Tamagawa, R., Giese-Davis, J., Speca, M., Doll, R., Stephen, J., & Carlson, L. E. (2013). Trait mindfulness, repression, suppression, and self-reported mood and stress symptoms among women with breast cancer. *Journal of Clinical Psychology*, *69*(3), 264–277. https://doi.org/10.1002/jclp.21939

Teixeira, R. J., & Pereira, M. G. (2014). Psychological morbidity and autonomic reactivity to emotional stimulus in parental cancer: A study with adult children caregivers. *European Journal of Cancer Care*, *23*(1), 129–139. https://doi.org/10.1111/ECC.12102

The Management of Posttraumatic Stress Disorder Work Group. (2017). *VA/DoD clinical practice guideline for the management of posttraumatic stress disorder and acute stress disorder*. The United States Departments of Veterans Affairs and Defense. https://www.healthquality.va.gov/guidelines/MH/ptsd/VADoDPTSDCPGFinal.pdf

The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. (1979). *The Belmont Report: Ethical principles and guidelines for the protection of human subjects of research* (No. 78-0014). The United States Department of Health, Education, and Welfare. https://www.hhs.gov/ohrp/sites/default/files/the-belmont-report-508c_FINAL.pdf

Thieleman, K., & Cacciatore, J. (2014). Witness to suffering: Mindfulness and compassion fatigue among traumatic bereavement volunteers and professionals. *Social Work*, *59*(1), 34–41. https://doi.org/10.1093/sw/swt044

Thomas, J. T., & Otis, M. D. (2010). Intrapsychic correlates of professional quality of life: Mindfulness, empathy, and emotional separation. *Journal of the Society for Social Work and Research*, *1*(2), 83–98. https://doi.org/10.5243/jsswr.2010.7

Thompson, I., Amatea, E., & Thompson, E. (2014). Personal and contextual predictors of mental health counselors' compassion fatigue and burnout. *Journal of Mental Health Counseling*, *36*(1), 58–77. https://doi.org/10.17744/mehc.36.1.p61m73373m4617r3

Tosone, C., Bettmann, J. E., Minami, T., & Jasperson, R. A. (2010). New York City social workers after 9/11: Their attachment, resiliency, and compassion fatigue. *International Journal of Emergency Mental Health*, *12*(2), 103–116.

Trompetter, H. R., de Kleine, E., & Bohlmeijer, E. T. (2017). Why does positive mental health buffer against psychopathology: An exploratory study on self-compassion as a resilience mechanism and adaptive emotion regulation strategy. *Cognitive Therapy and Research*, *41*(3), 459–468. https://doi.org/10.1007/s10608-016-9774-0

U.S. Bureau of Labor Statistics. (n.d.). *Employment projections: National employment matrix: 19-3033 Clinical and counseling psychologists*. Retrieved data from https://data.bls.gov/projections/nationalMatrix?queryParams=19-3033&ioType=o

Vago, D. R., & Silbersweig, D. A. (2012). Self-awareness, self-regulation, and self-transcendence (S-ART): A framework for understanding the neurobiological mechanisms of mindfulness. *Frontiers in Human Neuroscience, 6*(296), 1–30. https://doi.org/10.3389/fnhum.2012.00296

Van Dam, N. T., Sheppard, S. C., Forsyth, J. P., & Earleywine, M. (2011). Self-compassion is a better predictor than mindfulness of symptom severity and quality of life in mixed anxiety and depression. *Journal of Anxiety Disorders, 25*(1), 123–130. https://doi.org/10.1016/j.janxdis.2010.08.011

van den Bos, R., Harteveld, M., & Stoop, H. (2009). Stress and decision-making in humans: Performance is related to cortisol reactivity, albeit differently in men and women. *Psychoneuroendocrinology, 34*(10), 1449–1458. https://doi.org/10.1016/j.psyneuen.2009.04.016

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

Vogel, M. E., Kanzler, K. E., Aikens, J. E., & Goodie, J. L. (2017). Integration of behavioral health and primary care: Current knowledge and future directions. *Journal of Behavioral Medicine, 40*(1), 69–84. https://doi.org/10.1007/s10865-016-9798-7

Wager, N. M. (2012). Respondents' experiences of completing a retrospective web-based, sexual trauma survey: Does a history of sexual victimization equate with risk for harm? *Violence and Victims, 27*(6), 991–1004. https://doi.org/10.1891/0886-6708.27.6.991

Warnecke, E., Quinn, S., Ogden, K., Towle, N., & Nelson, M. R. (2011). A randomised controlled trial of the effects of mindfulness practice on medical student stress levels. *Medical Education, 45*(4), 381–388. https://doi.org/10.1111/j.1365-2923.2010.03877.x

Washington State Health Care Authority. (2016). *Report to the legislature: State health care innovation plan annual status report*. https://app.leg.wa.gov/ReportsToTheLegislature/Home/GetPDF?fileName=SHCIPAnnualStatusReport_1%2019%2016_Final_to%20Leg_Compiled_b0c4152f-0580-422b-8b85-7ed6495a72f5.pdf

Weir, K. (2017). Assisted dying: The motivations, benefits and pitfalls of hastening death. *Monitor on Psychology, 48*(11), 26–30. https://www.apa.org/monitor/2017/12/ce-corner

Weiss, N. H., Tull, M. T., Davis, L. T., Dehon, E. E., Fulton, J. J., & Gratz, K. L. (2012). Examining the association between emotion regulation difficulties and probable posttraumatic stress disorder within a sample of African Americans. *Cognitive Behaviour Therapy, 41*(1), 5–14. https://doi.org/10.1080/16506073.2011.621970

Williams, J. M. G., & Kabat-Zinn, J. (2011). Mindfulness: Diverse perspectives on its meaning, origins, and multiple applications at the intersection of science and dharma. *Contemporary Buddhism: An Interdisciplinary Journal*, *12*(1), 1–18. https://doi.org/10.1080/14639947.2011.564811

Yarnell, L. M., Neff, K. D., Davidson, O. A., & Mullarkey, M. (2018). Gender differences in self-compassion: Examining the role of gender role orientation. *Mindfulness*, *10*(6), 1136–1152. https://doi.org/10.1007/s12671-018-1066-1

Zeidner, M., Hadar, D., Matthews, G., & Roberts, R. D. (2013). Personal factors related to compassion fatigue in health professionals. *Anxiety, Stress and Coping*, *26*(6), 595–609. https://doi.org/10.1080/10615806.2013.777045

APPENDIX A

Figley Institute Copyright Permission

From: Dr. Kathleen Regan Figley
Date: Tue, Jun 23, 2020 at 2:53 PM
Subject: Re: Republication Request
To: Christen Aiguier
Cc: Charles Figley

Both Charles and I are pleased that you find our work useful. Of course you may use the figure. When I discovered Kristen Neff's work on self-compassion, I was hooked. I'm delighted that self-compassion is part of your dissertation focus. I'm interested in your work, and would love to read it when you're done.

Best regards,
Kathy Regan Figley
--
Dr. Kathleen (Kathy) Regan Figley, Master Traumatologist
Adjunct Professor, Tulane University
www:katfigley.com

On Tue, Jun 23, 2020 at 4:19 PM Christen Aiguier wrote:

> Dr. Kathleen Regan Figley,
>
> My name is Christen Aiguier, and I am currently working on my doctoral dissertation for a degree in clinical psychology at the Antioch University of Seattle. The working title is "Relationships Among Trait Mindfulness, Self-Compassion, and Secondary Traumatic Stress in Mental Health Professionals Working with Clients with a Terminal Illness." I anticipate that my dissertation will be completed in 2021.
>
> I would like to request permission to use a figure (Figure 1: Model of Compassion Stress and Fatigue), found on page 44 of a 2012 document found at the following URL of your website: http://www.figleyinstitute.com/documents/Workbook_AMEDD_SanAntonio_2012July20_RevAugust2013.pdf. I would like to use it within the literature review section of my dissertation to discuss the theoretical orientation of Dr. Charles Figley on secondary traumatic stress.
>
> Please contact me if you need further information and thank you for your consideration.
>
> Respectfully,
> Christen Aiguier

APPENDIX B

The ProQOL Office of the Center for Victims of Torture Copyright Permission

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Hello Christen,

Thank you for your request. Yes, you are welcome to use this figure. Best wishes on your dissertation.

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Thank you for your interest in the ProQOL. Your question is listed below, and the ProQOL office will be in touch with you to discuss your situation or question.

Query:
I am currently working on my doctoral dissertation for a degree in clinical psychology at Antioch University of Seattle. The working title is "Relationships Among Trait Mindfulness, Self-Compassion, and Compassion Fatigue in Mental Health Professionals Working with Clients with a Terminal Illness". I anticipate that my dissertation will be completed in 2021.

I would like to request permission to use a figure (Figure 2: Theoretical Path Analysis), found on page 10 of the 2010 document found at the following URL of your website: https://proqol.org/uploads/ProQOLManual.pdf. I would like to use it within the literature review section of my dissertation to discuss the theoretical orientation of Dr. Stamm on compassion fatigue as it relates to professional quality of life.

Please contact me if you need further information and thank you for your consideration.

Respectfully,
Christen Aiguier

Please note our capacity is unfortunately quite limited, as this is a volunteer-run initiative. If you do not hear from us within two weeks, you may contact us at proqol@cvt.org<mailto:proqol@cvt.org?subject=Permission%20to%20Use%20the%20ProQOL>.

Thank you!

The ProQOL Office
at The Center for Victims of Torture

APPENDIX C

The Guilford Press Copyright Permission

From:
Date: Thu, Jul 2, 2020 at 7:35 AM
Subject: RE: Republication Permissions Request
To: Guilford Website User

Thank you for your request.

Permission is hereby granted for the use requested.

Any third party material is expressly excluded from this permission. If any of the material you wish to use appears within our work with credit to another source, authorization from that source must be obtained.

This permission does not include the right for the publisher of the new work to grant others permission to photocopy or otherwise reproduce this material except for versions made by non-profit organizations for use by the blind or handicapped persons.

Credit line must include the following:
Title of the Work, Author(s) and/or Editor(s) Name(s). Copyright year. Copyright Guilford Press. Reprinted with permission of The Guilford Press

Kind regards,

Kathy Kuehl

Guilford Publications, Inc.
370 Seventh Avenue, Suite 1200
New York, NY 10001-1020

-----Original Message-----
From: Guilford Website User
Sent: Tuesday, June 23, 2020 3:47 PM
To:
Subject: Republication Permissions Request

Below is the result of your feedback form. It was submitted by Guilford Website User on Tuesday, June 23, 2020 at 15:47:25
---

rush: no
name: Christen Aiguier
inst: Antioch University of Seattle
city: Edmonds
state: WA
zip: 98026

country: United States
phone:
GP_title: Mindfulness-oriented interventions for trauma: Integrating contemplative practices
isbn: 9781462533848
author: Victoria M. Follette, John Briere, Deborah Rozelle, James W. Hopper, and David I. Rome
author_yesno: no
chapter: Cultivating Self-Compassion in Trauma Survivors
figures: Figure 3.1
pagenum: 46
pubyear: 2017
yourtitle: Relationships among trait mindfulness, self-compassion, and secondary traumatic stress in mental health professionals working with clients with a terminal illness
yourtitle_auth: Christen Aiguier
pubdate: 2021
comments: I would like to request permission to use Figure 3.1 from the above listed book chapter in my doctoral dissertation, anticipated to be completed in 2021. It will be used to within the literature review section to discuss the theoretical orientation by Germer and Neff on self-compassion and its intersection with PTSD.
Please contact me if you need further information.
Thank you for your consideration.

APPENDIX D

Inclusion Criteria Questionnaire

Thank you for your interest in this research project. Your assistance is greatly appreciated, and every response is very important.

This research requires that participants be adults, licensed graduate-level mental health professionals, who are currently working with client(s) with a terminal illness in the United States.

Please note, you will not be able to change your answers to these questions once you click on the survey's Next button on the bottom of each page. Therefore, please do not use your internet browser's Back button, as this will invalidate your survey.

1. What is your age? [Numeric]

    18–24: Inclusion criteria met, progresses to next question (1)

    25–34: Inclusion criteria met, progresses to next question (2)

    35–44: Inclusion criteria met, progresses to next question (3)

    45–54: Inclusion criteria met, progresses to next question (4)

    55–64: Inclusion criteria met, progresses to next question (5)

    65+: Inclusion criteria met, progresses to next question (6)

2. Are you currently working in the United States? [Multiple choice]

    (1) Yes: Inclusion criteria met, progresses to next question (3)

    (0) No: *Inclusion criteria not met, excluded from the survey

3. Are you currently licensed to work as a mental health professional, with a graduate-level degree in a mental health related field, and working as a mental health professional?

(1) Yes: Inclusion criteria met, progresses to next question (4)

(0) No: *Inclusion criteria not met, excluded from the survey

4. During the past 30 days, have you worked with client(s) diagnosed with a terminal illness? [Multiple choice]

(1) Yes: Inclusion criteria met, progresses to the ProQOL-5

(0) No: *Inclusion criteria not met, excluded from the survey

*Response given if inclusion criteria are not met:

Thank you for your time and interest in this research project.

Unfortunately, you do not meet one or more of the requirements to participate in this research project.

APPENDIX E

Demographic and Practice Questionnaire

1. What gender do you identify as?

   (1) Male

   (2) Female

   (3) Other (please specify): _____

   (0) I'd prefer to not say.

2. Please describe your race: _____
3. Approximately how many hours per week do you currently work with all types of clinical clients and their associated paperwork? [Numeral] _____
4. Approximately how many years or partial years of clinical experience do you have working as a mental health professional total, including training years? [Numeral]

   _____

5. Approximately how many years or partial years have you been working with clients with a terminal illness, including training years? [Numeral] _____
6. Approximately to what extent do clients with a terminal illness comprise your current clinical work (percentage)? [Numeral] _____%
7. Approximately to what extent of clients with a terminal illness have a treatment focus on terminal illness related content (percentage)? [Numeral] _____%
8. Approximately to what extent are your sessions with clients with a terminal illness comprised of content related to their terminal illness (percentage)? [Numeral] _____%
9. Do you have a formal mindfulness meditation practice?

   (1) No

   (2) Yes

a) Please identify in years or partial year (e.g., 0.5 for half a year) approximately how long you have maintained a formal mindfulness meditation practice: [Numeral]

_____

WARNING: Despite attempts made to keep the 1 to 4 questions brief, they may still cause discomfort or distress for some people. Because earlier research shows a correlation between personal trauma histories and an increased risk for compassion fatigue in some mental health professionals (Choi, 2011; Cieslak, Anderson, Bock, Moore, Peterson, & Benight, 2013; Ewer, Teesson, Sannibale, Roche, & Mills, 2015; Nelson-Gardell & Harris, 2003; Roden-Foreman, Bennett, Rainey, Garrett, Powers, & Warren, 2017; Sodeke-Gregson, Holttum, & Billings, 2013), it is important to account for this potential confounding factor. Therefore, this researcher is seeking your consent to complete three final questions regarding a potential personal trauma history.

PLEASE NOTE: These questions are not necessary for your survey to be considered complete. If you have reached this point in the survey, your survey counts toward the surveys that are being counted for the donation to the International Society for Traumatic Stress Studies, and you will still be able to enter the drawing for the Amazon.com gift card.

Also please remember, your participation is voluntary, and you may elect to discontinue your participation at any time by closing your internet browser window.

10. Do you give consent to be briefly asked about a potential personal trauma history?

(1) No

(2) Yes

a) Have you ever experienced a personal traumatic event?

(1) I prefer to not disclose this information.

(2) No

(3) Yes

i. Approximately, how long ago, in years and partial years, did your latest personal traumatic event occur? [Numeral]

ii. Have you received professional support (e.g., in therapy/counseling) for a personal traumatic event?

1. I prefer to not disclose this information.
2. No
3. Yes

Please remember, if you found these questions caused discomfort or distress, please consider reading the following information regarding common responses, helpful suggestions in recovering naturally, and options for seeking professional help after experiencing a traumatic event, which can be found by clicking here: Trauma During Adulthood (https://istss.org/ISTSS_Main/media/Documents/Trauma-During-Adulthood-12-6-20.pdf)

[Participants will then be presented with the Reaction to Research Participation Questionnaire–Revised, and then will finish with the following.]

Thank you for your participation!

If you are interested in entering an email address to be entered into a drawing for one of three (3) $100 Amazon.com gift cards or one (1) $200 Amazon.com gift card, please click on the web link found at the bottom of this page.

Please remember, this is an optional drawing. If you choose to participate in this drawing, you will be directed to a second, separate survey where you will be asked to provide the email

address to which the gift card(s) should be sent. Participation in the “Gift Card Drawing” will not be linked to your responses in this survey research in any way. You may opt out from participating in the “Gift Card Drawing” by selecting “Done” at the end of this survey without clicking on the separate survey to enter your email address. If you choose to participate in this drawing, your email address will be stored until the end of the data collection period (anticipated to be 6/30/2022) and will automatically be deleted after the winner has been selected on the following day.

Please click **HERE** < https://www.surveymonkey.com/r/NWZ68M7> to be taken to the separate Amazon gift card drawing survey.

APPENDIX F

Five-Facet Mindfulness Questionnaire

Instructions: Please rate each of the following statements using the scale provided. Select the answer that best describes your own opinion of what is generally true for you.	1 Never or Very Rarely True	2 Rarely True	3 Sometimes True	4 Often True	5 Very Often or Always True
1. When I'm walking, I deliberately notice the sensations of my body moving.					
2. I'm good at finding words to describe my feelings.					
3. I criticize myself for having irrational or inappropriate emotions.					
4. I perceive my feelings and emotions without having to react to them.					
5. When I do things, my mind wanders off and I'm easily distracted.					
6. When I take a shower or bath, I stay alert to the sensations of water on my body.					
7. I can easily put my beliefs, opinions, and expectations into words.					
8. I don't pay attention to what I'm doing because I'm daydreaming, worrying, or otherwise distracted.					
9. I watch my feelings without getting lost in them.					
10. I tell myself I shouldn't be feeling the way I'm feeling.					
11. I notice how foods and drinks affect my thoughts, bodily sensations, and emotions.					

12. It's hard for me to find the words to describe what I'm thinking.					
13. I am easily distracted.					
14. I believe some of my thoughts are abnormal or bad and I shouldn't think that way.					
15. I pay attention to sensations, such as the wind in my hair or sun on my face.					
16. I have trouble thinking of the right words to express how I feel about things.					
17. I make judgments about whether my thoughts are good or bad.					
18. I find it difficult to stay focused on what's happening in the present.					
19. When I have distressing thoughts or images, I "step back" and am aware of the thought or image without getting taken over by it.					
20. I pay attention to sounds, such as clocks ticking, birds chirping, or cars passing.					
21. In difficult situations, I can pause without immediately reacting.					
22. When I have a sensation in my body, it's difficult for me to describe it because I can't find the right words.					
23. It seems I am "running on automatic" without much awareness of what I'm doing.					
24. When I have distressing thoughts or images, I feel calm soon after.					

25. I tell myself that I shouldn't be thinking the way I'm thinking.					
26. I notice the smells and aromas of things.					
27. Even when I'm feeling terribly upset, I can find a way to put it into words.					
28. I rush through activities without being really attentive to them.					
29. When I have distressing thoughts or images, I am able just to notice them without reacting.					
30. I think some of my emotions are bad or inappropriate and I shouldn't feel them.					
31. I notice visual elements in art or nature, such as colors, shapes, textures, or patterns of light and shadow.					
32. My natural tendency is to put my experiences into words.					
33. When I have distressing thoughts or images, I just notice them and let them go.					
34. I do jobs or tasks automatically without being aware of what I'm doing.					
35. When I have distressing thoughts or images, I judge myself as good or bad, depending what the thought/image is about.					
36. I pay attention to how my emotions affect my thoughts and behavior.					
37. I can usually describe how I feel at the moment in considerable detail.					

38. I find myself doing things without paying attention.					
39. I disapprove of myself when I have irrational ideas.					

Scoring Information:

Observe subscale items:

1, 6, 11, 15, 20, 26, 31, 36

Describe subscale items:

2, 7, 12R, 16R, 22R, 27, 32, 37

Actaware subscale items:

5R, 8R, 13R, 18R, 23R, 28R, 34R, 38R

Nonjudge subscale items:

3R, 10R, 14R, 17R, 25R, 30R, 35R, 39R

Nonreact subscale items:

4, 9, 19, 21, 24, 29, 33

Reference:

Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment, 13*(1), 27–45. https://doi.org/10.1177/1073191105283504

APPENDIX G

Self-Compassion Scale

HOW I TYPICALLY ACT TOWARDS MYSELF IN DIFFICULT TIMES

Please read each statement carefully before answering. Indicate how often you behave in the stated manner, using the following scale:

	Almost never 1	Not very often 2	Sometimes 3	Very often 4	Almost always 5
1. I'm disapproving and judgmental about my own flaws and inadequacies.					
2. When I'm feeling down I tend to obsess and fixate on everything that's wrong.					
3. When things are going badly for me, I see the difficulties as part of life that everyone goes through.					
4. When I think about my inadequacies, it tends to make me feel more separate and cut off from the rest of the world.					
5. I try to be loving towards myself when I'm feeling emotional pain.					
6. When I fail at something important to me I become consumed by feelings of inadequacy.					
7. When I'm down and out, I remind myself that there are lots of other people in the world feeling like I am.					
8. When times are really difficult, I tend to be tough on myself.					
9. When something upsets me I try to keep my emotions in balance.					
10. When I feel inadequate in some way, I try to remind myself that					

feelings of inadequacy are shared by most people.					
11. I'm intolerant and impatient towards those aspects of my personality I don't like.					
12. When I'm going through a very hard time, I give myself the caring and tenderness I need.					
13. When I'm feeling down, I tend to feel like most other people are probably happier than I am.					
14. When something painful happens I try to take a balanced view of the situation.					
15. I try to see my failings as part of the human condition.					
16. When I see aspects of myself that I don't like, I get down on myself.					
17. When I fail at something important to me I try to keep things in perspective.					
18. When I'm really struggling, I tend to feel like other people must be having an easier time of it.					
19. I'm kind to myself when I'm experiencing suffering.					
20. When something upsets me I get carried away with my feelings.					
21. I can be a bit cold-hearted towards myself when I'm experiencing suffering.					
22. When I'm feeling down I try to approach my feelings with curiosity and openness.					

23. I'm tolerant of my own flaws and inadequacies.					
24. When something painful happens I tend to blow the incident out of proportion.					
25. When I fail at something that's important to me, I tend to feel alone in my failure.					
26. I try to be understanding and patient towards those aspects of my personality I don't like.					

Scoring Information:

Self-Kindness subscale items: 5, 12, 19, 23, 26

Self-Judgment subscale items: 1, 8, 11, 16, 21

Common Humanity subscale items: 3, 7, 10, 15

Isolation subscale items: 4, 13, 18, 25

Mindfulness subscale items: 9, 14, 17, 22

Over-Identification subscale items: 2, 6, 20, 24

Total Self-Compassion score: Reverse score the following subscales before calculating a grand mean score of all 6 subscale means:

Self-judgment

Isolation

Over-identification

Reference:

Neff, K. D. (2003a). The development and validation of a scale to measure self-compassion. *Self and Identity, 2*(3), 223–250. https://doi.org/10.1080/15298860309027

APPENDIX H

Professional Quality of Life, Version 5

Instructions: 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. (Stamm, 2009)

	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.					

Scoring Information:

Compassion Satisfaction subscale items:

3, 6, 12, 16, 18, 20, 22, 24, 27, 30

Burnout subscale items:

*1, *4, 8, 10, *15, *17, 19, 21, 26, *29

Secondary Traumatic Stress subscale items:

2, 5, 7, 9, 11, 13, 14, 23, 25, 28

Scores < 22 = Low; 23-41 = Moderate; 42+ = High

* Starred items are reverse scored, therefore, a score of 5 is 1, 4 is 2, . . .

Reference:

Stamm, B. H. (2009). Professional quality of life: Compassion satisfaction and fatigue version 5 (ProQOL). https://proqol.org/uploads/ProQOL_5_English_Self-Score.pdf

APPENDIX I

Reaction to Research Participation Questionnaire–Revised

Instructions: This questionnaire asks for your opinions about what it was like for you to participate in this study. Your responses will be used to help us understand more about what it is like to be a research participant. Please select the number that best describes your response.					
	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
1. I gained something positive from participating.					
2. Knowing what I know now, I would participate in this study if given the opportunity.					
3. The research raised emotional issues for me that I had not expected.					
4. I gained insight about my experiences through research participation.					
5. The research made me think about things I didn't want to think about.					
6. I found the questions too personal.					
7. I found participating in this study personally meaningful.					
8. I believe this study's results will be useful to others.					
9. I trust that my replies will be kept private.					
10. I experienced intense emotion during the research session and / or parts of the study.					
11. I think this research is for a good cause.					
12. I was treated with respect and dignity.					
13. I found participating beneficial to me.					
14. I was glad to be asked to participate.					
15. I like the idea that I contributed to science.					
16. I was emotional during the research session.					
17. I felt I could stop participating at any time.					
18. I found participating boring.					
19. The study procedures took too long.					
20. Participating in this study was inconvenient for me.					
21. Participation was a choice I freely made.					

22. Had I known in advance what participating would be like I still would have agreed to participate.					
23. I understood the consent form.					

Scoring Information:

Participation subscale items:

14, 15, 17, 21

Personal Benefit subscale items:

1, 4, 7, 13

Emotional Reaction subscale items:

*3, *5, *10, *16

Perceived Drawback subscale items:

2, *6, *18, *19, *20, 22

Global Research Evaluation subscale items:

8, 9, 11, 12, 23

* Starred items are reverse scored, therefore, a score of 5 is 1, 4 is 2, . . .

Reference:

Newman, E., Willard, T., Sinclair, R., & Kaloupek, D. (2001). The costs and benefits of research from the participants' view: The path to empirically informed research practice. *Accountability in Research, 8*(4), 27–47. https://doi.org/10.1080/08989620108573983

APPENDIX J

Five-Facet Mindfulness Questionnaire: Copyright Permission

Simmons (2013) reports that “the FFMQ is available in the public domain, is not copyrighted, and does not require permission [to] reproduce for clinical and research purposes” (p. 153).

APPENDIX K

Self-Compassion Scale: Copyright Permission

To Whom It May Concern:

Please feel free to use the Self-Compassion Scale in your research. Masters and dissertation students also have my permission to use and publish the Self-Compassion Scale in their theses. The appropriate reference is listed below.

Best,

Kristin Neff, Ph. D.
Associate Professor
Educational Psychology Dept.
University of Texas at Austin

Reference:
Neff, K. D. (2003). Development and validation of a scale to measure self-compassion. *Self and Identity, 2, 223-250.*

Coding Key:
Self-Kindness Items: 5, 12, 19, 23, 26
Self-Judgment Items: 1, 8, 11, 16, 21
Common Humanity Items: 3, 7, 10, 15
Isolation Items: 4, 13, 18, 25
Mindfulness Items: 9, 14, 17, 22
Over-identified Items: 2, 6, 20, 24

Subscale scores are computed by calculating the mean of subscale item responses. To compute a total self-compassion score, reverse score the negative subscale items before calculating subscale means - self-judgment, isolation, and over-identification (i.e., 1 = 5, 2 = 4, 3 = 3. 4 = 2, 5 = 1) - then compute a grand mean of all six subscale means. Researchers can choose to analyze their data either by using individual sub-scale sores or by using a total score.

(This method of calculating the total score is slightly different than that used in the article referenced above, in which each subscale was added together. However, I find it is easier to interpret the total score if a mean is used.)

APPENDIX L

Professional Quality of Life, Version 5: Copyright Permission

Permission to use the ProQOL-5 in research projects is provided on the self-score version of the instrument “as long as author is credited, no changes are made, and it is not sold” (Stamm, 2009, p. 1).

APPENDIX M

Reaction to Research Participation Questionnaire–Revised: Copyright Permission

From: Newman, Elana
Date: Sun, Jun 13, 2021 at 1:12 PM
Subject: RE: Reactions to Research Participation Questionnaire-Revised
To: Christen Aiguier

It's in the public domain and you are totally free to use it! I would love to hear what you find out!

Elana Newman, Ph.D. (she/her/hers)
R. M. McFarlin Professor of Psychology, University of Tulsa
Research Director, Dart Center for Journalism and Trauma
Co-Director, Tulsa Institute of Trauma, Adversity, and Injustice, University of Tulsa

Mailing Address:
Department of Psychology
The University of Tulsa
800 South Tucker Drive, Tulsa, OK 74104-3189

---------- Forwarded message ---------
From: Christen Aiguier
Date: Sun, Jun 13, 2021 at 11:59 AM
Subject: Reactions to Research Participation Questionnaire-Revised
To:

Dr. Newman,

My name is Christen Aiguier, and I am currently working on my doctoral dissertation for a degree in clinical psychology at the Antioch University of Seattle. The working title is "Relationships Among Trait Mindfulness, Self-Compassion, and Compassion Fatigue in Mental Health Professionals Working with Clients with a Terminal Illness." I anticipate that my dissertation will be completed in 2022.

I would like to request permission to use the Reactions to Research Participation Questionnaire–Revised to assess participants' perceptions of the research experience at the conclusion of the surveys.

Please contact me if you need further information and thank you for your consideration.

Respectfully,
Christen Aiguier

APPENDIX N

Informed Consent

Consent to Participate in Research:

Relationships Among Trait Mindfulness, Self-Compassion, and Compassion Fatigue in Mental Health Professionals Working with Clients with a Terminal Illness

This is a survey exploring the potential relationships between trait mindfulness, self-compassion, and compassion fatigue in mental health professionals working with client(s) with a terminal illness. This survey will give you an opportunity to contribute to the literature regarding potential protective and treatment target factors for compassion fatigue, and participant perceptions of engaging in scientific research.

If you agree to take part in this research, your identity will be anonymous. No one outside the research team will know about your participation in this project. You will not be asked for your name. Some demographic information will be requested, including your age, race, gender, and general clientele and practice information. However, this demographic data will be reported as aggregated information, and no personally identifiable information will be associated with your responses to any reports of this data. Your anonymous responses will be assigned a random participant number and stored on a securely encrypted server that only the research team can access.

There are some minimal risks associated with participation in this survey. The potentially upsetting nature of questions regarding compassion fatigue may cause you to recall unwanted and upsetting thoughts and emotions about clinical work experiences. However, it is not anticipated these reactions will exceed those you are likely to encounter during day-to-day clinical work with clients with a terminal illness. Additionally, there are three optional general questions about your potential personal trauma history. These questions will not ask for details about any trauma event but could nonetheless be upsetting for some individuals. Therefore, answering these questions is not necessary for the survey to be considered complete.

Please remember, your participation is voluntary, and you may elect to discontinue your participation at any time by closing your internet browser window.

If at any time you feel discomfort or distress by the content of the survey, please consider reaching out to friends, family, or professional support and reading the following information regarding common responses, helpful suggestions in recovering naturally, and options for seeking professional help after experiencing a traumatic event, which can be found by clicking here: Indirect Traumatization in Professionals Working with Trauma Survivors (for Providers) (https://istss.org/ISTSS_Main/media/Documents/ISTSS_IndirectTrauma_FNL.pdf)

At the end of the survey, you will have the opportunity to enter an email address to enter a drawing for either one of three (3) $100 Amazon.com gift cards or one (1) $200 Amazon.com gift card. If you choose to enter an email address, you will be directed to a second, separate survey where you will be asked to provide the email address to which the gift card should be sent.

Participation in the "Gift Card Drawing" will not be linked to your responses in this survey research in any way. You may opt out from participating in the "Gift Card Drawing" by selecting "Done" at the end of the survey without clicking on the link to the separate survey. If you choose to participate in this drawing, your email address will be stored separately on a securely encrypted server that only the research team can access until the end of the data collection period (anticipated to be 6/30/2022) and will automatically be deleted after the winner has been selected on the following day.

A $2 donation will also be made for the first 250 participants who complete the survey to the International Society for Traumatic Stress Studies' General Fund to support educational and supportive resources. "The International Society for Traumatic Stress Studies is a nonprofit organization whose goal is to ensure that everyone affected by trauma receives the best possible professional response, and to reduce traumatic stressors and their immediate and long-term consequences worldwide" https://istss.org/ISTSS_Main/media/Documents/ISTSS_WhatIsISTSS_FNL., 2016, para. 11). The organization publishes a bimonthly research journal, newsletters, PTSD treatment guidelines, psychoeducation pamphlets, provides online training, clinician referrals, and promotes "sharing of research, clinical strategies, public policy concerns and theoretical formulations on trauma around the world" (https://istss.org/about-istss, 2021, para 2). To learn more about this organization, please go to the following URL: https://istss.org

This survey is part of my dissertation research at Antioch University of Seattle, in the PsyD in clinical psychology program. The information may be used for future research without additional consent.

This project has been approved by the Institutional Review Board at Antioch University. If you have any questions about your rights as a research participant, please contact Mark Russell at mrussell@antioch.edu or 206-268-4837.

Please see the SurveyMonkey Privacy Policy (https://www.surveymonkey.com/mp/legal/privacy-policy/) for additional information regarding your privacy rights associated with the use of Survey Monkey to complete this survey.

If you agree to the terms of this consent form, you will be taken to an online survey that is designed to take approximately 35-minutes to complete. If you have any questions about the survey or the research study, please contact me at: caiguier@antioch.edu

Please print a copy of this page for your records.

Thank you for your consideration to participate in this research project and contributing to scientific knowledge!

1. I have read and understood the above information. By choosing "Yes" and clicking "Next" below, I am indicating that I have read and understood this consent form and agree to participate in this research study. [Yes/No–*Excluded]

*Response given if consent form is rejected:

Thank you for your time and interest in this research project.

Unfortunately, you do not meet one or more of the requirements to participate in this research project or you did not agree to one of the survey's instructions.

APPENDIX O

Recruitment Email

Subject: Recruiting Mental Health Professionals to Participate in an Online Survey–Chance to Win a $100 or $200 Amazon Gift Card & Donation to the ISTSS

Thank you in advance for a moment of your time and consideration.

My name is Christen Aiguier, and I am a clinical psychology doctoral candidate in an APA-accredited program at Antioch University of Seattle. This study is being conducted in support of fulfilling my dissertation requirement. Christopher L. Heffner, PsyD, PhD is supervising the research project and it is approved by Antioch University of Seattle's Institutional Review Board for the Protection of Human Participants in Research.

The purpose of this study is to explore the relationships among trait mindfulness, self-compassion, and compassion fatigue in mental health professionals working with clients with a terminal illness. The survey is expected to take 35 minutes to complete; participation is anonymous and voluntary. Following the completion of the survey, participants have the option of entering their email address into a separate survey to enter a drawing to win either one of three (3) $100 Amazon.com gift cards or one (1) $200 Amazon.com gift card. Additionally, a $2 donation will be made for the first 250 participants who complete the survey to the International Society for Traumatic Stress Studies General Fund to support educational and supportive resources.

"The International Society for Traumatic Stress Studies is a nonprofit organization whose goal is to ensure that everyone affected by trauma receives the best possible professional response, and to reduce traumatic stressors and their immediate and long-term consequences worldwide" (What is ISTSS, 2016, para. 11). The organization publishes a bi-monthly research journal, newsletters, PTSD treatment guidelines, psychoeducation pamphlets, provides online training, clinician referrals, and promotes "sharing of research, clinical strategies, public policy concerns and theoretical formulations on trauma around the world" (About ISTSS, 2021, para 2). To learn more about this organization, please go to the following URL: https://istss.org/

If you know other mental health providers who may be interested in participating in this research, I would be very grateful if you shared this email with them. If you would like additional information about this study, please contact Christen Aiguier at c or the dissertation committee chair Christopher L. Heffner, PsyD, PhD .

The survey for the research project can be found by clicking on the following link:

https://www.surveymonkey.com/r/9HW6WKX

Apologies for cross-posting and thank you again for your time.

Christen Aiguier
Clinical Psychology Doctoral Candidate

School of Applied Psychology, Counseling, and Family Therapy
Antioch University of Seattle

Christopher L. Heffner, PsyD, PhD
Core Faculty
PsyD Program
School of Applied Psychology, Counseling, and Family Therapy
Antioch University of Seattle

APPENDIX P

Incentive Questionnaire

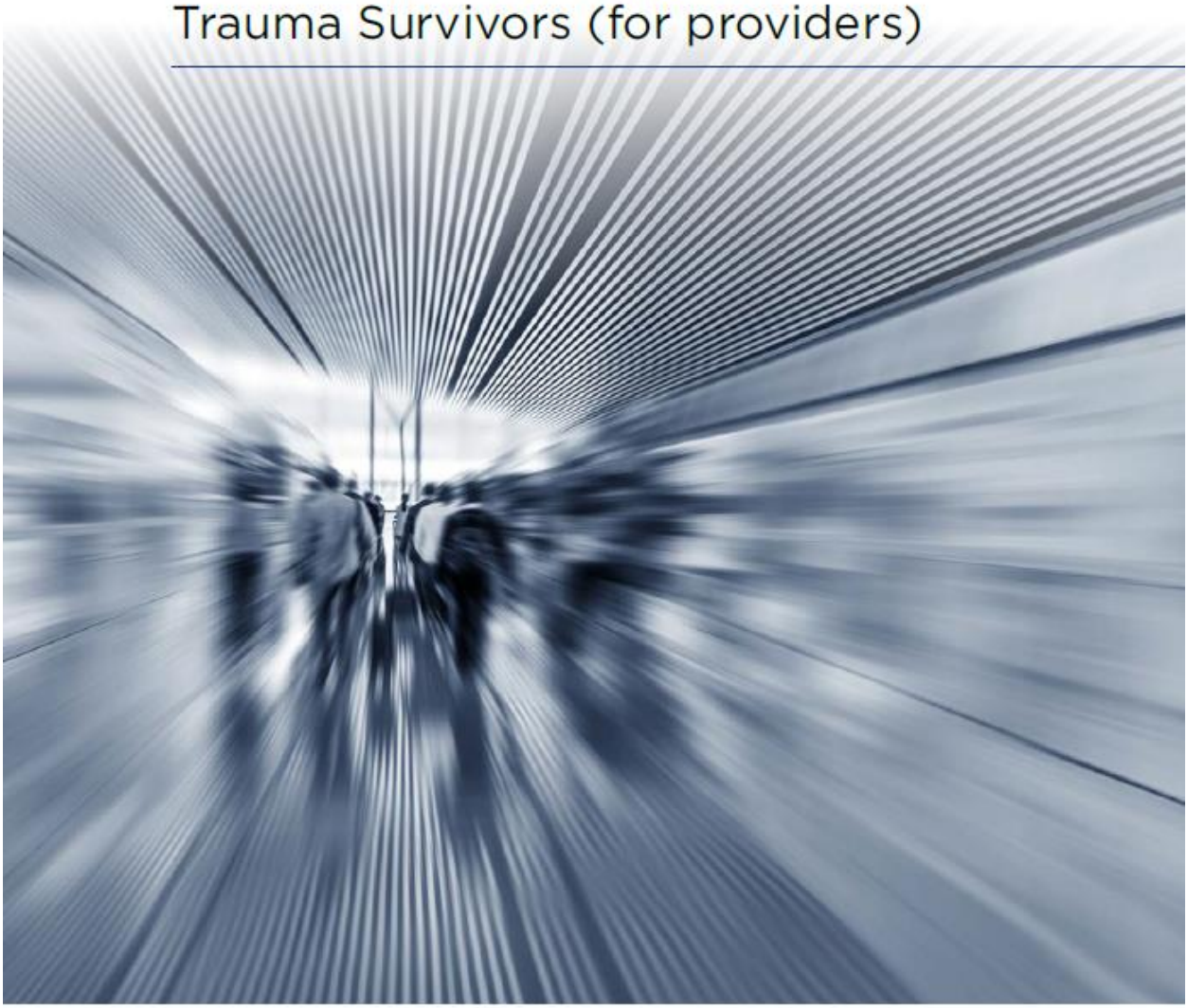
If you are interested in entering an email address to be entered into a drawing for one of three (3) $100 Amazon.com gift cards or one (1) $200 Amazon.com gift card, please enter the email address to which the gift card(s) should be sent.

Email: _____

APPENDIX Q

ISTSS: Indirect Traumatization in Professionals Working with Trauma Survivors (for Providers)

Indirect Traumatization in Professionals Working with Trauma Survivors (for providers)



ISTSS
International Society
for Traumatic Stress Studies

Indirect trauma

Professionals who work with trauma survivors in an open, engaged, and empathic way and who feel responsible or committed to helping them are likely to experience indirect trauma. That means that they will be transformed by the work. The way helpers understand and experience the world and themselves is changed as they enter into the world of the survivor. While trauma work can be very meaningful and rewarding, it can also be very difficult and painful. The changes helpers experience in their identities, world views, and spirituality affect both the helpers' professional relationships with clients and colleagues and their personal relationships.

Indirect trauma, also known as vicarious trauma (VT), compassion fatigue (CF), or empathic strain, is an inevitable byproduct of working with trauma survivors. It isn't the "fault" of survivors, any more than occupational stress in air traffic controllers is the fault of pilots or airline passengers. Indirect trauma is the cumulative response to working with many trauma survivors over time. The signs and symptoms of indirect trauma resemble those of direct trauma. Treaters may experience intrusive imagery and thoughts, physiological arousal, avoidance, or anxiety. Treaters may also experience disruptions in their personal or professional relationships, in managing boundaries, and in regulating their emotions. They may withdraw from others, become hopeless, have nightmares or difficulties sleeping, overeat, overuse alcohol, and so forth. Work with clients who have had specific traumatic experiences may affect the treater in specific ways. For example, those who work with sexual abuse survivors may have sexual difficulties, or those working with people after transportation accidents may find themselves increasingly anxious about travel.

Who is affected?

Anyone who encounters trauma survivors empathically and is committed to helping them may be affected by indirect or vicarious trauma. Examples of professionals who may be affected are psychotherapists, shelter staff, lawyers, health-care professionals, clergy, journalists, trauma researchers, and first responders—whether paid or volunteer.

How does indirect trauma come about?

Many who work with trauma survivors find it enriching and rewarding. However, they open up their hearts and minds to the experience of trauma survivors, confronting the worst of humanity — torture, violence, aggression, and sadism. Treaters see the disruptions in relationships, the harm to survivors' way of understanding the world, the damaged spirituality, and the shame, horror, grief, terror, agony, and rage that follow violence and victimization. As those who work with trauma survivors open themselves to these processes, their ways of understanding and experiencing themselves, their world, and their own spirituality are transformed.

What contributes to indirect trauma?

Indirect trauma, like direct trauma, arises from an interaction between the person (or treater) and the situation. Indirect trauma will look and feel different for each person.

Some of the characteristics of the treater that may contribute to indirect trauma are personal history, usual ways of coping with challenge and distress, and current life circumstances (e.g., other stressors). In addition, the treaters' ways of working with survivors may contribute to indirect trauma. For example, managing boundaries effectively can help protect the treater from indirect trauma.

Aspects of the situation that can contribute to indirect trauma include the confidential nature of trauma work, the difficulty forming therapeutic relationships with people whose ability to trust has been diminished by betrayal or abuse, systems problems in organizations and institutions, and negative social attitudes toward trauma victims.

What is the cost of indirect trauma?

Indirect trauma can have negative effects on the individual, as well as on his or her family, friends, and clients. Trauma treaters who don't attend to their indirect trauma are at risk for becoming ineffective in their work, violating boundaries in helping relationships, withdrawing from friends, family, and colleagues, and making bad judgments. They may experience burnout and become a burden to colleagues or leave the field prematurely, disheartened and cynical.

What can trauma workers do about indirect trauma?

The first step in any change process is to acknowledge and name the problem. We take another step forward when we normalize our responses to our work. We can address indirect trauma by attending to basic self-care: balancing work, play, and rest. Adequate diet and exercise are essential. In addition, treaters benefit from appropriate professional training for their work, connection with their colleagues, ongoing consultation for their work, and a place to talk about their experience of indirect trauma. Some trauma treaters find it helpful to balance their trauma work with other work, get more support for the work, and simply to acknowledge the difficulties of the work. Trauma professionals can benefit from identifying specific difficulties, assessing the contributing factors, targeting specific steps to take, and getting support from friends or colleagues in taking those steps. Finally, restoring meaning and hope is essential. Each individual must find ways to reconnect with whatever in life is meaningful and gives purpose for that person. Hope and meaning are two of the primary gifts that are undercut by indirect trauma. Restoring these to work and life is the ultimate goal of addressing these difficulties.

An experienced trauma therapist may be able to provide a referral for consultation about indirect trauma. For more information about traumatic stress or the International Society of Traumatic Stress Studies, call 1-847-686-2234.

What is ISTSS?

The International Society for Traumatic Stress Studies is a nonprofit organization whose goal is to ensure that everyone affected by trauma receives the best possible professional response, and to reduce traumatic stressors and their immediate and longterm consequences worldwide.

ISTSS provides an independent community for supporting and sharing research, clinical strategies, public policy concerns and theoretical formulations on trauma. ISTSS members include psychiatrists, psychologists, social workers, nurses, counselors, researchers, journalists, clergy, law enforcement, correctional facilities administrators, advocates and others with an interest in the treatment and study of traumatic stress.

Members work in clinical and nonclinical settings around the world, including public and private health facilities, private practice, universities and research foundations.

This pamphlet was created by the Public Education Committee of the International Society for Traumatic Stress Studies.

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istss@istss.org
www.istss.org

APPENDIX R

ISTSS: Trauma During Adulthood

ISTSS International Society for Traumatic Stress Studies | Fact Sheet

Trauma During Adulthood

Overview

People are affected by trauma in different ways. This fact sheet will help you learn about things like what trauma is, common reactions to it, problems that can result, and things that can help.

What is a traumatic event?

Traumatic events involve either 1) actual or possible death or serious injury or 2) sexual violence. Most adults have lived through at least one traumatic event and many have experienced more than one event. Trauma can also be chronic, meaning that similar events happen many times over a long period of time.

There any many different types of traumatic events, but here are some examples:

- ✓ Sexual or physical abuse or assault
- ✓ Serious vehicle accidents
- ✓ Combat or war zone exposure
- ✓ Serious medical events
- ✓ Seeing death or dead bodies, including while at work
- ✓ Unexpected death of a loved one
- ✓ Natural disasters
- ✓ Arson or house fires
- ✓ Torture
- ✓ Domestic violence
- ✓ Witnessing or experiencing violence, such as a homicide or suicide
- ✓ Terrorism or mass violence

What are common responses following a traumatic event?

Professionals have found three different paths that adults can follow after trauma:

- ✓ Some people never experience any major problems. This is known as **resistance.** Resistance is very common after traumas that do not involve sexual assault or abuse.
- ✓ Many people have symptoms similar to posttraumatic stress disorder (PTSD) in the weeks after a trauma. For most of those people, those symptoms will then go away on their own. This is known as **natural recovery** or **resilience**. This path is very common among people who experience sexual assault.
- ✓ Other people experience problems that do not go away on their own. **Posttraumatic stress disorder (PTSD)** is one potential outcome when this happens. PTSD is described in detail in the next section.

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Fact Sheet

www.istss.org

What is Posttraumatic Stress Disorder (PTSD)?

PTSD is a mental health condition that may be diagnosed by a professional when someone has experienced a traumatic event and is having particular types of problems as a result. The major types of symptoms experienced by people with PTSD include:

- ✓ **Re-experiencing symptoms**, including:
  - Flashbacks or intrusive thoughts about the traumatic event
  - Intense physical or emotional reactions to reminders of the event
  - Nightmares

- ✓ **Avoidance symptoms**, including:
  - Avoiding thinking or talking about the trauma
  - Avoiding people, places, activities or sensations that remind you of the trauma

- ✓ **Negative changes in your thinking and emotions**, including:
  - Feeling more down, depressed, angry or anxious
  - Finding it hard or impossible to feel happy
  - Feeling shameful or guilty
  - Feeling distant from other people
  - Losing interest in things you used to enjoy
  - Being unable to remember important parts of the trauma
  - Having more negative thoughts about yourself, other people and the world

- ✓ **Hyperarousal or emotional/physical reactivity**, including:
  - Being always on guard and/or easily startled
  - Having trouble concentrating
  - Being quick to anger and aggression
  - Doing things that are risky (e.g., impulsive sex, binge drinking)
  - Having trouble sleeping

What is Complex Posttraumatic Stress Disorder (C-PTSD)?

C-PTSD is a mental health condition that also may be diagnosed by a professional when someone has experienced a traumatic event. C-PTSD shares many symptoms in common with PTSD, including re-experiencing, avoidance, and hyperarousal, as described above. However, C-PTSD also includes

- ✓ **Problems in emotion regulation**, like having difficulty managing ones feelings

- ✓ **Problems in self-image**, like feeling completely different from other people and/or having a negative self-view

- ✓ **Interpersonal problems**, including having trouble trusting others

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Fact Sheet

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What are risk factors for PTSD or C-PTSD following trauma?

Risk factors for PTSD can be present before, during or after a trauma.

- ✓ **Risk factors BEFORE a trauma** include:
  - A history of other mental health conditions, including PTSD
  - A history of other traumas
  - A family history of mental disorders

- ✓ **Risk factors DURING a trauma** include:
  - Experiencing certain types of trauma, like sexual assault or unexpected death of a loved one
  - Experiencing a more severe trauma
  - Believing that your life is in danger during the trauma
  - Experiencing more physical injury or specific types of injury, such as head injury or loss of consciousness
  - Dissociating during the trauma

- ✓ **Risk factors AFTER a trauma** include:
  - Having less social support or more negative social interactions
  - Having more life stress
  - Avoidance coping

What helps people recover naturally after trauma?

We know much more about what makes someone likely to develop PTSD than we do about what makes someone likely to recover naturally. However, the following factors are thought to contribute to natural recovery:

- ✓ **Social support**, including:
  - Believing that other people care about you and will be there if you need them
  - Being able to talk about the trauma and your reactions to it with supportive people
  - Having supporters who avoid reacting in unhelpful ways when told about the trauma

- ✓ **Getting back to one's life**, including:
  - Returning to your routine, such as going to work or school, doing chores and maintaining a sleep schedule
  - Not avoiding safe reminders of the trauma
  - Staying connected to friends and other important people

- ✓ **Making meaning of what happened**, including:
  - Finding helpful and realistic ways to fit the trauma into the way you think about yourself, other people and the world
  - Noticing unhelpful thoughts that get in the way of making meaning, such as self-blame, and finding more helpful thoughts
  - Looking for examples of ways that you did your best or coped well

ISTSS International Society for Traumatic Stress Studies

Fact Sheet

www.istss.org

How can someone decide if they need professional help?

Many times, people are able to recover from traumatic events on their own and with the help of their support systems. Sometimes, professional help is needed to recover.

If symptoms do not go away within one month following a traumatic event, a visit to a mental health professional or primary care physician is recommended. There are also mobile apps, like PTSD Coach, that can be helpful in monitoring your symptoms and preparing for this visit.

If treatment is needed, what are the options?

Even though many people recover naturally, some people do need treatment. Most benefit quickly when they get one of the treatments that have been shown to work for PTSD. You can learn about the treatments that work for PTSD on the National Center for PTSD website. The website also has a tool you can use to see which is the best fit for you. There are options for people who prefer **talk therapy** and for people who prefer **medication**. Know that no single treatment is effective for everyone and it might take time to find the right fit—but don't give up!

The field of mental health is constantly changing and new treatments are being developed. To make sure you or someone else gets the best treatment, we recommend learning about these evidence-based treatments before your visit so that you can ask the provider which they offer.

If you are already seeing a therapist or decide to see a therapist in the future, you can show them this fact sheet so that they can learn about the resources that have been created for therapists that work with trauma survivors. This includes:

- ✓ **ISTSS' PTSD Prevention and Treatment Guidelines**, which were released in 2019 and describe the state of the evidence on ways to prevent and treat PTSD. You can visit this resource here.

How can I find someone to help me?

Professional organizations like ISTSS often have directories of mental health professionals who can help. Don't give up if you don't find a provider in your area! You can also search the internet, call your doctor or insurance company, or ask other people you know if you don't find someone right away. Just be sure to ask them if they are experienced in helping people who have experienced trauma and whether they offer the treatment you have decided on. See ISTSS' directory of mental health professionals.

Where can I get more resources?

For more information, visit the Public Resources page of ISTSS' website. There, you will find links to many of our public education products, briefing papers and affiliated resources.

APPENDIX S

ISTSS: Pamphlet Copyright Permission

From: Patricia Ferchland-Bingham - ISTSS
Date: Tue, Sep 21, 2021 at 4:18 PM
Subject: RE: Indirect Traumatization in Professionals Working with Trauma Survivors (Pamphlet)
To: Christen Aiguier Meagan Comerford - ISTSS

Good afternoon,

I apologize for the delay in my response. I have checked with the ISTSS staff and Board, and you have permission to use both of these handouts for your dissertation.

Thank you and best of luck,
Patricia

International Society for Traumatic Stress Studies
Patricia Ferchland-Bingham|Senior Education Manager
International Society for Traumatic Stress Studies
111 West Jackson Blvd., Suite 1412, Chicago IL 60604

From: Christen Aiguier
Sent: Friday, July 23, 2021 1:04 PM
To: Patricia Ferchland-Bingham - ISTSS Meagan Comerford - ISTSS ISTSS
Subject: Fwd: Indirect Traumatization in Professionals Working with Trauma Survivors (Pamphlet)

My name is Christen Aiguier, and I am currently working on my doctoral dissertation for a degree in clinical psychology at the Antioch University of Seattle. The working title is "Relationships Among Trait Mindfulness, Self-Compassion, and Secondary Traumatic Stress in Mental Health Professionals Working with Clients with a Terminal Illness". I anticipate that my dissertation will be completed in 2021.

I am seeking guidance in determining who I can contact for permission to use a couple of handouts available on the ISTSS website. My intention is to use them within my doctoral dissertation in clinical psychology from Antioch University of Seattle. The first handout is the "Indirect Traumatization in Professionals Working with Trauma Survivors (for Providers)" pamphlet found at: https://istss.org/ISTSS_Main/media/Documents/ISTSS_IndirectTrauma_FNL.pdf. I would like to provide a link to this resource within the informed consent portion of my online survey.

The second is the "Trauma During Adulthood" pamphlet found at: https://istss.org/ISTSS_Main/media/Documents/Trauma-During-Adulthood-12-6-20.pdf. I would

like to provide a link to this resource after a couple of brief questions inquiring about participant's potential personal trauma history in the instance that participants feel triggered by these questions.

Thanks in advance for any and all assistance. Please contact me if you need further information.

Respectfully,
Christen Aiguier
PsyD candidate

APPENDIX T

ISTSS: Donation Acknowledgement

ANTIOCH UNIVERSITY

[redacted]

ISTSS - Order #1004060 processed successfully!

1 message

[redacted]

Thu, Sep 1, 2022 at 10:12 AM

Hello Christen Aiguier Student,

We've successfully received your order.

If you purchased an exam or recording, you can access your materials at: http://www.istss.org/education-research/online-learning/my-online-learning.aspx

Order Summary

Order #:	ORD1004060
Date:	September, 01, 2022
Total:	$100.00
Amount Paid:	$100.00
Balance Due:	$0.00

Qty	Item	Unit Price	Total
1	General Fund Donation	$100.00	$100.00
		Subtotal:	$100.00
		Shipping:	$0.00
		Taxes:	$0.00
		Discounts:	$0.00
		Grand Total:	**$100.00**

We hope to see you again soon,
Headquarters