

**Compassion Fatigue in Mental Health Professionals
in the United Kingdom: An Occupational
Perspective, a Qualitative Exploration, and a
Psychometric Evaluation**

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requirements of Nottingham Trent University for
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Compassion Fatigue in Mental Health Professionals in the United Kingdom: An Occupational Perspective, a Qualitative Exploration, and a Psychometric Evaluation

Abstract

With the rising prevalence of mental health ailments, a shortage of qualified mental health professionals, and the emotionally taxing nature of mental healthcare, mental health professionals are vulnerable to experiencing the psychological cost of caring, also known in the research literature as “compassion fatigue”. Previous research reports moderate to high levels of compassion fatigue in mental health professionals, yet the focus on potentially alterable work-related covariates has been less prominent in comparison with relatively stable individual-level factors. Moreover, minimal research has been conducted to examine the psychometric properties of Professional Quality of Life Scale Version 5 (Stamm, 2010), an instrument widely used to assess compassion fatigue in health and social care professionals. Therefore, the aims of this research were twofold: to explore the concept of compassion fatigue from the perspective of occupational health psychology; and to examine the construct validity of ProQOL 5 scale, in a sample of mental health professionals based in the United Kingdom (UK).

This thesis is a confluence of three research studies. The first study was a systematic review of 44 empirical studies examining the association between occupational risk and preventive factors and compassion fatigue in mental health professionals. The findings were in alignment with the Job Demands-Resources (JD-R) model wherein job demands (such as, quantitative and qualitative workload, burden of empathising with clients, and engagement with survivors of trauma) were positively associated with compassion fatigue. Job resources (such as, supervisor’s support, co-workers’ support, manager’s support, organisational support, use of evidence-based practices, and empathic alliance with clients) were found to attenuate the

impact of job demands and promote a sense of compassion satisfaction. The study provides a framework for developing capacity-building programmes to develop mental health professionals' personal resources and highlights methodological limitations in existing research. Also, from a theoretical point of view, it highlights the role of occupational factors in making professionals vulnerable to compassion fatigue. Existing theoretical models of compassion fatigue have not paid adequate attention to occupational or work-related factors and have instead focused more on individual-level factors or core requirements of mental healthcare such as, empathising with clients. Thus, by suggesting that occupational factors could also play a potent role, the findings of this study have the potential to expand current theoretical models.

The second study is a phenomenological study on occupational experiences of 19 mental health professionals in context of the COVID-19 pandemic. Three superordinate themes, which emerged from the analysis included: transition from face-to-face therapy to online therapy, novel changes and wellbeing, and uncertain professional support in uncertain times. The study elaborates the interaction among these themes in influencing participants' professional experiences and wellbeing and highlights the need for providing training in online or telephonic therapy. Experiences related to compassion fatigue were also observed and have been detailed in the relevant chapter. The study contributes to the limited body of research on the impact of the pandemic on mental health professionals based in the UK.

The third study is a psychometric evaluation of the Professional Quality of Life Scale Version 5 (ProQOL 5; Stamm, 2010), an instrument popularly used to assess compassion fatigue and compassion satisfaction. The study conducted confirmatory factor analysis to examine the factorial structure of the scale on a sample of 366 clinical psychologists, counsellors, and psychotherapists practicing in organisational and independent settings in the UK. In alignment with previous studies, the factorial structure of the scale demonstrated poor fit to data. Thus, a

novel technique called exploratory graph analysis was used to explore the structure. The study found support for a revised 21-item scale and provides directions for future research to further investigate this structure.

Overall, this thesis makes three pertinent contributions to the extant literature. First, it suggests that occupational or work-related factors share a significant association with compassion fatigue therefore, it is vital that their role is taken into cognisance by empirical and theoretical research. Second, it provides a rich, detailed qualitative evidence that highlights complex interactions among psychosocial hazards at work and their association with compassion fatigue in mental health professionals, which could be used to make structural changes in the system to improve professionals' occupational experiences. Third, it provides preliminary evidence in favour of a revised 21-item three factor-structure of ProQOL 5 scale, which has implications for conceptual clarity of compassion fatigue as a theoretical construct.

CHAPTER ONE

INTRODUCTION

Burgeoning incidence of mental health ailments constitutes a serious public health concern that demands immediate attention to prevent its adverse impact on physical and psychological health and wellbeing. According to the Adult Psychiatric Morbidity Survey, one in six people in England experience common mental disorders (such as depression or anxiety) and one in three seek professional help in the form of psychotropic medications or psychological therapies (McManus et al., 2016). The percentage of adolescents (17–19-year-olds) in England with a probable psychiatric condition has increased exponentially – from 10% in 2017 to 26% in 2022 (Committee of Public Accounts, 2023). In Wales, the Welsh Health Survey (Welsh Government, 2016) highlighted that 13% of adults in the country received treatment for mental illnesses. The deleterious impact of the growing prevalence of mental health conditions on physical and psychological health and wellbeing can be assessed by the fact that suicide is now the second-leading cause of death among adolescents and young adults and one in five years of a person’s life affected by disability can now be attributed to a mental health condition (World Health Organization, 2019).

The resolution of above-mentioned crisis requires concerted efforts on part of the state and the national healthcare community. According to the UK government’s shortage occupation list, there is a dearth of qualified mental health professionals in the UK such as psychologists (all categories) and social workers (UK Visas and Immigration, 2021). According to the Department of Health and Social Care, the vacancy rate in acute inpatient mental health services is 20% (Committee of Public Accounts, 2023) and a recent study by Clerkenwell Health (Integrated Care Journal, 2023) also showed that 1 in 10 positions for mental health professionals in the NHS are currently vacant. In addition, the evidence provided by The King’s

Fund (2020) and the British Medical Association (2019) highlight escalating demands within mental health services that are not unequivocally met with a proportional increase in the number of staff that should be employed within those services. The National Health Service (NHS) hospitals, mental health services, and community providers in the UK reported a shortage of 84,000 full-time employees in 2020 (The King's Fund, 2020). According to a recent House of Commons Committee Report (Committee of Public Accounts, 2023), there was a 22% increase in the NHS mental health workforce over a five-year period from 2016-17 to 2021-22. However, the referrals made to NHS mental health services during the same period increased by 44%, outpacing the growth in the size of the workforce (Committee of Public Accounts, 2023). This skewed demand – supply ratio has a negative impact on waiting period for patients (Royal College of Psychiatrists, 2021; Larsson et al., 2022). According to a recent study, of the 374,455 patients who were waiting for the commencement of their treatment at an Improving Access to Psychological Therapies (IAPT) service in November 2021, 16.48% had to wait for more than 90 days (Larsson et al., 2022). The study also suggested that whilst there was drop in the size of the waiting list group during the pandemic, by January 2022, it had increased in size to 388,325 patients, which was comparable to pre-pandemic levels (Larsson et al., 2022).

Prolonged waiting periods could lead to undesirable treatment experience and outcomes for patients such as, frustration with the service (Marshall et al., 2016) and deterioration of condition (Reichert & Jacobs, 2018). Also, from the point of staff well-being, it has the potential to lead to heightened workload, which could produce pernicious consequences for personnel's mental health and well-being and foster turnover intention. According to NHS Sickness Absence Rates for September 2023 (NHS England, 2024), the rate of sickness absenteeism in mental health and learning disability units (5.48%) was second highest, after ambulance services (6.51%). The most highly cited reason for sickness absence was anxiety,

stress, depression, and other psychiatric illnesses (26.4%). Moreover, in 2021-22, 17,000 employees left the NHS mental health workforce, and the percentage of staff citing poor work-life balance as the reason behind turnover increased from 4% in 2012-13 to 14% in 2021-22 (Committee of Public Accounts, 2023).

To mitigate the consequences of staff shortage in mental health services, the NHS Long Term Workforce Plan (NHS England, 2023), aims to grow the proportion of staff in mental health, primary, and community care by 73% by 2036/37. Specifically, about psychological professions, the plan highlights the need for expanding the number of training positions for clinical psychology and child and adolescent psychotherapy from 1,050 in 2022 to 1,326 in 2031 (NHS England, 2023). In addition, NHS England has committed to invest £600,000,000 over a three-year period to train 15,000 individuals to take the roles of psychological therapists and psychological practitioners (NHS England, 2023).

The goals mentioned in the NHS Long Term Workforce Plan (NHS England, 2023) are very important but, they will take time to materialise. In the meanwhile, the lack of a large workforce coupled with emotionally taxing nature of mental healthcare are likely to have a negative impact on psychological health and wellbeing of the existing personnel in mental health services in the UK (Kumar, 2007; Edward et al., 2017; Mann & Cowburn, 2005; Bondarenko et al., 2017; Indregard et al., 2018; Singh & Hassard, 2021; Kinman & Grant, 2020). Empirical evidence suggests that mental health professionals in the UK report high levels of occupational stress such as burnout (Johnson et al., 2012; Johnson et al., 2016; Johnson et al., 2020) and secondary traumatic stress (Bell et al., 2019; Sodeke-Gregson et al., 2013; Singh & Hassard, 2021). In combination referred to as “compassion fatigue” (Stamm, 2010), both burnout and secondary traumatic stress have the potential to interfere with professionals’ personal lives (e.g., Figley & Gould, 2005; Finzi-Dottan & Kormosh, 2016; Salloum et al., 2019) and

compromise the quality of services provided to clients (Negash & Sahin, 2011; Coetzee & Laschinger, 2018; Rudolph et al., 1997, as cited in Fulk, 2014).

In light of this, the aim of the present chapter is to comprehend the impact of providing mental health services on psychological health and wellbeing of mental health professionals. The chapter begins by elucidating the role of empathy in therapeutic settings and its impact on professionals. It is followed by elaborating and scrutinizing the concept of compassion fatigue: its definition, historical development, conceptual clarity, theoretical models, risk and preventive factors, and measurement. It concludes by providing an overview of succeeding chapters.

Empathy in Mental Healthcare: A Double-Edged Sword

Mental health professionals such as clinical psychologists, counsellors, psychotherapists, mental health nurses, and mental health social workers are trained to and encouraged to empathise with clients (Council on Social Work Education, 2015; Mousa, 2015; Rogers, 1957; Stebnicki, 2008). Empathy is one of the cornerstones of effective psychotherapeutic interventions (Winter, 2017; Tansey & Burke, 1995) and is a guiding principle of many professional bodies of mental health professionals (British Psychological Society, 2018; British Association for Counselling and Psychotherapy, 2018; British Association of Social Workers, 2014). According to Carl Rogers (1957), one of the founding fathers of the humanistic school of thought and a strong advocate of the use of empathy in psychotherapy:

To sense the client's private world as if it were your own, but without ever losing the “as if” quality—this is empathy, and this seems essential to therapy. To sense the client's anger, fear, or confusion as if it were your own, yet without your own anger, fear, or confusion getting bound up in it, is the condition we are endeavoring to describe. (p. 99)

Segueing from Rogers (1957) description, Elliott and colleagues (2018) considered therapeutic empathy a higher-order process that could be nested into three modes: empathic rapport and support, communicative attunement, and person empathy. Empathic rapport and support lay the groundwork for effective treatment by demonstrating a sense of compassion towards clients and communicating a sense of understanding for problems or issues faced by them (Elliott et al., 2018). Communicative attunement, often displayed by humanistic and person-centred therapists, includes active attention paid towards clients' communications and experiences unfolded in therapeutic settings on a momentary basis (Elliott et al., 2018). Lastly, person empathy (Elliott et al., 2003), typically practised by psychodynamic therapists, results in an in-depth or near-experience understanding of clients' worlds, their past or present experiences or the background of their current experiences (Elliott et al., 2018). The boundaries of distinctions among these three modes are porous and their use is contingent upon preferences of mental health professionals (Elliott et al., 2018).

Nevertheless, research suggests that empathy facilitates the development of effective therapeutic alliance with clients (Nienhuis et al., 2018; Moreno-Poyato & Rodríguez-Nogueira, 2019) and plays a vital role in determining outcomes of psychotherapy (Elliott et al., 2011; Elliott et al., 2018). However, when one is required to deeply process emotionally laden narratives of a growing caseload (as indicated in the preceding section), it is inevitable but to be concerned about adverse consequences such as depletion of empathic resources or impact on psychological health and wellbeing. According to the Conservation of Resources (COR) theory (Hobfoll, 1989, 1998), personal resources (such as, empathic resources) are renewable resources that need to be replenished from time to time to prevent exhaustion. This implies that if empathic resources are not replenished, then a professional might become vulnerable to adverse consequences such as burnout or compassion fatigue. Alternatively, secondary exposure to extremely emotional or traumatic experiences could also foster a debilitating

attachment producing an aversive impact in the form of constant rumination and lack of psychological detachment. The following section describes some of these consequences.

Adverse Consequences of Empathising

The adverse consequences of providing services that require sustained empathic reaction towards individuals experiencing psychological challenges are called in the literature by various names: burnout (Freudenberg, 1974; Maslach, 1976), secondary traumatic stress (Figley, 1995), compassion fatigue (Joinson, 1992; Figley, 1995), vicarious traumatization (McCann & Pearlman 1990; Pearlman & Saakvitne 1995); countertransference (Freud, 1923/1964; Hacker, 1957); traumatic countertransference (Herman, 1992); empathic distress fatigue (Klimecki & Singer, 2012); empathy fatigue (Stebnicki, 2008); and emotional contagion (Hatfield et al., 1993/2012). What are these concepts, and which experience a professional will have, are questions that will be addressed later in this chapter. The commonality, however, remains that all these concepts stem from prolonged empathic reaction towards others and have the potential to negatively affect mental health professionals' wellbeing and interfere with their work.

“40 different clients, 40 different stories, 40 different traumas... you're overwhelmed with everything and every story that you're hearing from everyone”

- de Figueiredo et al. (2014, p. 7)

Classical studies on emotional contagion in psychotherapy (DiMascio et al., 1955; DiMascio et al., 1957; *as cited in* Hatfield et al., 1993/2012) and recent neuroscientific evidence suggest that mental health professionals often imitate verbal and nonverbal expressions of their clients which could make them vulnerable to adverse consequences like vicarious trauma (Isobel & Angus-Leppan, 2018). Widely known in the literature as *interpersonal synchrony*, the congruence between movements and expressions of therapists

and clients have been found to be positively associated with therapeutic alliance and outcomes (Koole & Tschacher, 2016). However, it also implies that conscious or unconscious imitation of clients' movements and expressions could risk mental health professionals to experience emotions akin to their clients, which has the potential to alter their cognitive schemas and behaviours (Pearlman & MacIan, 1995; Pearlman & Saakvitne, 1995; Figley, 1995; Herman, 1992). For instance, providing psychotherapeutic services to clients with terminal diseases like AIDS or stage 3 or stage 4 cancer could challenge mental health professionals' existing schemas related to health, the fragility of existence, or the importance of life. Similarly, therapeutic engagement with vivid, traumatic narratives of rape or sexual abuse survivors could affect the quality of sexual life in intimate relationships of psychiatric social workers.

Charles Figley, the researcher who pioneered the concept of secondary traumatic stress, partly attributed the termination of his first marriage to the therapeutic work he conducted with the Vietnam war veterans (Figley & Gould, 2005). He reported that following his qualitative investigation with war veterans, he experienced symptoms of depression, poor sleep hygiene, and a general sense of being inundated (Figley & Gould, 2005). This suggests that emotions uncovered in a therapeutic context could be contagious: therapists might consciously or unconsciously reflect and experience the distress of their clients (Hatfield et al., 1993/2012; Rothschild & Rand, 2006). It could not only impair their physical and psychological health and wellbeing but could also interfere with ethical judgement and behaviour (Lawson et al., 2007; Everall & Paulson, 2004), therapeutic relationship with clients (Orpustan-Love, 2014), and treatment provided for clients' ailments (Rudolph et al., 1997, as cited in Fulk, 2014). For instance, a psychoanalyst who is reminded of his or her own sexual abuse experienced during the course of treatment with a victim might unconsciously project his or her own experiences onto the client. It could harm the analyst's interpretation of that client's experience, which could further impact the treatment recommended.

Secondary traumatic stress could also threaten social relationships established with one's colleagues or co-workers (Herman, 1992; Figley, 2002). Therefore, to mitigate these risks, *wounded or impaired* mental health professionals are often encouraged to recognise how their current psychological health could hamper their professional engagement with clients and are advised to seek professional aid for it, if required (Zur, 2020) or engage in self-care practices (Cuartero & Campos-Vidal, 2019; Posluns & Gall, 2020).

The example presented above relates to one of the many varied reactions a professional could have when providing mental health services. A significant number of mental health professionals experience what is known as compassion fatigue (Singh et al., 2021; Sodeke-Gregson et al., 2013) wherein they experience secondary traumatic stress that involves an imitation of the syndrome reported by clients, and burnout that entails an exhaustion of mental and physical resources (Figley, 1995; Stamm, 2010). The following section defines compassion fatigue and details its historical roots, conceptual clarity, and theoretical models.

Compassion Fatigue

Definition of Compassion Fatigue

According to the Oxford English Dictionary (2022), the term “compassion” traces its roots to the medieval French and Latin word, “compati” meaning “to suffer together with” or “to feel pity”. The etymology of the term “fatigue” dates back to the mid-17th century French and Latin terms for “tire out” (Dictionary, 2022). Conjoined together “compassion fatigue” implies a sense of weariness born out of feeling the agony of another person. First used in 1992 to describe chronic stress in nurses employed in emergency departments (Joinson, 1992), the term was popularized by an American researcher named Charles Figley who proposed it as a more user-friendly substitute for “secondary traumatic stress” (Figley, 1995). More than two decades later, the research community has still not been able to arrive at a consensus regarding the definition of compassion fatigue (Sinclair, 2017; Coetzee & Laschinger, 2018).

Figley's conceptualisation of compassion fatigue has also evolved over the years. It was initially described as re-experiencing the trauma endured by a client caused by a state of tension (in the therapist) created by being a witness to the suffering of that client (Figley, 1995, 2002; Figley & Gould, 2005). It was characterized by intrusive thoughts, avoidant behaviours, hypervigilance, and persistent anxiety (Figley, 1995). The more recent definition however describes it as a state of biological, psychological, and social exhaustion and dysfunction caused by stress resulting from prolonged compassion towards others (Figley, 2007). The difference between the two operationalisations relate to symptomatology. Whilst the former definition focused exclusively on the contagion of symptoms from a client to a mental health professional (also known as, secondary traumatic stress), the latter definition included symptoms of exhaustion (or burnout) as well as secondary trauma. Definitions provided by other researchers (e.g., Nelson-Gardell & Harris, 2003; Kinzel & Nanson, 2000; Rank et al., 2009) have also directly or indirectly touched upon exhaustion as one of the characteristics of compassion fatigue. However, exhaustion, according to their descriptions, mainly relate to the exhaustion of physical and psychological resources. Pfifferling and Gilley (2000) and McHolm (2006) broadened the concept of exhaustion in compassion fatigue by including spiritual exhaustion in addition to physical and psychological exhaustion under its ambit. In slight contrast to these definitions (which focus on the impact on professionals), the definition provided by Coetzee and Klopper (2010) addressed the impact of compassion fatigue on the quality of services provided to the recipients of one's care. According to their conceptualisation, compassion fatigue threatens the provision of appropriate care via a hampered empathic reaction towards patients emanating from a sense of disengagement with them (Coetzee & Klopper, 2010).

The views presented above imply that the concept of compassion fatigue is still in its infancy and requires deliberation among subject-matter experts to arrive at a consensus. One such

endeavour was carried out by Coetzee and Klopper (2010) in their concept analysis. After reviewing 34 dictionaries, 55 journal articles, and 13 books, they provided a comprehensive definition of compassion fatigue, mentioned below:

Compassion fatigue is the final result of a progressive and cumulative process that evolves from compassion stress after a period of unrelieved compassion discomfort, which is caused by prolonged, continuous, and intense contact with patients, the use of self, and exposure to stress. The manifestations increase in intensity with each progressive state, but the indicative signs of compassion fatigue are the physical effects of burnout, absence of energy, and accident proneness, the emotional effects of breakdown, apathy, and a desire to quit, the social effects of unresponsiveness, callousness, and indifference towards patients, the spiritual effects of poor judgment and disinterest in introspection, and the intellectual effect of disorderliness. (Coetzee & Klopper, 2010, p. 23)

Their definition highlights the affective, behavioural, cognitive, and spiritual aspects of exhaustion in addition to its impact on the patient-practitioner relationship (Coetzee & Klopper, 2010). However, it is important to highlight that their operationalization excludes the pivotal element of secondary trauma and appears more relevant to medical professionals (e.g., with explicit reference to “accident proneness” and “patients”), as opposed to allied health and social care professionals such as clinical psychologists, counsellors, psychotherapists, or mental health social workers. Since, the aim of the present doctoral study was to explore the concept of compassion fatigue in mental health professionals and because the measure used in Chapter 3 (i.e., the Professional Quality of Life Scale Version 5; Stamm, 2010) is partly based on the original conceptualisation (Figley, 1995), the present study adopted Stamm’s (2010) operationalisation of compassion fatigue as a combination of burnout and secondary traumatic stress.

Before discussing the conceptual clarity and theoretical models of compassion fatigue, a brief review of the historical development of this construct merits attention. It would aid in understanding the current theoretical models of compassion fatigue and discerning how it is distinct from other potentially related constructs.

Historical Development of Compassion Fatigue

A chronological examination of compassion fatigue requires us to board an arduous historical odyssey dating back to the works of the early 20th century psychoanalysts like Freud and Jung to the World War II era (1939-1945), the Vietnam war time period (1955-1975), the research conducted in the 1980s, early and mid-1990s, and finally concluding with early 21st century research. The present section will succinctly discuss the development of compassion fatigue during each period of significant historical development and will attempt to explain how the *zeitgeist* or the spirit of time influenced researchers' understanding of this concept.

According to the history of compassion fatigue literature chronicled by Newell and colleagues (2016), the idea that therapists could unconsciously absorb emotional distress of clients was the brainchild of classical psychoanalysts such as Freud and Jung (Baranowsky et al., 2005). Psychoanalysts labelled this process as countertransference and described it as the activation of unconscious or unresolved childhood conflicts (of therapists) during the course of treatment due to compatibility with repressed childhood conflicts of the client (Freud, 1923/1964; Corey, 2013). It was considered detrimental to the psychoanalytic process (Newell et al., 2016; Knott, 2016) as it could obstruct therapists' objectivity and interpretation of clients' cases (Clarkson & Nuttall, 2000; Newell et al., 2016; Knott, 2016; Freud, 1910, 1912, 1923/1964).

Making headway from the era of Freudian psychoanalysis and entering the 1940s where psychological research focused more on combat fatigue or neurasthenia (now referred to as Post-Traumatic Stress Disorder (PTSD); Newell et al., 2016; Herman, 1992) among soldiers

returning home from the war front during the World War II (Baker & Sperry, 2021; Leahey, 2004; Brysbaert & Rastle, 2013), research on mental health professionals addressed the concept of projective identification among therapists (Heimann, 1950; Racker, 1968; Grinberg, 1962; Newell et al., 2016). The concept of projective identification, although originally introduced by Klein (1946) to describe infant-mother interactions, is often linked with countertransference (Waska, 1999; Knott, 2016). It occurs following a client's projection of their feelings and emotions onto a therapist, culminating in a degree of congruence between the feelings and emotions of the therapist and their client (Knott, 2016; Tansey & Burke, 1995). It involves an unconscious psychological manipulation of the therapist by the client wherein the latter projects their undesirable feelings and emotions onto the former to produce similar feelings which could then be used to produce a sense of guilt in or to empathise with the former (i.e., the therapist; Bruscia, 2018).

Although the major historical event following the World War II (1939-1945) was the Vietnam War (1955-1975), research during that period did not focus exclusively on mental health professionals providing psychotherapeutic services to soldiers returning from the war front, instead it addressed the psychiatric wounds of military veterans (Herman, 1992). Figley started his work with Vietnam war veterans in 1971 (Figley, 2002) but his systematic investigation into the psychological impact of therapeutic work with veterans on mental health professionals began in the 1980s (Figley, 1982, 1983). Whilst referring to the adverse impact on the significant others of survivors of sexual abuse or the Vietnam war veterans, Figley (1983) introduced the concept of "secondary traumatic stress". According to Figley (1995), secondary traumatic stress involved "the natural, consequent behaviors and emotions resulting from knowledge about a traumatizing event experienced by a significant other - the stress resulting from helping or wanting to help a traumatized or suffering person" (p. 7). Described as identical to PTSD in its symptomatology, secondary traumatic stress differs from PTSD in

terms of its causal dynamics. In case of PTSD, the source of trauma is primary or experienced first-hand whereas in secondary traumatic stress, the source of trauma is secondary or experienced second-hand (Figley, 1995, 2002; Stamm, 1997). Interestingly, fourth and fifth editions of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; DSM-5; American Psychiatric Association, 1994, 2013) identify secondary exposure to trauma as a precursor to the symptoms of PTSD. This implies that mental health professionals who are often engaged with traumatised clients are vulnerable to the aversive symptoms of secondary traumatic stress such as intrusive thoughts, avoidant behaviours, and heightened arousal (Bride et al., 2004).

Figley (1995), to attenuate the stigma associated with secondary traumatic stress (attributable to explicit reference to trauma), later used the term “compassion fatigue” as a less stigmatizing and a more user-friendly term. Although the term was first used by Joinson (1992) to describe the nature of chronic stress or burnout in nurses working in an emergency department, the construct was not operationalised by her (Coetzee & Klopper, 2010). As mentioned in the section *Definition of Compassion Fatigue*, the concept was formally defined by Figley (1995, 2007) but, it still remains hotly debated among researchers working on this topic area (e.g., Sinclair, 2017; Coetzee & Klopper, 2010; Coetzee & Laschinger, 2018).

In addition to its definition, two other critical debates in the compassion fatigue literature relate to its relationship with vicarious traumatization (McCann & Pearlman, 1990) and the critique provided by social and developmental psychology and social neuroscience research on the appropriateness of the term “compassion fatigue” (e.g., Klimecki & Singer, 2012).

Similar to Figley (1995), McCann and Pearlman (1990) examined the impact of work with trauma survivors on mental health professionals’ psychological wellbeing. They labelled their construct as “vicarious traumatization” (McCann & Pearlman, 1990) and described it as a macro-level construct responsible for producing cognitive disruptions in professionals’ sense

of dependency, trust, safety, power, esteem, and intimacy as a result of empathic engagement with survivors of trauma (McCann & Pearlman, 1990; Pearlman & Saakvitne, 1995). Vicarious traumatization is distinct from compassion fatigue in the sense that the latter is broader in its focus and emphasis (Harlan, 2004). More details on the difference between the two constructs will be covered later in this chapter.

Lastly, recent research from social and developmental psychology and social neuroscience proposes that the term “compassion fatigue” lacks neuroscientific support and should instead be substituted with “empathic distress fatigue” (Klimecki & Singer, 2012). Since excessive empathic engagement plays a paramount role in the development of compassion fatigue and adverse consequences of excessive empathic engagement are a result of a lack of psychological detachment on part of practitioners (Figley, 1995), Klimecki and Singer (2012) provided neuroscientific support for their argument which will be discussed in the section *Conceptual Clarity on Compassion Fatigue: A Polemical Stance*.

The Enigma of Compassion Fatigue

As mentioned above, the noxious effects of excessive empathic reaction towards clients are known in the literature by various names. In comparison to some of those constructs, compassion fatigue is a well-researched concept and is described in literature as the “cost of caring” (Figley, 1995, p. 9). However, evaluating its conceptual ambiguity reveals that compassion fatigue continues to lack theoretical clarity (Coetzee & Laschinger, 2018; Sinclair et al., 2017) and is often used synonymously with secondary traumatic stress (Figley, 1995), burnout (Freudenberg, 1974; Maslach, 1976), vicarious traumatization (McCann & Pearlman 1990; Pearlman & Saakvitne 1995), countertransference (Freud, 1923/1964; Hacker, 1957), and traumatic countertransference (Herman, 1992). Emotional contagion (Hatfield, 1993/2012) and empathy fatigue (Stebnicki, 2008) are also two constructs similar to compassion fatigue but they have not been covered in this chapter because of the following reasons: (i) similarity

of empathy fatigue to countertransference and its dearth of support in empirical literature as an independent construct, and; (ii) the potential mediational role played by emotional contagion in the relation between interpersonal synchrony and therapist's mental health and wellbeing (as indicated in the section *Adverse Consequences of Empathising* (p. 9)). Emotional contagion could act as a process through which emotions transfer from a client to a professional. Those emotions could be varied and could range from depression to elation, whereas compassion fatigue and related constructs focus on arousal or transfer of only negative emotions in or to mental health professionals. In addition, emotional contagion could occur in any professional or non-professional group whereas concepts elucidated below are usually discussed only among allied health and social care professionals.

The aims of the present section are threefold: (i) to critically examine the parsimony of compassion fatigue as a theoretical construct; (ii) to throw light on constructs similar to compassion fatigue, and; (iii) to delineate how compassion fatigue is distinct from its related constructs.

Conceptual Clarity of Compassion Fatigue: A Polemical Stance

Whilst research on compassion fatigue began in the mid-1990s, the ambiguity surrounding its conceptualisation and measurement continues to plague researchers and practitioners even after two decades since its first use (Shar, 2019; Sinclair et al., 2017). *What are the components of compassion fatigue? What is its aetiology? How is it an orthogonal construct? Is there any sound empirical evidence to support its parsimony?* These are pertinent questions that remain unanswered and impede the growth of and further research on compassion fatigue. Ledoux (2015) argued that compassion fatigue connotes a depletion of compassion towards others over a period of time and since compassion is an ethical principle in healthcare (Zulueta, 2014; Kerasidou et al., 2020; Leget & Olthuis, 2007), its reduction is akin to moral distress: a situation

where hindrances imposed by an institution (such as, workload) deter the persuasion of a morally right course of action (Jameton, 1984; Austin et al., 2009; Ledoux, 2015).

Conceptual analyses on compassion fatigue in nurses (Coetzee & Klopper, 2010; Coetzee & Laschinger, 2018; Lynch & Lobo, 2012; Henson, 2020; Peters, 2018; Jenkins & Warren, 2012; McHolm, 2006) endeavour to differentiate between burnout and secondary traumatic stress but with regards to compassion fatigue, the clinical picture described in model cases of these analyses do not accord adequate clarity to its apparently distinct nature. According to these conceptual analyses, secondary traumatic stress caused by an over-exposure to a large number of traumatised patients has the potential to impair a nurse's psychological wellbeing leading to poor sleep hygiene, heightened arousal, and an inability to psychologically detach from patients. Burnout, according to these analyses, is understood as an exhaustion of emotional resources and a growing sense of cynicism triggered by work-related factors such as workload, administrative work, or lack of resources over a prolonged period of time. Lastly, compassion fatigue in these analyses (except for Coetzee & Klopper, 2010) is described as a distinct phenomenon that involves an immediate depletion of empathic resources due to exposure to intense trauma endured by a patient. It suggests that compassion fatigue is distinct from secondary traumatic stress in terms of degree of exposure; the latter requires an over-exposure to several traumatised patients whereas the former can be triggered by only a small number of traumatised patients. Also, it is distinct from burnout in terms of its rapid onset. However, to support this claim, studies with repeated measures design and experiential sampling method are required, which currently do not exist in research literature.

The lack of parsimony of compassion fatigue also points out interdisciplinary differences in conceptualisations of burnout and compassion fatigue. Whilst occupational health psychology views professional engagement with traumatised patients as *another job demand* having the potential to lead to burnout or secondary traumatic stress (e.g., Maran et al., 2020; Moreno-

Jiménez1 et al., 2021; Cieslak et al., 2013), researchers in nursing usually treat it as an *exclusive factor* responsible for producing feelings of compassion fatigue in medical personnel (e.g., Coetzee & Klopper, 2010; Coetzee & Laschinger, 2018; Lynch & Lobo, 2012; Henson, 2020; Peters, 2018; Jenkins & Warren, 2012; McHolm, 2006). Nursing literature usually considers burnout as arising from prolonged exposure to work-related stressors and treats it as a condition that can be improved by either withdrawing from the workplace or modifying existing workplace dynamics to rejuvenate one's resources (e.g., the classical case study of Ms. Jones by Schwartz & Will, 1953). Whereas compassion fatigue in nursing literature is conceptualised as an outcrop of the emotionally taxing nature of the work itself (e.g., Coetzee & Klopper, 2010; Coetzee & Laschinger, 2018; Lynch & Lobo, 2012; Henson, 2020; Peters, 2018; Jenkins & Warren, 2012; McHolm, 2006). Thus, the requirement to be compassionate with patients who are victims of trauma or who are suffering immensely poses a risk for nurses to get overly attached to them and experience probable adverse consequences. Therefore, to safeguard their own psychological wellbeing, nurses might emotionally withdraw from work. This withdrawal might appear similar to burnout, but it is vital to acknowledge that burnout is caused by exposure to a variety of work-related factors and takes a significant period of time to develop (Figley, 1995). Thus, attributing rapid emotional exhaustion to secondary trauma and labelling it as compassion fatigue creates a theoretical void, which requires further clarity and empirical investigation. Therefore, to clear the confusion surrounding the meaning of compassion fatigue and to enhance its conceptual clarity, it is important to advocate an inter-disciplinary scientific approach to the study of compassion fatigue.

Adopting a biopsychosocial perspective, Klimecki and Singer (2012) considered compassion fatigue a form of pathological altruism wherein the needs of others are considered more important than one's own needs even at the cost of potential harm to one's own physical and psychological health and wellbeing (McGrath & Oakley, 2012). Klimecki and Singer

(2012) argued that compassion motivated by a sense of empathy, although aimed at alleviating the distress of others, can have detrimental consequences for helpers' or caregivers' physical and psychological health and wellbeing. Based on research in social psychology, developmental psychology, and social neuroscience, they posited that the blurring of distinction between the self and the other (Hofmeyer et al., 2019) following an initial empathic response towards the suffering of others can cause fatigue in caregivers known as *empathic distress fatigue* (Klimecki & Singer, 2012; Hofmeyer et al., 2019). It is distinct from compassion fatigue in the sense that compassion reinforces positive behaviours towards others whilst maintaining a psychological partition (Klimecki & Singer, 2012; Hofmeyer et al., 2019). Whereas empathic distress fatigue involves an emulative reaction wherein a caregiver imitates the distress of their clients (Klimecki & Singer, 2012). Viewed from the lens of Figley' model of compassion fatigue (Figley, 1995), it appears that Klimecki and Singer (2012) seconded his proposition that a prolonged empathic reaction without psychological disengagement could result in a contagion of symptoms from the client to the professional consequently compromising a professional's caregiving ability. It is also akin to the caveat of "without losing the 'as if' quality" (Rogers, 1957, p. 99) that Rogers (1957) described in his conceptualisation of empathy in humanistic counselling and psychotherapy.

Although gaining popularity in research (e.g., Coetzee & Laschinger, 2018; Downing, 2018; Hofmeyer et al., 2019), even after a decade since the publication of their chapter in *Pathological Altruism* (Oakley et al., 2012), Klimecki and Singer's (2012) proposition remains unexamined. I was unable to find experimental studies validating their thesis. This might be responsible for the widespread continued use of the term compassion fatigue in healthcare and allied health and social care research literature.

Compassion Fatigue and Related Constructs

The theoretical obscurity surrounding the components, symptomatology, and aetiology of compassion fatigue has fostered a misleading use of synonymous terms such as secondary traumatic stress (Figley, 1995), vicarious traumatization (McCann & Pearlman 1990; Pearlman and Saakvitne 1995), burnout (Freudenberg, 1974; Maslach, 1976), countertransference (Freud, 1923/1964; Jung, 1976), and traumatic countertransference (Herman, 1992). It is responsible for creating ambiguity around the meaning of compassion fatigue because each of these constructs developed in different contexts and have independent assessment tools and criteria. Moreover, it has affected the interpretation of findings of studies measuring different constructs (Sabin-Farrell & Turpin, 2003). Although there is empirical evidence suggesting some convergence among compassion fatigue, secondary traumatic stress, and vicarious traumatization (e.g., Devilly et al., 2009; Ray et al., 2013), this is limited and insufficient to permit synonymous use (Craig & Sprang, 2010). Therefore, to highlight the touted overlap between compassion fatigue and related constructs, the present section will elaborate each related construct and explain how it is distinct from compassion fatigue.

Secondary Traumatic Stress.

Compassion fatigue and secondary traumatic stress were first used interchangeably by Figley (1995). Since then, the debate on similarities and differences between the two constructs has aggravated rather than arriving at a conclusion. The overlap between the two constructs can be witnessed by the degree of variation in their relationship evidenced in varied conceptualisations. According to Stamm's Professional Quality of Life Framework (2010), secondary traumatic stress (in addition to burnout) is considered a component of compassion fatigue, which is further considered a component of professional quality of life. However, this was not replicated in a confirmatory factor-analytic study on child protection workers (Geoffrion et al., 2019). Wilson and Thomas (2004) placed compassion fatigue and secondary traumatic stress under the broad umbrella of "Occupationally-Related Stress Response

Syndrome” (OSRS). In addition, by employing the definition of compassion fatigue provided by Coetzee and Klopper (2010), Eng and colleagues (2021) developed a multifactorial scale which showed moderate to high degree of convergence with the Secondary Traumatic Stress Scale (Bride et al., 2004). Such distinctions in conceptualisations and measurement suggests that the relationship of compassion fatigue with secondary traumatic stress is contingent upon the ontological position of a researcher. Theoretically, researchers have attempted to describe compassion fatigue as an independent construct (e.g., Coetzee & Klopper, 2010; Coetzee & Laschinger, 2018) but empirical findings indicate that they are related (Eng et al., 2021). Further exploratory studies are required to support their distinctiveness.

For the purpose of the present study, I considered secondary traumatic stress a component of compassion fatigue. This decision was largely pragmatic and motivated by three reasons. First, the 5th Version of the Professional Quality of Life Scale (ProQOL 5; Stamm, 2010) (which is used in the empirical study described in the fourth chapter of this thesis) considers secondary traumatic stress a component of compassion fatigue. Second, a recent systematic review on job demands and job resources associated with compassion fatigue in mental health professionals showed that scales or questionnaires generally used to assess the level of compassion fatigue (e.g., ProQOL 5; Compassion Fatigue Self-Test for Psychotherapists; Figley, 1995) in mental health professionals conceptualise it as a second-order construct with burnout and secondary traumatic stress as its two first-order factors (Singh et al., 2020). Third, there exists no other standardised psychometric scale or questionnaire in the literature to quantify compassion fatigue.¹ Therefore, the nested model of compassion fatigue with burnout and secondary traumatic stress as its two components was deemed appropriate for the present research.

¹ Although the scale developed by Eng et al. (2021) exists as a novel measure of compassion fatigue, it lacks essential psychometric validation.

Burnout.

According to Maslach's model of burnout (1982), emotional exhaustion, depersonalisation, and reduced sense of personal accomplishment are three facets that collectively contribute to an individual's experience of chronic stress or burnout. Emotional exhaustion entails a compromised ability to emotionally relate to others (Maslach, 1982; Maslach et al., 2001). Depersonalisation involves a sense of dehumanisation directed towards others fostered by a growing sense of cynicism (Maslach, 1982; Maslach et al., 2001). Lastly, a diminished sense of personal accomplishment contributes to feelings of inadequacy born out of not being able to achieve desired results (Huffman, 2016; Maslach, 1982; Maslach et al., 2001). These three components can exist in varied combinations and can affect an individual's personal and professional wellbeing (Huffman, 2016). However, of all the three components, many researchers concur that emotional exhaustion represents the core dimension of burnout (Maslach et al., 2001; Cox et al., 2005; González-Romá et al., 2006; Seidler et al., 2014; Tuithof et al., 2017; Schaufeli, 2017). This view is also supported by research on burnout in mental health professionals, which indicates high prevalence of emotional exhaustion (O'Connor et al., 2018; Konstantinou et al., 2018) and its impact of turnover intention (Yanchus et al., 2017). In a meta-analytic study determining the prevalence of burnout and collating factors associated with it, studies on mental health professionals were found to report high levels of emotional exhaustion, moderate levels of depersonalisation, and low levels of personal accomplishment (O'Connor et al., 2018). This suggests that burnout (especially emotional exhaustion and depersonalisation) remains a pertinent occupational health issue for mental health professionals. However, combining it with secondary traumatic stress and measuring them together as suggested by the Professional Quality of Life Framework (Stamm, 2010) is an issue that necessitates further attention in research literature.

The relation between burnout and secondary traumatic stress in the conceptualisation of compassion fatigue is a contentious issue that remains unresolved in research till date. Little empirical evidence exists and based on conceptual analyses of compassion fatigue in nursing (Coetzee & Klopper, 2010; Coetzee & Laschinger, 2018; Lynch & Lobo, 2012; Henson, 2020; Peters, 2018; Jenkins & Warren, 2012; McHolm, 2006), it can be argued that the distinction between burnout and secondary traumatic stress relates to four essential parameters: temporality, aetiology, symptomatology, and vulnerability of certain occupational groups. Each parameter will be discussed in the present section.

Temporality.

The first point of difference between burnout and secondary traumatic stress relates to temporality or the time required for the development of each experience. According to experts, secondary traumatic stress has a rapid onset; engagement with traumatized clients could result in a contagion of symptoms (Figley, 1995) especially when there is a certain degree of congruence between the trauma endured by clients and professionals (Rossi et al., 2012; Somoray et al., 2017; Butler et al., 2017; Thomas, 2013). Burnout, on the other hand, is an accumulative process that takes a longer period of time to develop (Figley, 1995; Fred & Scheid, 2018; Mather et al., 2014; Maslach & Leiter, 2016). Cross-sectional evidence indicates that there is a moderate to strong degree of convergence between burnout and secondary traumatic stress (Singh et al., 2020) but it is important to highlight that no empirical study till date has provided evidence for convergent and discriminant validity of scales purported to measure these constructs. In addition, correlational evidence does not answer an important question: *How can a construct that is characterised by a rapid onset of symptoms (i.e., secondary traumatic stress) be measured simultaneously with the one that is cumulative in nature (i.e., burnout)?*

Only one longitudinal study exists in the literature (Shoji et al., 2015) that aimed at answering this question. The findings of Shoji and colleagues' study (2015) provided preliminary empirical evidence to support the temporal relationship between secondary traumatic stress and burnout. Measured at two separate time intervals, their study demonstrated that burnout measured at time one predicted secondary traumatic stress measured at time two (Shoji et al., 2015). However, three major methodological limitations of their study raise concerns over the generalizability of findings: first, data were collected at only two occasions limiting the establishment of temporality (refer works of Ployhart & Vandenberg (2010) and Kelloway & Francis (2013) for limitations of two-wave longitudinal designs); second, the heterogeneous sample of the study could have introduced potential sampling error, and; third baseline levels of burnout or secondary traumatic stress were not measured or controlled. It might have been the case that there was an over-representation of participants reporting burnout. Nevertheless, the findings of Shoji et al. (2015) are in direct contradiction to Herman's (1992) assertion. Herman (1992) argued that due to therapeutic engagement with traumatised clients, mental health professionals could experience similar symptoms which could lead to the development of survivor's guilt that they might try to overcome by taking additional responsibilities at work thereby rendering them vulnerable to burnout. Her argument retains the association between work-related factors (i.e., workload) and burnout but implicates that secondary traumatic stress precedes burnout. Figley (1995) also argued that secondary traumatic stress has a rapid onset, and that burnout develops over a period of time. However, the findings of Shoji et al. (2015) are in direct contrast to these theoretical arguments. Therefore, it needs to be examined further in future longitudinal research.

Aetiology.

The second point of difference between burnout and secondary traumatic stress relates to their respective aetiologies or causal dynamics. Burnout is generally considered a cumulative

outcome of stress caused by unfavourable working conditions, dearth of sufficient job resources, or both (Demerouti et al., 2001; Maslach et al., 2001; Schauben & Frazier, 1995). Secondary traumatic stress in contrast, is mainly attributed to therapeutic work with traumatized clients (Figley, 1995). In their review, Jenkins and Baird (2002) found that workplace conditions were not associated with secondary traumatic stress. However, a meta-analytic study by Hensel and colleagues (2015) and a recent evidence synthesis (Singh et al., 2020) indicated that workplace conditions were associated with symptoms of secondary traumatic stress in mental health professionals (albeit to lesser extent in comparison with burnout). For more information on the impact of work-related factors on burnout and secondary traumatic stress, kindly refer the second chapter of this thesis.

Symptomatology.

The difference in symptomatology of burnout and secondary traumatic stress constitutes the third element of distinction between these two constructs. As mentioned before, secondary traumatic stress imitates the syndrome of PTSD (Figley, 1995), whereas burnout has been found to be a risk factor for the development of anxiety and mood-related psychological disorders such as, depression (Koutsimani, 2019; Laurent et al., 2017). This raises a question about their simultaneous assessment in compassion fatigue measures such as ProQOL 5 (Stamm, 2010). Since, both the experiences are associated with different outcomes, *is it justified to measure them together?* This question can be answered by exploring psychological consequences of burnout and secondary traumatic stress in a multi-group study with two independent groups – (i) high burnout, low secondary traumatic stress; (ii) high secondary traumatic stress, low burnout, and; (iii) high burnout, high secondary traumatic stress. If the first group is found to be more vulnerable to anxiety or mood-related disorders and the second group is found to be more prone to PTSD, then it could provide evidence for their

distinctiveness. However, if the third group demonstrates vulnerability to both anxiety or mood-related disorders as well as PTSD, then it could indicate a convergence of symptoms.

Vulnerability of Certain Occupational Groups.

Lastly, the fourth point of difference between burnout and secondary traumatic stress relates to the vulnerability of certain occupational groups in being affected by either of the two experiences. Any working professional irrespective of their occupational sector could experience burnout (Leonard, 2008). Whereas empathy-based stress like secondary traumatic stress (Rauvola et al., 2019) is more likely to affect professionals whose job requires close work with individuals with traumatic experiences (Leonard, 2008). However, a significant proportion of studies in the literature have assessed the prevalence and correlates of secondary traumatic stress in professional groups not working exclusively with traumatised populations (for more details, refer the section *Characteristics of Included Studies* (p. 63) in Chapter 2). A reason behind this could be the perceived applicability of secondary traumatic stress to varied human-services occupational groups created by the ambiguity of moniker, “compassion fatigue”. Whilst the term “secondary traumatic stress” explicates the role of interaction with traumatised individuals, compassion fatigue seems on the surface level applicable to all professional groups required to provide compassionate care to patients or clients.

Moreover, since secondary traumatic stress is a part of compassion fatigue according to the Professional Quality of Life Framework (Stamm, 2010), a large number of studies have inadvertently measured secondary traumatic stress in groups that are not necessarily working with a large number of patients or clients affected by chronic trauma (e.g., Jacobson, 2012; Samios, 2017; Zhang et al., 2021; Zhang et al., 2021; Chang & Shin, 2021). However, the rationale often provided by such studies is that due to the rising prevalence of traumatic incidents in society (such as, child sexual abuse, domestic violence, rape, gun violence in

schools etc.), mental health professionals are likely to have traumatised clients on their caseloads therefore, it is justified to measure burnout and secondary traumatic stress in these samples. However, it is crucial to recognise that mental health professionals vary in terms of their specialisations and diversity of caseload. For instance, psychological hotline counsellors working with clients with anxiety or depression are less vulnerable to experience secondary traumatic stress (e.g., Zhang et al., 2021) than military counsellors (e.g., Penix et al., 2020) working with war veterans due to the marked difference in the degree of trauma endured by their clients. Whilst some clients of psychological hotline counsellors could be victims of trauma, it is less likely to lead to secondary traumatic stress due to the relatively small number of clients with such experiences.

Vicarious Traumatization.

The concept of vicarious traumatization although originally conceived by McCann and Pearlman (1990) was later advanced by Pearlman and Saakvitne (1995). According to Saakvitne and Pearlman (1996), vicarious traumatization involves an alteration of cognitive schemas as a result of empathic engagement with survivors of traumatic experiences over a significant period of time. It can lead to cognitive disruptions in various psychosocial aspects such as safety, self-esteem, perceived value of others, self-trust, trust in others, and a sense of connection with oneself and others (Pearlman & Mac Ian, 1995; Saakvitne & Pearlman, 1996). Grounded in the constructivist self-development theory (CSDT; Pearlman & Saakvitne, 1995)², vicarious traumatization could pose a threat to personal and professional wellbeing of mental health professionals (Pearlman & Mac Ian, 1995; Saakvitne & Pearlman, 1996). It could imperil therapeutic services provided to clients and interpersonal relations of professionals both

² CSDT states that the lack of compatibility between cognitive schemas (of two or more individuals) has the potential to alter worldview of individuals (Pearlman & Saakvitne, 1995).

within and outside the sphere of workplace (Pearlman & Mac Ian, 1995; Saakvitne & Pearlman, 1996).

When broadly viewed from the perspective of symptomatology, vicarious traumatisation like secondary traumatic stress (or compassion fatigue), includes symptoms similar to PTSD such as emotional numbing, flashbacks, dissociation, obsessive thoughts, and nightmares (Beaton & Murphy, 1995). The difference, however, relates to respective clinical picture and vulnerability of certain occupational groups. A theoretical examination of temporality of symptoms revealed that unlike the acute onset of symptoms in secondary traumatic stress, the impact of vicarious traumatisation is cumulative and chronic in nature (Pearlman & Mac Ian, 1995; Baird & Jenkins, 2003; Najjar et al., 2009; Branson, 2011, 2019; Rauvola et al., 2019). Also, unlike secondary traumatic stress, vicarious traumatisation entails a disruption of cognitive schemas (Radford, 2013; Leonard, 2008; Sabin-Farrell & Turpin, 2003; Baird & Jenkins, 2003).

In terms of vulnerability of certain occupational groups, McCann and Pearlman (1990) and Pearlman and Saakvitne (1995) opined that vicarious traumatisation is more likely to affect trauma specialists since it lies under the broad purview of adverse consequences of providing trauma therapy. Whereas compassion fatigue is broader in its focus and can ail any human service professional (McCann & Pearlman, 1990; Pearlman & Saakvitne, 1995; Harlan, 2004).

Countertransference.

Following the conceptualisation of transference³, Freud observed that the expectation from therapists to be like a *tabula rasa* or a blank slate (Freud, 1909, 1912) is problematic (Freud, 1910, 1923/1964). This led to the development of countertransference as an adverse

³ Transference is a process in which a client projects his or her feelings associated with a significant figure from the past onto the therapist in the present (Corey, 2013).

consequence in classical psychoanalysis (Freud, 1923/1964; Stefana, 2015). It involves projection on part of the therapist of his or her own unresolved conflicts with significant figures from past onto a client in the present (Gladding, 2013; Corey, 2013; Gabbard, 2001). It can threaten professional boundaries of therapeutic alliance (Capri et al., 2013; Corey, 2013; Little, 2018; Stebnicki, 2008) and could have consequences for treatment accorded to clients (Hayes et al., 2018). Hayes and colleagues (2018), in their meta-analytic study found an inverse relationship between countertransference and outcomes of psychotherapy ($r = -.16$, $p = .02$, 95% CI [.30, .03], $d = 0.33$). Thus, Freud and his disciples recognised countertransference as an undesirable collateral of empathic engagement with clients that must be eschewed in psychoanalytic treatment and recommended suspension of practice and personal therapy in case an analyst was affected by it (Stefana, 2015; Geddes & Pajic, 1990; Freud, 1910, 1912; Kernberg, 1965).

Attempts have been made to distinguish countertransference from compassion fatigue or secondary traumatic stress (Figley, 2002; Stamm, 1997; Kanter, 2007; Berzoff & Kita, 2010; Cartwright, 2016). Stamm (1997) differentiated secondary traumatic stress from countertransference on the basis of their respective causal dynamics. According to Stamm (1997), exposure to secondary trauma plays a paramount role in the development of secondary traumatic stress. Countertransference in contrast, can develop even in the absence of secondary trauma (Stamm, 1997; Berzoff & Kita, 2010). Similarly, Figley (2002) opined that unlike compassion fatigue, countertransference is not usually associated with empathy. Instead, it stems from a repository of repressed, unresolved conflicts (Figley, 2002). However, unconvinced with this distinction, Kanter (2007) opined that Figley (1995) adopted an anachronistic, classical notion of countertransference and did not acknowledge the work of Neo-Freudians and object-relations theorists who pioneered a totalist approach to countertransference. According to the totalist approach advocated by Heimann (1950), Little

(1951), Racker (1968), and Kernberg (1965), countertransference, rather than being an impediment in the psychoanalytic process, could be a therapeutic tool that permits deeper understanding of clients' psychological issues. It is "more than a mere reaction to the client at the unconscious level, as originally formulated; it is the total contribution a therapist makes as a person to the client–therapist relationship" (Bruscia, 2018, para. 3). Thus, if a therapist is having an emotional reaction similar to a client, then it could act as a "means of checking whether he has understood or failed to understand his patient" (Heimann, 1950). This implies that the idea of a transfer of symptoms from the client to the therapist was the brainchild of Freudians and Neo-Freudians that Figley did not acknowledge in his extensive writings. Also, unlike psychoanalysts, Figley did not recognise the conducive role of contagion of symptoms in psychotherapeutic treatment. It led Kanter to metamorphose compassion fatigue as "old wine in new bottles" (as cited in Berzoff & Kita, 2010, p. 341).

However, Berzoff and Kita (2010) argued that the two concepts are independent because of four reasons. First, treatments suggested for both are distinct; whilst self-care is recommended for compassion fatigue, self-therapy is advised for countertransference (Berzoff & Kita, 2010). Second, in terms of temporality, countertransference develops rapidly whereas compassion fatigue develops accumulatively (Berzoff & Kita, 2010). This point, however, is unclear in terms of whether the emphasis is on burnout or secondary traumatic stress component of compassion fatigue or its conceptualisation as a unique construct. Third, Berzoff and Kita (2010) argued that the characteristic features of compassion fatigue which include physical and emotional fatigue and lack of interest in one's patients or clients are not associated with countertransference. This view was supported by Freud's memoirs and letters written to him by his students, which describe countertransference as an over-attachment with clients' concerns and an inability to distance oneself from their conflicts (Stefana, 2015). An element of fatigue was not mentioned in those anecdotal accounts. On the other hand, all conceptual

analyses on compassion fatigue in nurses as mentioned above have highlighted a depletion of personal resources as a pertinent tenet of compassion fatigue. Fourth, Berzoff and Kita (2010) opined that unlike countertransference which could be a conducive tool in psychotherapy, compassion fatigue is an occupational hazard that could impede a client's treatment. This view is supported by compassion fatigue literature (e.g., Figley, 1995) and the totalist approach to countertransference (Bruscia, 2018).

Traumatic Countertransference.

Acknowledging the role of trauma in countertransference, Herman (1992) introduced the concept of traumatic countertransference. It relates to defensive behaviour in a therapist triggered by unresolved traumatic conflicts brought to consciousness due to a client's divulgence of own traumatic experiences during the course of a therapeutic intervention (Wilson & Lindy, 1994, as cited in Kanno & Giddings, 2017). Similar to countertransference, traumatic countertransference can violate professional boundaries of clinician-client relationship which can have further negative consequences for the client as well as the clinician (Herman, 1992). Considered a risk factor for compassion fatigue (Leonard, 2008), it is differentiated from secondary traumatic stress and vicarious traumatization as a short-term response (McCann & Pearlman, 1990) that exclusively occurs in psychotherapeutic settings (Figley, 1995).

The disparate views highlighted in this section indicate that compassion fatigue in spite of being in existence for over two decades lacks conceptual clarity and empirical support. Purists might argue that it is countertransference refashioned as a simplistic term to generate applicability to a large group of varied professionals. Whereas proponents might hold the opinion that it is an independent phenomenon that has a sudden onset and involves a depletion of empathic resources. Neuroscientists on the other hand argue that the term itself is

unscientific and needs to be substituted with “empathic distress fatigue”. All these conflicting views suggest a schism in research: researchers from different disciplines and ontological positions view a construct differently. It calls for greater collaboration among researchers to reach a stage of theoretical clarity regarding compassion fatigue.

Models of Compassion Fatigue

Etiological Model of Compassion Fatigue (Figley, 1995, 2002)

Figley (1995, 2002) opined that empathy lies at the core of psychotherapeutic process; it facilitates the development of therapeutic alliance and aids the provision of effective services to clients. However, it also places a professional at a vulnerable position to experience compassion fatigue (Figley, 1995). Building upon this proposition, Figley (1995, 2002) developed a linear model of compassion fatigue comprising of ten variables⁴ that interact with one another and determine whether a mental health professional will experience compassion fatigue or not.

According to the etiological model, *empathic ability* (i.e., the ability to recognise the emotional needs of others) propels mental health professionals to respond to the psychological pain of their clients with the intention of helping them attenuate it (Figley, 1995, 2002). This motivation is labelled in the model as *empathic concern* and it allows mental health professionals to use their skills to the best advantage of their clients (Figley, 1995, 2002). Therapeutic engagement with clients provides mental health professionals *direct access to their clients’ suffering or trauma* (Figley, 1995, 2002). It permits them to enter their phenomenological world and experience it first-hand (this process is known as *empathic response*; Figley, 1995, 2002) with the caveat of recognised professional boundaries. This

⁴ Note: Some publications state that there are eleven variables in the model but since the eleventh variable is compassion fatigue, the present chapter considered it as outcome rather than a predictor.

could be a rewarding or taxing experience (Figley, 1995, 2002); witnessing growth or positive change in a client could reinforce certain behaviours or practices and enhance the self-esteem of professionals. On the contrary, prolonged empathic reaction could pose a risk of draining emotional resources (Figley, 1995, 2002). If latter were the case, then a professional could experience what is known in the model as *compassion stress* wherein the residual emotional energy is expended on meeting the continued emotional demands emanating from clients (Figley, 1995, 2002). It can have consequences for physical and psychological health and wellbeing of professionals (Figley, 1995, 2002).

According to Figley (1995, 2002), two coping mechanisms that can mitigate the likelihood of experiencing compassion fatigue are feeling a *sense of achievement* and *disengagement*. Feeling a sense of achievement in being able to help a client encourages a professional to acknowledge and respect professional boundaries thereby inoculating against compassion stress (Figley, 1995, 2002). Similarly, disengagement or distancing oneself from feelings and thoughts of clients allows a professional to engage in self-care activities and attend to their own health and wellbeing (Figley, 1995, 2002). Unless either of these two preventive actions are taken, prolonged exposure will continue and threat of adverse consequences will become more imminent (Figley, 1995, 2002). One such adverse consequence, according to the model is *traumatic recollection* (Figley, 1995, 2002). It involves implanting traumatic memories through exposure to clients' trauma or bringing to consciousness memories of repressed traumatic events experienced by a professional, as a result of engagement with traumatised clients (Figley, 1995, 2002). It could cause disruptions in a professional's life hampering their physical, psychological, and social wellbeing which could ultimately lead to compassion fatigue (Figley, 1995, 2002).

Although having an intuitive appeal, the etiological model (Figley, 1995, 2002) has been criticised by Sabo (2011) for its linearity, ambiguous conceptualisation of empathy, and lack

of focus on positive consequences of caring for others. Sabo (2011) argued that the linear direction of etiological model from empathic ability to compassion fatigue coupled with the dichotomous nature of its proposed outcome i.e., one either has or does not have compassion fatigue is “antithetical to human behavioral responses where individuals may express varying degrees of [a] response. For example, an individual may not have compassion fatigue, yet may be slightly, moderately, or severely affected by a given interaction with a patient.” (Sabo, 2011)

The second point of Sabo’s critique (2011) targets the ambiguous operationalisation of empathy in the etiological model. The paramount role played by empathy in the model, according to Sabo (2011) is too narrow in its focus and does not acknowledge the varied conceptualisations of the construct. This argument is supported by empirical research. Figley’s atomistic approach to the study of empathy does not recognise that it is a multi-faceted concept with variations in associations between varied facets and aspects of compassion fatigue. For further details, readers are directed to the section, *Burden of Empathy* in the second chapter of this thesis. Lastly, Sabo (2011) criticised the etiological model for its failure to recognise positive consequences of helping others. This point is partially true. Figley (1995, 2002) did mention the positive consequences of empathising with clients (positive change in client’s behaviour or thinking following *empathic response* could enhance the self-esteem of a therapist) in his model but focused more on negative consequences like compassion fatigue. Also, in later conceptualisations (e.g., Professional Quality of Life Framework; Stamm, 2010), the concept of compassion satisfaction was introduced as an opposite dimension to compassion fatigue.

Professional Quality of Life Framework (Stamm, 2010)

“Professional quality of life is the quality one feels [i]n relation to their work as a helper. Both the positive and negative aspects of doing one’s job influence one[’]s professional quality

of life. People who work in helping professions may respond to individual, community, national, and even international crises.” (Stamm, 2010, p. 8) According to the Professional Quality of Life Framework (Stamm, 2010), professional quality comprises of compassion fatigue (a combination of burnout and secondary traumatic stress) and compassion satisfaction. The framework classified the predictors of professional quality of life into three broad categories namely, work environment, client environment, and person environment. However, it is important to note that it did not operationalise these categories or provide a list of variables included under each category. In addition, the model in its entirety has not been examined till date in empirical literature.

Coetzee and Laschinger’s (2018) Theoretical Model of Compassion Fatigue

Based on a review of existing models in compassion fatigue literature, the Conservation of Resources theory (Hobfoll, 1989, 1998), and evidence from social neuroscience research (Klimecki & Singer, 2012), Coetzee and Laschinger (2018) developed a theoretical model of compassion fatigue. According to their model, the quality and quantity of an existing object, condition, or personal resource determine how healthcare professionals appraise patients’ demands (Coetzee & Laschinger, 2018). If they perceive a dearth of resources, then they will focus on their own needs; psychologically withdrawing from their patients (Coetzee & Laschinger, 2018). This could compromise the quality of services delivered to patients which in turn could result in negative feedback from colleagues which could further affect interactions with individuals outside the sphere of workplace (Coetzee & Laschinger, 2018). This could propel a vicious cycle wherein strained relations created by psychosocial hazards at work could further dampen occupational performance (Coetzee & Laschinger, 2018). In contrast, if existing repository of resources is deemed sufficient, then professionals will be focused on addressing needs of their patients and recognising their role as professional helpers (Coetzee & Laschinger, 2018). This could have a positive impact on quality of services delivered which

could produce a ripple effect on occupational wellbeing and interpersonal relations outside the sphere of workplace (Coetzee & Laschinger, 2018).

Akin to the transactional model of stress (Lazarus & Folkman, 1984), Coetzee and Laschinger's (2018) model acknowledged the role of individual appraisal of resources and demands. However, similar to Figley's (1995, 2002) model, it is linear in direction (Sabo, 2011). It assumes that experiences culminate in a stepwise order whereas, the reality could be complex or curvilinear (Karanika-Murray, 2010). The resources highlighted as the first step could exist in multiple permutations and combinations influencing employees' work experiences (e.g., Greenhaus & Powell, 2006; Siu et al., 2010; Timms et al., 2015). The positive feedback resulting from compassionate care delivered to patients could also be responsible for compassionate care provided to patients in the first place. For instance, positive feedback from family members could impact psychological wellbeing at workplace which could further result in the delivery of compassionate care.

A Brief Review of Risk and Preventive Factors Associated with Compassion Fatigue in Mental Health Professionals

A large body of research has examined various risk and preventive factors associated with compassion fatigue in mental health professionals. Some of these factors include coping strategies (Udipi et al., 2008; Zeidner et al., 2013), spirituality (Injeyan et al., 2011), mindfulness (Thieleman & Cacciatore, 2014; Zeidner et al., 2013), being female (Rossi et al., 2012; Sprang et al., 2007; Thompson et al., 2014), personal history of traumatic events (MacRitchie & Leibowitz, 2010; Killian et al., 2008; Rossi et al., 2012; Thomas & Otis, 2010; Nelson-Gardell & Harris, 2003), attachment style (Tosone et al., 2010), dispositional optimism (Injeyan et al., 2011), and exposure to traumatic events (Boscarino et al., 2004) among others. In a narrative review of 32 studies, Turgoose and Maddox (2017) found that mental health

professionals' personal history of trauma was the most frequently examined risk factor for compassion fatigue. This suggests that professionals with a personal history of trauma might encounter difficulties in distancing themselves from their clients. They might identify with their clients, which could lead to symptoms of secondary traumatic stress such as, intrusive thoughts and avoidant behaviours (Figley, 1995).

Although important to examine, individual-level antecedents such as personal history of trauma, mindfulness, or spirituality (Turgoose & Maddox, 2017) might be less amenable to change in comparison to work-related factors such as, co-workers' support, supervisor's support, and job control among others. In a systematic review of secondary interventions to reduce compassion fatigue in emergency and community service workers, Cocker and Joss (2016) found minimal support for the efficacy of interventions designed to develop employees' personal resources. Also, a recent large-scale cross-sectional study on the effectiveness of individual level mental health interventions (resilience training, mindfulness, and well-being apps) found no significant difference in the subjective wellbeing of participants and non-participants (Fleming, 2024). This suggests the need for researchers and organisations to focus more on potentially alterable work-related factors. Thus, the second chapter of this thesis is a systematic review of work-related factors associated with compassion fatigue in mental health professionals. It highlights several job demands (such as workload, burden of empathy, and traumatic experiences at workplace) and job resources (such as supervisors' support, coworkers' support, organisational support, empathic alliance, use of evidence-based practices, and sense of autonomy) that have the potential to foster or attenuate experiences of compassion fatigue. It provides insights for designing interventions to increase the job resources to counter the negative effect of job demands on employees' mental health and well-being. For more details, refer chapter 2.

Measurement of Compassion Fatigue

Sinclair et al. (2017) and Bercier (2013) chronicled the brief history of scales or instruments designed to assess compassion fatigue. According to them, the first scale developed to measure compassion fatigue was known as the Compassion Fatigue Self-Test (CFST; Figley, 1995; Figley & Stamm, 1996). It was developed specifically to assess the levels of compassion fatigue in psychotherapists. It comprised of 40 items (rated on a 3-point Likert scale: '1 = Very True', '2 = Somewhat True', and '3 = Rarely True'), which were divided into two subscales namely, compassion fatigue (23 items) and burnout (17 items). Examples of items from the compassion fatigue subscale include: "I can be so focused on someone I am helping that I lose sight of my own perceptions, interests and desires.", "When listening to someone's problems, I am more aware of their feelings than I am of my own feelings." Examples of items from the burnout subscale include: "I seem to be working harder and accomplishing less.", "I take work home frequently." It is important to highlight that the test did not have a clear scoring system. The only scoring criterion was that if a professional selected the 'Very True' option for more than 15 items then, they were encouraged to evaluate their self-care issues (Figley, 1995). In addition, the psychometric properties of the test have not been rigorously evaluated in the research literature (Jenkins & Baird, 2002).

CFST was revised as the Compassion Satisfaction/Fatigue Self-Test (CSFST) by Figley and Stamm between 1995 and 1998 (Bercier, 2013). It included 66 items, which were rated on a 5-point Likert scale ('0 = Never' to '5 = Very Often'). The items were divided into three subscales: compassion satisfaction (26 items; e.g., "I have beliefs that sustain me.", "Working with those I help brings me a great deal of satisfaction."), burnout (16 items; e.g., "I have concluded that I work too hard for my own good.", "I have felt "on edge" about various things and I attribute this to working with certain people I help."), and compassion fatigue (23 items; e.g., "I force myself avoiding certain activities or situations because they remind me of a frightening experience.", "I find myself to avoid certain thoughts or feelings that

remind me of a frightening experience.”). In contrast to CFST, CSFST had a clear scoring system. The scale developers provided cut-off values for low, medium, and high risk for all the assessed variables. However, no information was provided about how the proposed cut-off values were developed, which poses an important question about the criterion-related validity of the scale.

Stamm (2005) revised CFST to create the Professional Quality of Life Scale (ProQOL). It is a 30-item instrument with three subscales (Compassion Satisfaction [“I get satisfaction from being able to help people.”], Burnout [“I feel trapped by my work as a helper.”], and Compassion Fatigue/Secondary Trauma [“I think that I might have been “infected” by the traumatic stress of those I help.”]) comprising of 10 items each. The items are rated on a 5-point Likert scale ranging from ‘0 = Never’ to ‘5 = Very Often’. The internal consistency values of subscales are satisfactory (Cronbach’s alpha values above .70) and are reported in the scale manual (Stamm, 2005). The scale developer also reported low covariances among subscales as evidence for discriminant validity (Stamm, 2005).

It is important to mention here that the development of ProQOL (Stamm, 2005) was preceded by the publication of the Compassion Fatigue Self Test – Revised for Care Providers (CF – R; Gentry et al., 2002). It includes 30 items that are rated on a 10-point Likert scale (‘1 = Rarely/Never (N/A)’ to ‘10 = Very Often’). The two subscales included in this instrument are: (i) post traumatic and/or secondary traumatic stress (22 items; e.g., “While caring for a victim I thought about violence against the perpetrator.”, “I am experiencing troubling dreams similar to those of a client of mine.”) and (ii) burnout (7 items; e.g., “I have thought that there is no one to talk with about highly stressful work experiences.”, “I have frequently felt weak, tired, or rundown as a result of my work as a caregiver.”). The combined score on both the subscales was used to evaluate a professional’s risk level for compassion fatigue. The scale developers (Gentry et al., 2002) provided no

information about the development and validation of the scale. Lastly, it remains unclear regarding why Gentry and colleagues (2002) revised the items of CFST and not CSFST considering the latter was a revision of the former. Due to this reason, there is ambiguity in the research literature around whether ProQOL should be considered the third or the fourth revision in the series of scales that have been developed. In some articles, it is considered ProQOL III (e.g., Smallwood-Butts, 2012, Killian, 2008) and in others, it is considered ProQOL (e.g., Sprang et al., 2007; Jacobson, 2006).

The fifth and the most recent revision is the Professional Quality of Life Scale Version 5 (ProQOL 5; Stamm, 2010). It includes three subscales – Burnout (“I feel overwhelmed because my case [work] load seems endless.”, “I feel "bogged down" by the system.”), Secondary Traumatic Stress (“I jump or am startled by unexpected sounds.”, “I find it difficult to separate my personal life from my life as a [helper].”), and Compassion Satisfaction (e.g., “I like my work as a [helper].”, “I am pleased with how I am able to keep up with [helping] techniques and protocols.”) – comprising of 10 items each (rated on a 5-point Likert scale [‘1 = Never’ to ‘5 = Very Often’]). The subscales have demonstrated satisfactory levels of internal consistency (Cronbach’s alpha values above .70; Stamm, 2010) but there is (relatively) considerable research on its factorial validity (e.g., Samson et al., 2016; Galiana et al., 2017; Duarte, 2017). It is not clear in research literature whether the scale measures two inter-related but distinct constructs i.e., whether burnout and secondary traumatic stress subscales can be combined to assess compassion fatigue or are they separate components of a second-order construct called compassion fatigue (Geoffrion et al., 2019). This has implications for the theoretical clarity of compassion fatigue. Also, from the standpoint of accurate measurement, it casts aspersions over the validity of studies that report low, moderate, or high levels of compassion fatigue or compassion satisfaction in their samples (Coaley et al., 2014). Moreover, the usage of a scale with unsound psychometric

properties with other scales or research instruments in the examination of complex models raises a pertinent question over the internal and external validity of applied research. ProQOL 5 has been subjected to a rigorous psychometric evaluation in the fourth chapter of this thesis. For more details, refer Chapter 4.

Summary of Chapter One

Chapter one details the role of empathy in making mental health professionals vulnerable to adverse occupational experiences, discusses the historical development and major tenets of theoretical models of compassion fatigue, critiques the conceptual clarity of compassion fatigue as an independent construct, and briefly described the instruments to measure compassion fatigue. It highlights two major limitations in compassion fatigue research. First, conflation of compassion fatigue with existing theoretical constructs, and second, the lack of empirical evidence to support theoretical models of compassion fatigue.

The first limitation referred to debates among researchers from varied disciplines and sub-disciplines regarding whether compassion fatigue is an orthogonal construct or is it just an exemplar of construct proliferation, an infamous practice of developing constructs that are similar to existing constructs. Based on available evidence, it is not possible to conclude that compassion fatigue is distinguishable from other-related constructs such as, burnout, countertransference, and vicarious traumatisation. Thus, it is vital that prior to developing applied models around risk and preventive factors of compassion fatigue, research is conducted to determine whether compassion fatigue is even a distinct construct that warrants attention or not.

The second limitation regarding lack of empirical evidence supporting major tenets of theoretical models of compassion fatigue relates to conceptual clarity of the construct. The most popular theoretical model, which is the Professional Quality of Life Framework (Stamm,

2010) has not been empirically validated in research, yet it is used as a theoretical framework to guide empirical investigations (e.g., Singh et al., 2020). Moreover, its conceptualisation of compassion fatigue as a higher-order construct with burnout and secondary traumatic stress as sub-components is not shared by other models such as, the Etiological Model (Figley, 1995, 2002) or Coetzee and Laschinger's (2018) model. This suggests that in spite of almost three decades of research, there is ambiguity and lack of consensus around the conceptualisation of compassion fatigue.

Based on the evidence reviewed in chapter one, it can be concluded that there is a pressing need for research on conceptualisation and theorisation of compassion fatigue to ascertain its orthogonality. It is also imperative to conduct inter-disciplinary research to prevent the growth of multiple constructs that are very similar to each other. Researchers conducting research on compassion fatigue in various occupational groups need to reach a consensus regarding its theoretical conceptualisation before developing and examining applied models.

Impact of COVID-19 Pandemic on the Doctoral Project

The current doctoral project started in January 2020. After spending approximately 10 months reviewing literature around the history, conceptual clarity, theories, and measurement of compassion fatigue, and conducting a systematic review of job demands and job resources associated with compassion fatigue in mental health professionals, the plan was to conduct a mixed-methods study. It included a quantitative longitudinal study with three waves of data collection separated by a period of three months each on job demands⁵ and job resources⁶ associated with compassion fatigue (burnout and secondary traumatic stress) in allied mental

⁵ Job demands included the following variables: quantitative demands, work pace, cognitive demands, emotional demands, demands for hiding emotions, role conflict, job insecurity, insecurity over working conditions, threats of violence, and physical violence.

⁶ Job resources included the following variables: influence at work, possibilities for development, control over working time, meaning of work, predictability, recognition, role clarity, quality of leadership, social support from supervisor, social support from colleagues, sense of community at work, vertical trust, and organisational justice.

health professionals (clinical psychologists, counsellors, and psychotherapists) working in the NHS and private practice. The study aimed to examine the moderating role of job resources in the relation between job demands and compassion fatigue⁷. Since one of the limitations of previous research mentioned in the systematic review was over-reliance on cross-sectional design, it was opined that a longitudinal study could aid in clarifying the relationships among variables found in previous cross-sectional research. Also, it would permit the determination of temporal relations among variables.

The longitudinal study was supposed to be followed by a qualitative interview-based study with participants randomly invited from the database created for the quantitative, longitudinal study. It would have helped triangulate the findings of the longitudinal study and provide in-depth information about mental health professionals' occupational well-being. To execute this plan, associations were formed with three large UK-based professional bodies of mental health professionals.

The data collection started in November 2020 but, by the end of the first wave (i.e., December 2020), the prospects of conducting a longitudinal study tarnished. The number of participants recruited in the first wave of data collection ($N = 165$) was very far from the expected sample size ($N = 800 - 1,000$). Thus, the decision to conduct a longitudinal study was substituted with a cross-sectional study. However, after the completion of data collection (i.e., 31st May 2020) and data cleaning, it was realised that due to the extremely high percentage of missing data, it was not possible to examine the associations among challenging job demand, hindrance job demands, structural job resources, social job resources, and burnout, secondary traumatic stress, and compassion satisfaction. The only remaining viable option was to conduct a psychometric study to examine the factorial validity

⁷ Note. Compassion satisfaction would have also been examined as an outcome variable.

of ProQOL 5 (Stamm, 2010). It was discovered during review of literature that no study to date examined the psychometric properties of ProQOL 5 (Stamm, 2010) in a sample of health and social care professionals in the UK. This was surprising because the scale is popularly used in research on those professionals in the country (e.g., Singh & Hassard, 2021; Bridger et al., 2020). Thus, conducting a psychometric study to validate the scale on mental health professionals in the UK was deemed a constructive use of the collected data. For more details on the impact of the COVID-19 pandemic on the doctoral project, refer Appendix F (p. 838).

Overview of Subsequent Chapters

The present doctoral project is a culmination of three research studies on compassion fatigue in mental health professionals. Each study endeavours to fill a crucial gap in compassion fatigue research. Existing research in compassion fatigue has paid a disproportionate amount of attention to individual-level factors in making professionals vulnerable to compassion fatigue thus, to address this gap in research, the first study discusses the association between occupational risk and preventive factors and compassion fatigue. It is a systematic review of work-related factors associated with compassion fatigue in mental health professionals. The findings suggested that job demands such as, quantitative and qualitative workload, burden of empathising with clients, and traumatic experiences at workplace were positively associated with burnout and secondary traumatic stress in mental health professionals. Job resources such as, co-workers' support, supervisors' support, sense of autonomy, and empathic alliance with clients fostered a sense of compassion satisfaction (i.e., pleasure derived from helping others; Stamm, 2010). In addition, the review highlighted methodological limitations of existing research such as, the lack of use of standardised measures, small heterogeneous samples, inaccurate operationalisation of predictor variables, lack of theory-driven research, and an over-reliance on cross-sectional design.

Of 44 studies included in the systematic review, only 5 were conducted in the UK (Sodeke-Gregson et al., 2013; Bell et al., 2019; Towey-Swift & Wittington, 2019; Thompson, 2018; Linley & Joseph, 2007). Majority of the studies ($N = 28$) were conducted in the United States. The dearth of findings from the UK suggests a gap in the research literature on compassion fatigue in mental health professionals. It might be the case that findings of research studies conducted in other countries (e.g., the USA or Canada) might not be generalizable to a UK context. In a meta-analytic review of the prevalence and determinants of burnout in mental health professionals, O'Connor et al. (2018) found that when only studies conducted in North America were considered, the pooled mean estimate for lack of personal accomplishment (a component of burnout) increased whereas, when only studies from Europe (including the UK) were considered, the pooled mean estimate for lack of personal accomplishment decreased. This suggests geographical variations in the extent to which professionals experience burnout (a construct similar to compassion fatigue), implying a need for conducting additional research in the UK to prevent an inaccurate translation of research findings from one country onto another.

In addition, the systematic review synthesised findings from only quantitative studies, which albeit important for generalisation, might not succeed in providing in-depth information about professionals' occupational experiences and/or deciphering the connections among various risk and preventative factors influencing their professional experiences and well-being. Thus, to validate or triangulate the findings of quantitative research (Willig, 2013), it was considered imperative to conduct an in-depth qualitative research study on work-related factors having the potential to influence the professional practice and experience of mental health professionals. It helped in gaining deeper insights about the relationships among variables identified in previous quantitative research studies conducted in the UK and other countries. Thus, the systematic review detailed in the second

chapter of this thesis was followed by a chapter describing an interview-based phenomenological study conducted on 19 mental health professionals - 11 employed by the National Health Service (NHS) and 8 working in independent settings - about their professional experiences during the COVID-19 pandemic. This study adopted a wider, contextual perspective to comprehend mental health professionals' occupational experiences during the COVID-19 pandemic, for two reasons. First, due to the unprecedented nature of the pandemic, it was opined that it would be better to study mental health professionals' experiences holistically rather than focusing on only certain aspects of occupational wellbeing (such as, burnout or secondary traumatic stress). In other words, by addressing only the impact of the pandemic on compassion fatigue, the likelihood of gaining a rich, complex understanding of various forces influencing professionals' lived experiences could have been forestalled. Therefore, it was decided to conduct semi-structured interviews aimed at capturing the complexity of participants' vivid experiences. Second, since the approach was phenomenological in nature, the requirement to bracket or conceal pre-conceived ideas had to be met to allow novel findings to emerge. The findings of the study highlighted factors in addition to job demands and job resources identified in the systematic review that were associated with the occupational wellbeing of mental health professionals such as, transition from face-to-face to online therapy, support provided by professional bodies, and sense of disappointment in senior management in the NHS among others. The study provides an essential, holistic context that aids understanding interactions among the wider structural, psychological, and management-related forces in influencing professionals' experiences of compassion fatigue.

Moreover, it is important to mention here that several themes and subthemes discussed in the qualitative study were closely related to the symptoms of secondary traumatic stress and burnout measured by ProQOL 5 (Stamm, 2010). Participants in the qualitative study

mentioned experiencing the trauma of their clients and dreaming about the issues faced by their clients due to the vicissitudes of providing online therapy from home. They also stated a deep sense of disappointment in the senior management of their organisation, suddenly having a large, unmanageable caseload volume, and an impaired balance between their personal and professional lives. These experiences are very similar to some of the items of ProQOL 5 such as, “I am not as productive at work because I am losing sleep over traumatic experiences of a person I [help].” (Item 8), “I think that I might have been affected by the traumatic stress of those I [help].” (Item 9), “I feel overwhelmed because my case [work] load seems endless.” (Item 21), and “I feel "bogged down" by the system.” (Item 26) among others. Thus, to understand how the symptoms of secondary traumatic stress and burnout relate to each-other i.e., which symptoms are closely related, and which are negatively associated with each-other, a psychometric study examining the internal structure of ProQOL 5 (Stamm, 2010) was conducted.

The third and final study in this thesis is an empirical study evaluating the psychometric properties of ProQOL 5 (Stamm, 2010). This study used confirmatory factor analysis to examine the factorial structure of ProQOL 5 in a sample of 366 clinical psychologists, counsellors, and psychotherapists working in organisational and independent settings in the UK. Due to the lack of support for the scale’s factorial structure, a novel technique in network psychometrics called bootstrapped Exploratory Graph Analysis (bootEGA) was used to explore the structure further. The findings indicated that in lieu of the original 30-item structure, a renewed 21-item structure demonstrated stability in more than 80% of bootstrapped samples. In addition, the findings highlighted networks of secondary traumatic stress and burnout, the central symptoms in each network, which could trigger other symptoms in a chain reaction, and the association of each symptom and network with aspects of compassion satisfaction. This study was, to the best of my knowledge, the first

psychometric study to evaluate the validity of ProQOL 5 in a sample of UK-based mental health professionals and it provided preliminary evidence in favour of a revised scale. As mentioned in the section, *Measurement of Compassion Fatigue* (p. 39), the dearth of psychometric studies examining the factorial structure of the scale risks inaccurate assessment and inferences derived from applied research. Thus, by providing preliminary evidence for a revised structure, the study attempted to address an important gap in the research literature.

The thesis is concluded by a general discussion and critique chapter that aims to draw connections among preceding chapters and highlights limitations and scientific and practical implications of findings of this doctoral project.

CHAPTER TWO

WORK-RELATED FACTORS ASSOCIATED WITH COMPASSION FATIGUE IN MENTAL HEALTH PROFESSIONALS: A SYSTEMATIC REVIEW

Abstract

Psychosocial hazards in mental healthcare contribute to the development of compassion fatigue in mental health professionals. Compassion fatigue has a negative impact on mental health and wellbeing of mental health professionals which can further negatively impact the quality of services provided to clients. Majority of research on this construct has focused on individual-level characteristics such as gender, history of trauma, mindfulness, coping mechanisms, and age, among others. It is imperative to understand the role played by alterable work-related characteristics in order to attenuate its impact on mental health professionals and to design appropriate interventions. Thus, the aim of the present review was to examine and synthesize articles exploring work-related factors associated with compassion fatigue in mental health professionals. Forty-four quantitative studies were included, and their quality was assessed using a validated checklist. An inductive content-analysis was conducted to synthesize themes and subthemes emerging from data. The results suggested a theoretical model consistent with the Job Demands-Resources model, wherein job demands (such as workload, burden of empathy, and traumatic experiences at workplace) were associated with compassion fatigue, and job resources (such as supervisors' support, coworkers' support, organisational support, empathic alliance, use of evidence-based practices, and sense of autonomy) were found to mitigate the impact of job demands. The review concludes that in conjunction with person-related factors, work-related factors are also critical for the development and prevention of compassion fatigue thus it merits further research. Limitations and scientific and practical implications of the current study are discussed.

Introduction

A vital skill for mental health professionals is to be able to empathise with clients (Gladding, 2013). Empathy is associated with the development of an effective therapeutic alliance with clients (Rogers, 1967; Kohut, 2010; Beck, 1979), which is further associated with outcomes of treatment (Frued, 1939; Flückiger et al., 2012). A meta-analytic study by Elliott and colleagues (2018) found that empathy is a significant predictor of outcomes of psychotherapy. Rogers (1967), a prominent advocate of the use of empathy in mental healthcare, defined it as the ability to enter the private world of a client as if it is one's own without ever losing the "as if" quality. The proviso specified in this definition, of not losing oneself in the client's narrative, may be easier said than done. To help alleviate a client's pain or trauma, a mental health professional has to listen to and to some degree absorb the *pain of a client* (Morrissette, 2004; Rothschild, 2006). However, recurrent exposure to distressing information may take a toll on the mental health of a mental health professional (Newell & MacNeil, 2010).

Excessive empathic engagement with clients' traumatic information is a risk factor for secondary traumatic stress (Canfield, 2005; Jachens et al., 2018). It is a syndrome that mimics the symptoms of post-traumatic stress disorder (PTSD) but unlike PTSD, it is caused by secondary exposure to trauma (Figley, 1995; Stamm, 1999). Secondary traumatic stress has an aversive impact on mental health and wellbeing of a professional leading to psychological issues such as strained interpersonal relationships, insomnia (or poor sleep hygiene), and major depressive disorder (Canfield, 2005). If early measures to counter negative effects of excessive empathic involvement are not taken, then a mental health professional could become vulnerable to burnout (Figley, 1995). Burnout involves feelings of emotional exhaustion, a sense of detachment towards the recipients of one's care, and a plummeting sense of competence (Maslach & Jackson, 1981). Studies have highlighted moderate to high rates of burnout and secondary traumatic stress in mental health professionals such as clinical psychologists,

counsellors, psychotherapists, psychiatric social workers, and psychiatric nurses (Diehm et al., 2019; Makadia et al., 2017; Ivicic & Motta, 2017; McCormack et al., 2018; Berjot et al., 2017; O'Connor et al., 2018; Singh & Hassard, 2021).

The combination of secondary traumatic stress and burnout is commonly referred to as *compassion fatigue* (Figley, 1995; Rauvola et al., 2019; Bride et al., 2007). Although the term is used synonymously with *burnout* (Maslach & Jackson, 1981), *secondary traumatic stress* (Bride et al., 2007), *vicarious traumatization* (McCann & Pearlman, 1990), and *traumatic countertransference* (Rothschild, 2006), the present review focuses exclusively on *compassion fatigue* for the purpose of consistency and because some researchers have attempted to distinguish it from other similar constructs (e.g., Newell & MacNeil, 2010; Shoji et al., 2015). According to Cocker, and Joss (2016), compassion fatigue (CF) is the “stress resulting from exposure to a traumatised individual. CF has been described as the convergence of secondary traumatic stress (STS) and cumulative burnout (BO), a state of physical and mental exhaustion caused by a depleted ability to cope with one’s everyday environment.” (p. 1). Signs of compassion fatigue include chronic physical and emotional exhaustion, depersonalization, feelings of inequity, touchiness, headaches, loss of weight, and negative feelings towards work, life and others outside the therapeutic relationship (Negash & Sahin, 2011). Mental health professionals experiencing compassion fatigue might also experience self-contempt, feelings of low job satisfaction, psychosomatic ailments, absenteeism, or substance abuse among other adverse outcomes (Mathieu, 2007).

A 2013 cross-sectional study (Sodeke-Gregson et al., 2013) reported that 70% of psychotherapists employed by UK’s National Health Service (NHS) were vulnerable to experiencing chronic levels of secondary traumatic stress and average levels of burnout. In addition, a 2016 report published by the British Psychological Society (BPS), based on a survey conducted by New Savoy, reported that 48% of psychotherapists in the NHS reportedly

experienced symptoms of depression, 25% experienced a long-term chronic condition, and 70% reported experiencing occupational stress (MAILONLINE REPORTER, 2017). Depression, chronic health impairment, and experience of work-related stress have all been associated with compassion fatigue (Canfield, 2005; Mathieu, 2007; Barr, 2017). In spite of this, the existing literature has paid more attention to the role of relatively stable individual-level characteristics such as, gender, age, history of trauma, negative life events, coping style, and attachment style among others (e.g., Rauvola et al., 2019; Connally, 2012; Rossi et al., 2012; Rochell & Buonanno, 2018; Gleichgerrcht & Decety, 2013; Salloum et al., 2015; Barr, 2017; Hamid & Musa, 2017; Thomas, 2013; Valavanis, 2019; Roden-Foreman et al., 2017; Borges et al., 2019) as opposed to the more dynamic, extrinsic, and potentially alterable work-related factors. A relatively small body of research that has investigated the role of work-related factors has found that workload, client-related difficulties, relations with other health professionals, emotional labour, supervisor's support, and co-workers' support are some of the work-related factors that have been associated with compassion fatigue in mental health professionals (Creamer & Liddle, 2005; Sprang et al., 2007; Singh & Hassard, 2021; Finzi-Dottan & Kormosh, 2016; Phelps et al., 2009; Badger et al., 2008).

A narrative review of factors associated with compassion fatigue in mental health professionals found that caseload (or the number of traumatised clients seen per week) was the only significant work-related factor predicting compassion fatigue in mental healthcare personnel (Turgoose & Maddox, 2017). Other non-work-related factors included professionals' history of trauma, trait-based mindfulness, dispositional or trait empathy, socio-demographic factors (such as, age, experience, and gender), and religiosity (Turgoose & Maddox, 2017). However, it is important to highlight that the review focused on articles published until the end of August 2014. This implies the need for a revised, updated synthesis of studies especially since the growing prevalence of various mental health conditions

(McManus et al., 2016) could have an impact on the workload of existing workforce in mental healthcare (Mental Health Analysis Team, 2017, 2018, 2018, 2019). Furthermore, the review by Turgoose and Maddox (2017) did not provide adequate information about reliability checks (such as, the degree of inter-rater agreement for selecting articles for a full-text review or scores provided for assessing studies' quality) casting aspersions over the rigor of the study selection process, transparency and replicability of the review (Belur et al., 2018; Gough et al., 2017). According to AMSTAR guidelines, a "good" review article should achieve an inter-rater agreement of at least 80% (Shea et al., 2017). In contrast, the review by Turgoose and Maddox (2017) did not provide any such information.

Considering compassion fatigue as an occupational health and safety issue, the literature in occupational health psychology suggests that providing primary interventions to eliminate stressors are more time- and cost-effective than delivering secondary interventions to develop personnel's personal resources (Lamontagne et al., 2007; Montano et al., 2014). For instance, amending the workload of professionals is generally preferred over influencing their psychological coping mechanisms. However, some evidence indicates that a combination of individual, group, and organizational-level interventions are the most effective for psychological issues faced by employees (Corbiere et al., 2009). A systematic review of literature on secondary interventions to reduce compassion fatigue in emergency and community service workers found that out of 13 included studies, only 4 (30%) reported a significant decrease in burnout and only 3 (23%) reported a significant decrease in secondary traumatic stress (Cocker & Joss, 2016).

In light of the evidence presented above, it is important for compassion fatigue research to place more emphasis on work-related factors for two primary reasons: (i) to complement the existing evidence on person-related factors, and; (ii) to inform the development of primary interventions to attenuate the impact of work-related factors on the mental health and wellbeing

of mental health professionals. Therefore, the aim of the present systematic review is to synthesise and critically examine existing empirical evidence exploring the role of work-related factors in the development and mitigation of compassion fatigue in mental health professionals.

Materials and Methods

A scoping review of literature was conducted prior to the commencement of the present systematic review. The results of scoping review aided the development of a research protocol which was agreed upon by the doctoral candidate (JS) and supervisors (TB, JH, and MKM). The systematic review process followed the guidelines of Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA; Moher et al., 2009). PRISMA guidelines provide a set of items informed by empirical research for conducting a systematic review and meta-analysis (Moher et al., 2009). Although they were originally developed for reporting systematic reviews and meta-analyses collating evidence from randomized-controlled trials (Moher et al., 2009), they are now also being increasingly used for reporting systematic reviews of studies adopting varied research designs and in diverse scientific disciplines (e.g., Teoh et al., 2019; McCormack et al., 2018; Cocker & Joss, 2016; Singh et al., 2020).

Search Strategy

Online databases to search relevant research studies included Academic Search Complete, ProQuest Central, Web of Science, PsycINFO, PTSDpubs, Science Direct, Pubmed, and ProQuest Dissertations & Theses. The search strategy included a combination of the following terms: “*Compassion Fatigue*” AND (“*Clinical Psychologist*” OR “*Counsellor*” OR “*Counselor*” OR “*Psychotherapist*” OR “*Therapist*” OR “*Psychiatric Social Worker*” OR “*Mental Health Social Worker*” OR “*Psychiatric Nurse*” OR “*Community Psychiatric Nurse*” OR “*Community Mental Health Nurse*” OR “*Psychiatrist*” OR “*Mental Health Professional*” OR “*Mental Health Worker*”). The search was restricted to studies published in English (or

where an English translation was available) in peer-reviewed journals or post-graduate (master's or doctoral) dissertations published prior to 11th August 2022. Reference lists of included studies were also manually examined for additional potential studies for inclusion.

Inclusion and Exclusion Criteria

Studies that met the following criteria were included: (i) the sample population comprised of mental health professionals (MHPs; clinical psychologists, counsellors, psychotherapists, psychiatric social workers, psychiatric nurses, psychiatrists or professionals employed in other-related mental healthcare services) working in organisational settings; (ii) at least 50% of the sample comprised of MHPs; (iii) the study examined work-related determinants or preventative factors of compassion fatigue using a quantitative methodology, and; (iv) the study analysed primary data (i.e., systematic reviews, meta-analytic reviews, and narrative reviews were not included). In addition, no restriction was imposed on research design adopted by a particular study. In case of mixed-methods studies, only quantitative results were included in the present review. Studies were eliminated if they examined medical practitioners⁸ (such as, nurses, physicians etc.) as their main cohort despite those professionals being involved in the delivery of mental health services. The reason behind this decision was differences in their training and philosophical approach to mental healthcare (Leahey, 2004). Also, quantitative studies that did not use validated measures of compassion fatigue were not included in the current review (refer table 1 for inclusion and exclusion criteria).

⁸ This excludes psychiatrists and psychiatric nurses.

Table 1*Inclusion and Exclusion Criteria for Potential Studies*

	<i>Inclusion</i>	<i>Exclusion</i>
Methodology	Quantitative research methods Mixed method, but only quantitative information is extracted.	Qualitative methods
Study sample	Mental health professionals	Healthcare professionals
Predictor variables	Work-related factors	Non-work-related factors
Outcome variable	Compassion fatigue: Burnout and Secondary Traumatic Stress	Burnout (measured using Maslach Burnout Inventory) and Secondary Traumatic Stress (measured using Secondary Traumatic Stress Scale)
Language restrictions	English	All other languages

Study Selection and Data Extraction

In the present review, following PRISMA guidelines (Moher et al., 2009), post identification of research articles and removal of duplicates, the first independent reviewer (JS) screened titles and abstracts for determining articles' eligibility for inclusion. All articles were first assessed by the first reviewer (JS) and then a small subset, i.e., 33.33%, of those articles ($n = 42$) were randomly selected and evaluated independently by the second and third reviewers (TB and MKM) against the inclusion criteria.⁹ Interrater agreement was observably strong, $k = 0.83$ (95% CI 0.70–0.97) and 0.80 (95% CI 0.66–0.94). However, since Cohen's Kappa is

⁹ Note: For latest revision of present review (i.e., August 2022), studies were reviewed only by JS. MKM and TB reviewed studies in the second round of revision in October 2020.

an omnibus index of agreement that is also vulnerable to chance-related inflation or bias (Feinstein & Cicchetti, 1990), the present study calculated proportions of specific agreement (Feinstein & Cicchetti, 1990; Spitzer & Fleiss, 1974) to obtain additional evidence for the degree of interrater agreement. The proportion of positive agreement [0.76 95% CI (0.56, 0.96), 0.7 95% CI (0.47, 0.93)] indicated a moderate degree of agreement and the proportion of negative agreement [0.87 95% CI (0.76, 0.98), 0.85 95% CI (0.73, 0.97)] indicated a strong degree of agreement among ratings for title and abstract screening provided by the first and two other independent reviewers.

This was followed by an evaluation of full-text articles for assessment of eligibility. In case of a doubt regarding eligibility, the opinion of an independent reviewer (TB) was sought. All disagreements were resolved through discussions. This was succeeded by an extraction and tabulation of characteristics of included studies. A data extraction form was developed to standardise processes of data extraction and qualitative synthesis. The form was peer-reviewed, with feedback integrated into its further development. The final version of data extraction form related to following information from full-text articles: (i) study title, year, and author(s); (ii) aim(s) of the study; (iii) theoretical framework; (iv) hypotheses or research questions and variables examined; (v) methodology, study design, and country; (vi) sample characteristics (total sample size, response rate, mean age of participants, percentage of male and female participants, and professional specialization of participants); (vii) scale used to assess compassion fatigue; (viii) prevalence of compassion fatigue; (ix) findings of the study, and; (x) limitations of the study. The data extraction form is attached in appendix A (p. 317).

Risk of Bias (Quality) Assessment

Two methods were adopted for the risk of bias (quality) assessment of included studies. First, only authenticated databases (as mentioned in *Search Strategy* (p. 56)) were used to

identify relevant articles. This enabled identification of articles published in peer-reviewed journals only. Second, each included study (i.e., full-text article) was assessed for its quality using the Quality of Survey Studies in Psychology (QSS-P) Checklist (Protogerou & Hagger, 2020). QSS-P Checklist (Protogerou & Hagger, 2020) was specifically developed for appraising the methodological quality and empirical rigour of research that uses survey instruments for data collection (Protogerou & Hagger, 2020). In the original study, the checklist demonstrated satisfactory levels of inter-rater reliability (Protogerou & Hagger, 2020) and criterion validity (Protogerou & Hagger, 2020). It includes 20 items that are used to assess the quality of survey studies across four domains (introduction [rationale and variables], participants [sampling], data [collection, analyses, measures, results, and discussion], and ethics) and classify them as either of acceptable or questionable quality (Protogerou & Hagger, 2020). If all items are applicable to a study, then a score greater than or equal to 75% is considered acceptable (Protogerou & Hagger, 2020). Similarly, if 19, 18, or 17 items are applicable then a score greater than or equal to 73%, 72%, or 70% is considered acceptable (Protogerou & Hagger, 2020). The assessed quality of reviewed studies was not used as an inclusion criterion in the current review. Due to the relatively unexplored nature of research on the relationship between work-related factors and compassion fatigue in mental health professionals, applying such an exclusion criterion would have unnecessarily restricted the scale of this review.

The QSS-P Checklist (Protogerou & Hagger, 2020), owing to its novelty, has not been used in other systematic reviews or meta-analyses, but the doctoral candidate and supervisors in the present study deemed it appropriate for four primary reasons. First, a scoping review of literature suggested that a large proportion of quantitative studies on the association between work-related factors and compassion fatigue in mental health professionals was cross-sectional in nature. Second, surveys are a predominant method of research in behavioural sciences

(Singleton & Straits, 2009) and past research syntheses on similar constructs such as burnout have identified a deluge of survey studies conducted on mental health professionals (e.g., O'Connor et al., 2018; McCormack et al., 2018). Third, items of QSS-P Checklist (Protogerou & Hagger, 2020) demonstrated face validity for evaluating quantitative, psychological research. Fourth, since other widely used quality assessment tools such as the Crowe-Critical Appraisal Tool Version 1.4 (CCAT v1.4; Crowe, 2013) or the Newcastle-Ottawa Scale (Wells et al., 2009) are mainly used for appraising research in medical sciences, they confer more weightage to experimental or quasi-experimental research designs, which are not frequently used in applied research in occupational psychology.

Strategy for Data Synthesis

An inductive content analysis approach (Thomas, 2006) was employed in order to identify themes emerging from narrative data. The rationale behind adopting an inductive content analysis approach as opposed to a deductive approach was that the former allows development of a model or theory based on interrelationships among themes emerging from data (Thomas, 2006). In contrast, a deductive approach aims to examine whether emerging data are consistent with a set of *a priori* assumptions or established theories or models (Thomas, 2006). In the present review, the coding process outlined by Thomas (2006) was adapted for qualitatively synthesising predictors and preventive factors emerging from existing literature.

Steps taken to categorise variables examined in included studies into themes and sub-themes are mentioned below:

- Enlisting work-related variables examined in included studies
- Identifying statistically significant work-related variables
- Labelling work-related variables to develop themes
- Organising variables into themes and sub-themes

- Developing a framework to incorporate the most significant themes

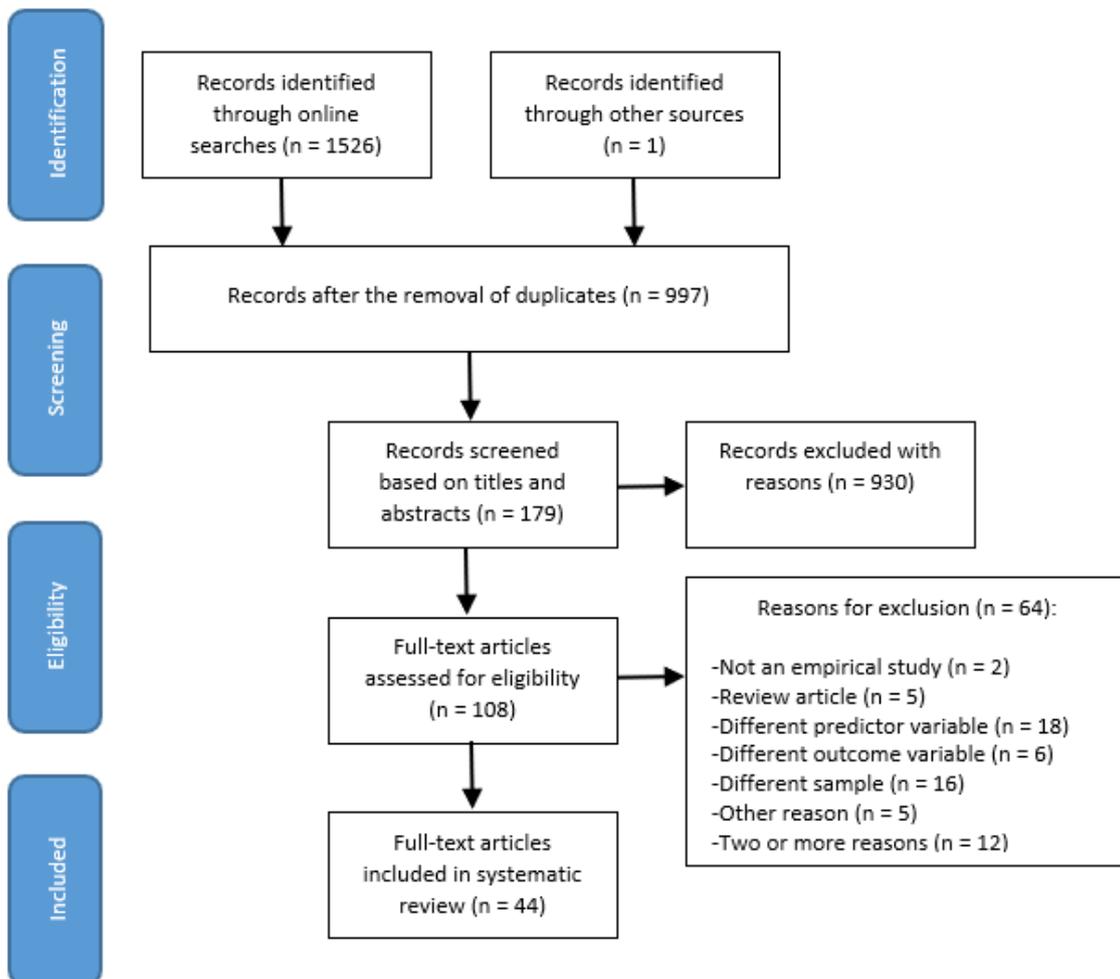
Results

Search Outcomes

The online search of literature led to identification of 997 unique articles. Following screening based on titles and abstracts, 108 articles were retained. Further, full-text review of articles to determine eligibility for inclusion in the present review identified 44 articles for qualitative synthesis (See Figure 2 for PRISMA flow diagram).

Figure 1

PRISMA Flow Diagram illustrating the steps taken in conducting the systematic review



Characteristics of Included Studies

Primary characteristics of included studies ($n = 44$) are summarized in table 2. All included studies adopted a cross-sectional design. They represented research conducted in eight different countries. Majority of the studies ($n = 28$) were conducted in North America (Burnett et al., 2017; Wells, 2004; Schwarz, 2013; Smallwood-Butts, 2012; Laverdière et al., 2019; Adams et al., 2006; Boscarino et al., 2004; Leigh, 2014; Holstein, 2011; Sprang et al., 2007; Jacobson, 2006; Craig & Sprang, 2010; Ray et al., 2013; Sallouma et al., 2019; Sutton, 2018; Shar, 2019; Killian, 2008; Fountain, 2015; Can & Watson, 2019; Tosone & Schaefer, 2010; Thompson et al., 2014; Campbell, 2013; Laverdière et al., 2018; Lounsbury, 2006; Grunhaus, 2018; Leonard, 2008; Butler et al., 2016; Lawson & Myers, 2010). Nine included studies were from European countries namely, the United Kingdom (Sodeke-Gregson et al., 2013; Bell et al., 2019; Towey-Swift & Wittington, 2019; Thompson, 2018; Linley & Joseph, 2007), Italy (Cetrano et al., 2017), Finland (Baldschuna et al., 2019), Greece (Mangoulia et al., 2015), and Belgium (Verhaeghe et al., 2014). Two studies were conducted in South Africa (Ortlepp & Friedman, 2002; MacRitchie & Leibowitz, 2010), one study was conducted in Israel (Itzhaki et al., 2018), and another one was from Australia (Somoray et al., 2017). Only two studies hailed from Asian countries: South Korea (Chang & Shin, 2021) and China (Zhang et al., 2021). Lastly, one study was multi-site thus, it recruited participants from three different countries namely, Germany, Austria, and Switzerland (Deighton et al., 2007).

Samples comprised professionals from diverse occupational groups such as, school counsellors (Wells, 2004), substance-abuse counsellors or professionals (Shar, 2019; Thompson, 2018), counsellors-in-training (Can & Watson, 2019; Grunhaus, 2018; Sutton, 2018), mental health counsellors (Thompson et al., 2014; Campbell, 2013; Lawson & Myers, 2010; Zhang et al., 2021), workplace lay trauma counsellors (Ortlepp & Friedman, 2002), crisis

counsellors (Lounsbury, 2006), trauma counsellors (MacRitchie & Leibowitz, 2010; Leonard, 2008), psychotherapists (Laverdière et al., 2019; Holstein, 2011; Sodeke-Gregson et al., 2013; Deighton et al., 2007; Killian, 2008; Laverdière et al., 2018; Linley & Joseph, 2007), social workers (Adams et al., 2006; Boscarino et al., 2004; Tosone & Schaefer, 2010), social work graduate trainees (Butler et al., 2016), doctoral-level clinical psychologists (Leigh, 2014; Sutton, 2018), psychiatric nurses (Bell et al., 2019; Itzhaki et al., 2018; Mangoulia et al., 2015; Verhaeghe et al., 2014), child welfare workers (Baldschuna et al., 2019; Sallouma et al., 2019), correctional officers (Bell et al., 2018), employee assistance professionals (Jacobson, 2006), and heterogeneous samples of mental health professionals (Burnett et al., 2017; Schwarz, 2013; Smallwood-Butts, 2012; Sprang et al., 2007; Craig & Sprang, 2010; Ray et al., 2013; Cetrano et al., 2017; Fountain, 2015; Towey-Swift & Wittington, 2019; Somoray et al., 2017; Chang & Shin, 2021).

Forty-two included studies represented a combined sample size of 10,143 participants ($M = 247.4$, $SD = 225.95$)¹⁰, with individual study sample sizes ranging from 36 (Bell et al., 2019; Schwarz, 2013) to 1,121 participants (Sprang et al., 2007). Of 25 studies that reported mean age of participants, the combined average age was 44.53 years ($SD = 7.53$ years) and ranged from 29.3 years to 59.83 years (Laverdière et al., 2019; Leigh, 2014; Holstein, 2011; Sprang et al., 2007; Jacobson, 2006; Craig & Sprang, 2010; Ray et al., 2013; Bell et al., 2019; Sutton, 2018; Shar, 2019; Killian, 2008; Can & Watson, 2019; Baldschuna et al., 2019; Itzhaki et al., 2018; Tosone & Schaefer, 2010; Ortlepp & Friedman, 2002; Mangoulia et al., 2015; Verhaeghe et al., 2014; Laverdière et al., 2018; Lounsbury, 2006; Somoray et al., 2017; Grunhaus, 2018; Linley & Joseph, 2007; Lawson & Myers, 2010). In terms of sex distribution, the total number of female participants across all included studies was 6,937 (69.9%). In all but three studies

¹⁰ Two studies (Boscarino & Figley, 2004; Adams et al., 2006) used the same dataset thus, their data were included only once. Also, in one study (Baldschuna et al., 2019), data for two groups were combined to compute average age and percentage of male and female participants.

(Leigh, 2014; Bell et al., 2019; Fountain, 2015), the percentage of male participants exceeded the percentage of female participants.

Table 2

Study characteristics and QSS-P scores

Study	Country	Brief Aim(s)	Sample	Measure	Theoretical framework	Results	Prevalence (%)
Burnett et al., 2017	USA	To examine the association among social factors (gender, age, spiritual connection, and marital status), work-related factors (work setting, workload, job satisfaction, and morale), social and work-related factors combined, and compassion fatigue.	121 licensed mental health professionals employed in the United States Military installations	ProQOL 5: BO, STS, CS	Transactional model of stress (Lazarus & Folkman, 1984)	Age and being married were negatively associated with compassion fatigue. Morale and workload were positively associated with compassion fatigue.	NR
Wells, 2004	USA	To determine the prevalence of compassion fatigue in school counsellors based in the school districts of Palm Beach County, Florida. Also, to explore its association with counsellors' gender, percentage of students at respective school who received free or reduced lunch, and type of caseload (grade level or specific portion of the alphabet).	78 school counsellors	ProQOL-R III: BO, CF, CS	NR	There were no differences for compassion satisfaction, burnout, or compassion fatigue among counsellors employed at schools where varying proportions of students received free or subsidized lunch and counsellors who were assigned a grade level or specific portion of the alphabet.	NR
Schwarz, 2013	USA	To explore the impact of mental health professionals' age, type of education, ethnicity and the percentage of clients diagnosed with personality disorders on the	36 mental health professionals	ProQOL	NR	Compassion fatigue was significantly associated with percentage of caseload with personality disorders.	NR

			levels of burnout, compassion fatigue, and compassion satisfaction.				
Smallwood-Butts, 2012	USA	To explore the relations among burnout, secondary traumatic stress (compassion fatigue), compassion satisfaction, use of evidence-based practices, demographic variables (gender, race, academic preparation), and caseload [adults or children].	248 mental health professionals	ProQOL-III	NR	Burnout was associated with use of evidence-based and non-evidence-based practices, female gender, and work with children. Secondary traumatic stress was associated with the use of evidence-based and non-evidence-based practices.	NR
Laverdière, Ogrodniczuk, & Kealy, 2019	Canada	To explore the relationship between dimensions of empathy and professional quality of life and to examine the moderating role of empathy in relation to previously identified risk factors of professional quality of life.	240 psychologists and registered psychotherapists	ProQOL 5: BO, STS, CS	NR	Perspective taking was positively related with burnout. Personal distress was positively correlated with burnout and secondary traumatic stress. Moderating evidence for perspective taking, empathic concern, and personal distress was not found.	NR
Adams, Boscarino, & Figley, 2006	USA	To evaluate the factorial and predictive validities of a scale designed to measure compassion fatigue.	236 New York-based social workers who were involved in counselling clients affected by 09/11 terrorist attacks	Compassion Fatigue Scale—Revised	Stress process framework (Pearlin, 1989; Thoits, 1995)	Exploratory factor analysis identified two factors namely, work burnout and secondary trauma. Work burnout was associated with psychological distress, exposure to stressful life events, exposure to lifetime traumatic events, 09/11 counselling involvement, percentage of survivors of violence on caseload, social support, availability of adequate information to work effectively, and sense of mastery. Secondary trauma was associated with psychological distress, exposure to stressful life events, exposure to lifetime	NR

						traumatic events, 09/11 counselling involvement, percentage of survivors of violence on caseload, social support, availability of information to work adequately, and sense of mastery.	
Boscarino, Figley, & Adams, 2004	USA	To investigate the predictors of burnout and compassion fatigue.	236 New-York based social workers involved in counselling clients affected by the 09/11 terrorist attacks	Compassion Fatigue Scale-Revised	NR	Burnout was significantly predicted by the availability of adequate information and secondary trauma was significantly predicted by helping those affected by 9/11 attacks and availability of adequate information.	NR
Fulk, 2014	USA	To examine associations among therapeutic orientation, self-efficacy, caseload, views about work, and compassion fatigue in clinical psychologists.	119 doctorate-level clinical psychologists	Compassion Fatigue Self-Test for Psychotherapists	NR	Compassion fatigue was associated with positive views about work and percentage of clients with personality disorders on caseload,	NR
Holstein, 2011	USA	To determine the prevalence of compassion fatigue in psychotherapists employed in the community behavioural health settings. Also, to examine the relation of compassion fatigue with demographic and work-related factors.	98 psychotherapists	ProQOL 5: BO, STS, CS	NR	Burnout was associated with work in community behavioural health settings, Caucasian ethnicity, educational qualification, actual number of working hours positive team environment, efforts made by organisation to make new employees feel comfortable, organisation's tolerance of differences, extent to which honesty is encouraged in the organisation, and the extent to which gossip is discouraged. Secondary traumatic stress was associated with work in community behavioural health settings, actual number of working hours, positive team environment, efforts	NR

						made by organisation to make new employees feel comfortable, and organisation's tolerance of differences.	
Sprang, Clark, & Whitt- Woosley, 2007	USA	To explore the degree to which compassion fatigue, compassion satisfaction, and burnout vary as a function of provider characteristics such as age, gender, educational level, licensure, years of experience, setting, and whether or not the individual has specialized trauma training. The role played by organisational setting and type were also explored.	1,121 mental health professionals (psychologists, psychiatrists, social workers, marriage and family therapists, professional counsellors, and drug and alcohol counsellors)	ProQOL: BO, CF, CS	NR	Burnout was associated with work in inpatient settings and compassion fatigue was associated with female gender and MD degree,	BO: 13% CF: 13.2%
Jacobson, 2006	USA	To determine the prevalence of compassion fatigue, burnout, and compassion satisfaction in employee assistance professionals. Also, to explore the relations between coping methods and the levels of compassion fatigue, burnout, and compassion satisfaction.	325 employee assistance professionals	ProQOL: BO, CF, CS	NR	Burnout was associated with passive coping, experiencing work-related stress in the past year as a result of working with traumatized individuals and/or groups, and services provided by EAPs to cope with stress. Compassion fatigue was associated with negative coping and experiencing work-related stress in the past year as a result of working with traumatized individuals and/or groups.	BO: 5% CF: 12%
Sodeke-Gregson, Holtum & Billings, 2013	UK	To determine the prevalence of compassion satisfaction and compassion fatigue in UK-based psychotherapists working with traumatized clients. Also, to explore the factors associated with compassion	253 psychotherapists	ProQOL 5: BO, STS, CS	NR	Age and perceived management support were significantly associated with burnout. Time spent in individual supervision, personal trauma history, and engagement in self-care were significantly associated with	BO: 25.8% STS: 70%

		satisfaction and compassion fatigue.				secondary traumatic stress.	
Craig & Sprang, 2010	USA	To determine the prevalence of compassion fatigue in mental health professionals.	532 clinical psychologists and clinical social workers	ProQOL-III: BO, CF, CS	NR	Age, special trauma training, and the use of evidence-based practices were negatively associated with burnout. Type of mental health organisation and percentage of clients with PTSD on the caseload were positively associated with burnout. For compassion fatigue, percentage of clients with PTSD on the caseload was a positive predictor and the use of evidence-based practices was a negative predictor.	BO: 12% CF: 6%
Ray, Wong, White, & Heaslip, 2013	Canada	To explore the relationships among compassion satisfaction, compassion fatigue, burnout and the six areas of work life satisfaction (workload, control, rewards, community, fairness, and values) among frontline mental health professionals (FMHPs).	169 frontline mental health professionals	ProQOL-R IV	ProQOL Framework (Stamm, 2009) and Compassion Stress/Fatigue Model (2001)	Compassion fatigue was associated with person-job match in terms of workload, control, reward, community, values, and fairness.	NR
Salloum, Choib, & Stover, 2019	USA	To examine the mediating role of utilization of trauma-informed self-care in three professional areas (utilizing organizational resources and support for trauma-informed trainings, organizational practices related to supervision and support, and personal self-care practices) on the association of burnout and secondary	177 child welfare workers	ProQOL 5: BO, STS	NR	Burnout was associated with less utilization of organisational resources and practices, and organisational practices. Secondary traumatic stress was associated with utilization of organisational resources and practices, and organisational practices. Mediation analysis showed that personal self-care practices mediated the relationship between burnout and mental health	BO Low: 23% Average: 52% High: 24% STS Low: 22% Average: 58% High: 21%

		trauma with mental health functioning among child welfare workers.				functioning. Use of organisational resources and support and personal self-care practices were found to mediate the relationship between secondary traumatic stress and mental health functioning.	
Bell, Hopkin, & Forrester, 2019	UK	To examine prison mental health professionals' and correctional officers' exposure to traumatic events at workplace and to determine the levels of burnout, compassion fatigue, and compassion satisfaction in this population. Also, to explore the risk and protective factors associated with professional quality of life in prison mental health professionals and correctional officers.	36 mental health nurses and correctional officers	ProQOL 5: BO, STS, CS	NR	Higher levels of burnout were significantly associated with being female, living alone, experiencing a range of traumatic events, and witnessing 10 or more fatal events. Lower levels of burnout were significantly associated with being religious and high self-reported levels of line manager, regular supervision, emotional support from colleagues and feeling they had adequate skills. Lower levels of secondary traumatic stress were significantly associated with support and consultation from line managers, emotional support from colleagues and feeling they had adequate skills.	BO Low: 44% Average: 50% High: 6% STS Low: 64% Average: 36% High: 0%
Deighton, Gurriss, & Traue, 2007	Germany, Austria, and Switzerland	The aim of the first study was to determine therapists' advocacy and achievement of working through trauma and prevalence of burnout, secondary traumatic stress and distress. The aims of the second study were twofold. Firstly, to explore the hindrances associated with working through. Secondly, to examine the interaction between degree	100 psychotherapists working with torture victims	ProQOL	NR	Burnout was associated with weekly caseload, degree of working through trauma, advocacy for working through trauma, discrepancy between degree and advocacy for working through trauma, and task burden. Compassion fatigue was associated with weekly caseload, degree of working through trauma, advocacy for working through trauma, and discrepancy between degree and advocacy for working through trauma.	NR

			of and advocacy for working through trauma.				
Sutton, 2018	USA	To explore doctoral trainees' experiences of and personal, training and supervisory, and exposure-related factors associated with compassion fatigue, secondary traumatic stress, and vicarious trauma.	48 fourth-year clinical psychology and counselling psychology doctoral students	ProQOL 5: BO, STS, CS	NR	Burnout was negatively associated with self-compassion. STS varied by total caseload, trauma intervention, trauma-focused externship, graduate program type, and extent of trauma training.	NR
Shar, 2019	USA	To empirically examine Stamm's (2010) Compassion Satisfaction and Compassion Fatigue Model and to investigate the relations of work, client, and personal environments with compassion fatigue and compassion satisfaction. Also, to explore the impact of clinical settings and client relapse on compassion fatigue and compassion satisfaction.	648 substance abuse counsellors	ProQOL 5: BO, STS, CS	Compassion Satisfaction and Compassion Fatigue Model (Stamm, 2010)	Factors found to be positively associated with burnout included frequency of learning relapse of discharge clients, frequency of client relapse occurring during treatment, person distress, and personal traumatic experiences. Factors found to be negatively associated with burnout included positive work environment, perceived importance of therapeutic alliance, perspective-taking, social support from significant others, and social support from friends. Frequency of learning relapse of discharged clients, proneness to fantasy, empathic concern, personal distress, and past traumatic experiences were positively associated with secondary traumatic stress. Factors found to negatively predict secondary traumatic stress included positive work environment, perceived importance of therapeutic alliance, and perspective-taking.	BO Low: 68.1% Average: 32.1% High: 0% STS Low: 73.4% Average: 26.7% High: 0.2%
Killian, 2008	USA	To explore helping professionals'	104 psychotherapists	ProQOL-R III	NR	Therapist's sense of powerlessness, work drain, and history of	NR

		experiences of working with trauma survivors and to investigate the individual and contextual factors associated with burnout, compassion fatigue and compassion satisfaction.	specialising in the treatment of trauma survivors			trauma were positively associated with compassion fatigue. Emotional self-awareness was negatively associated with compassion fatigue.	
Cetrano, Tedeschi, Rabbi, Gosetti, Lora, Lamonaca, Manthorpe & Amaddeo, 2017	Italy	To explore relations among perceived quality of working life and professional quality of life of mental health professionals.	400 mental health professionals	ProQOL-III: BO, CF, CS	NR	Burnout was positively associated with ergonomic problems, impact of work on life, and perceived risks for future. It was negatively associated with trust (managerial and co-workers' trust). Compassion fatigue was positively associated with ergonomic problems, impact of work on life, and impact of life on work.	NR
Fountain, 2015	USA	To determine the prevalence of compassion fatigue and compassion satisfaction in registered play therapists and registered play therapist supervisors in the US. Also, to explore the relations among professional quality of life, personal experience of traumatic events, percentage of caseload with clients exposed to traumatic events, experience of client violence, and duration of practice.	355 licensed clinical social workers and licensed marriage and family therapists	ProQOL 5: BO, STS, CS	NR	Secondary traumatic stress was associated with personal experiences of traumatic events, percentage of caseload comprising of clients exposed to traumatic events, and experience of client violence.	BO Low: 80% Average: 20% High: 0% STS Low: 75.5% Average: 24.5% High: 0%
Can & Watson, 2019	USA	To explore relations among compassion fatigue, empathy, supervisory working alliance, resilience, and wellness.	86 counsellors-in-training	ProQOL 5: BO, STS	NR	Compassion fatigue (combined scores on burnout and secondary traumatic stress subscales) was associated with supervisory working alliance, empathic concern, resilience, and flourishing.	NR

Baldschun, Hämäläinen, Töttöä, & Salob, 2019	Finland	To explore differences in occupational wellbeing of social workers with child protection duties and without child protection duties. Also, to investigate work-related factors associated with occupational wellbeing of social workers.	888 social workers	ProQOL R-IV	ProQOL Framework (Stamm, 2010)	Social workers with child protection duties reported significantly higher levels of burnout and secondary traumatic stress than social workers without child protection duties.	BO Low (n ₁): 46.2% Low (n ₂): 38.5% Average (n ₁): 53.8% Average (n ₂): 61.5% High (n ₁): 0% High (n ₂): 0% STS Low (n ₁): 73.8% Low (n ₂): 58.8% Average (n ₁): 28.2% Average (n ₂): 41.2% High (n ₁): 0x% High (n ₂): 0%
Itzhaki, Bluvstein, Peles Bortz, Kostistky, Bar Noy, Filshinsky & Theilla, 2018	Israel	To explore relations among professional quality of life, workplace violence, and work-related stress.	114 mental health nurses	ProQOL 5: BO, STS, CS	NR	Burnout was associated with physical violence, verbal violence, work stress, age, and, years as a nurse. Secondary traumatic stress was associated with physical violence, verbal violence, work stress, age, and, years as a nurse.	NR
Tosone & Schaefer, 2010	USA	To explore relations among attachment classification, resilience, and compassion fatigue.	481 social workers following 09/11 terrorist attacks	ProQOL- R IV	Attachment theory (Bowlby, 1969/1982, 1973)	Percentage of traumatised clients on the caseload, avoidance attachment style, and ambivalence attachment style were positively associated with compassion fatigue. Resilience was negatively associated with compassion fatigue.	NR
Thompson, Amatea, Thompson, 2014	USA	To explore the impact of counsellor gender, length of time in the field, appraisal of working conditions, and personal	213 mental health counsellors	ProQOL 5: BO, STS, CS	Transactional model of stress (Lazarus and Folkman, 1984)	Factors found to negatively predict burnout included counsellors' perceptions of working conditions, mindfulness, compassion satisfaction, and the	NR

		resources (level of compassion satisfaction, extent of general mindfulness attitudes, use of problem-focused coping strategy, use of emotion-focused coping strategy, and use of maladaptive coping strategy) on burnout and compassion fatigue.				use of emotion-focused coping. The use of problem-focused coping and maladaptive coping were found to positively predict burnout.	
						Counsellors' perceptions of working conditions and mindfulness were negatively associated with secondary traumatic stress. Years of working in the field and maladaptive coping were positively associated with secondary traumatic stress.	
Towey-Swift & Wittington, 2019	UK	To examine relationships among person-job congruence, compassion, and recovery attitudes in community mental health teams.	132 mental health professionals	ProQOL 5: BO, STS, CS	NR	Burnout was associated with years in setting, years in profession, and person-job congruence in terms of workload, control, reward, community, fairness, values. Secondary traumatic stress was associated with person-job congruence in terms of workload, control, reward, fairness, and values.	BO Low: 25% Average: 43% High: 32% STS Low: 21% Average: 52% High: 27%
Ortlepp & Friedman, 2002	South Africa	To investigate the prevalence and correlates of secondary traumatic stress and role satisfaction.	130 non-professional trauma counsellors	Compassion Satisfaction/ Fatigue Test: CF, BO, CS	NR	Burnout was associated with workplace trauma, programme coordination, self-efficacy, stakeholder commitment, sense of coherence, and social support. Compassion fatigue was associated with workplace trauma, programme coordination, self-efficacy, stakeholder commitment, sense of coherence, and social support.	NR
Campbell, 2013	USA	To determine the prevalence of compassion fatigue and compassion satisfaction in counsellors and to explore the professional and demographic factors	362 mental health counsellors	ProQOL-R-IV	Cognitive Theory, Social Cognitive theory, and Trauma Theory	Burnout was associated with age and stress. Secondary traumatic stress was significantly associated with gender, work setting, and stress level.	BO Low: 17.9% Average: 64% High: 17.9% STS Low: 0% Average: 30.3%

		associated with it.					High: 69.6%
Mangoulia, Koukia, Alevizopoulos, Fildissis, & Katostaras, 2015	Greece	To determine the prevalence of burnout, secondary traumatic stress, and compassion satisfaction in psychiatric nurses. Also, to explore the personal and work-related factors associated with burnout, secondary traumatic stress, and compassion satisfaction.	174 psychiatric nurses	ProQOL-R IV	NR	Burnout was higher among psychiatric nurses who didn't choose to work in the psychiatric unit, experienced economic stress, did not desire nursing for their children, did not choose nursing again for themselves, did not report very good relations with colleagues, reported low teamwork, expressed a desire to leave the psychiatric unit soon, expressed a desire to leave the particular hospital soon, and reported poor physical and mental health. Linear regression showed that burnout was negatively associated with working hours, years in the current profession, patients per nurse in the night shift, choice of nursing profession again, and experience of death of a loved one. Burnout was positively associated with financial stress, being married, having a postgraduate qualification (i.e. MSc), infrequent team-work, and poor physical health. Compassion fatigue was higher among psychiatric nurses who were female, did not choose to work in psychiatric unit, did not desire nursing for their children, wanted to leave the psychiatric unit soon, were assistant nurses, and did not have excellent physical or mental health. Logistic regression showed that secondary traumatic stress was negatively associated with being female and	BO High: 49.4% Average: 36.8% Low: 13.8% CF High: 44.8% Average: 43.7% Low: 11.5%

						work on weekends. It was positively associated with financial stress and the desire to leave the psychiatric clinic soon.	
Verhaeghe et al., 2014	Belgium	To explore the associations among mental health nurses' attitudes and perceived self-efficacy toward inpatient aggression and nurse-related characteristics.	219 mental health nurses	ProQOL 5: BO, STS, CS	Theory of Planned Behaviour (Fishbein & Ajzen, 2010); Theory of Self-Efficacy (Bandura, 1991)	Burnout was negatively associated with patient attribution and responsibility for aggression. Secondary traumatic stress was negatively associated with staff confidence and perceived self-efficacy to cope with inpatient aggression.	NR
Laverdière, Kealy, Ogrodniczuk, Chamberland, & Descôteaux, 2019	Canada	To determine the prevalence of burnout, secondary traumatic stress, and compassion satisfaction in psychotherapists and to compare the mean levels with those reported in a meta-analytic study. Also, to explore work conditions, self-care behaviours, and dispositional empathy as possible correlates of professional quality of life.	240 psychotherapists	ProQOL 5: BO, STS, CS	NR	Burnout was associated with caseload volume, independent practice, personal therapy, empathy, and institutional settings. Secondary traumatic stress was associated with practice of long-term psychotherapy, personal therapy, and work with traumatised clients.	BO Low: 52% Average: 37% High: 11% STS Low: 10% Average: 57% High: 33%
Lounsbury, 2006	USA	To examine personal factors, work-related factors, coping strategies, and self-care behaviours associated with secondary traumatic stress in crisis clinicians.	130 crisis counsellors	ProQOL: BO, CF, CS	NR	Burnout was associated with percentage of traumatised clients seen per week, humour, self-distraction, denial, substance-use, behavioural disengagement, adequate sleep, eating nutritiously, engaging in enjoyable activities, relaxation, contact with nature, allowing others to help, and total self-care. Compassion fatigue was associated with supervision hours, percentage of traumatised clients	NR

						seen per week, positive reframing, humour, self-distraction, denial, venting, substance use, behavioural disengagement, self-blame, adequate sleep, eating nutritiously, engaging in enjoyable activities, and allowing others to help.	
MacRitchie & Leibowitz, 2010	South Africa	To explore relationships among the level of exposure to trauma, empathy, social support, and secondary traumatic stress.	64 trauma counsellors	Compassion Fatigue Self-Test: Compassion Fatigue	Trauma Transmission Model (Figley, 1995) and Ecological Framework of Trauma (Dutton and Rubinstein, 1995)	Compassion fatigue was associated with the past history of trauma and social support. Empathy was found to positively moderate the association between previous experience of trauma and compassion fatigue.	NR
Thompson, 2018	UK	To explore the impact of workplace factors and emotional regulation on professionals' experiences of compassion fatigue.	114 substance misuse professionals	ProQOL 5: BO, STS, CS	Transactional Model of Stress (Lazarus & Folkman, 1986)	Compassion fatigue (combined scores on burnout and secondary traumatic stress) was associated with intention to leave, emotional suppression, cognitive reappraisal, emotional contagion, negative events, quantitative demands, decision authority, possibilities for development, meaning of work, commitment, predictability, rewards, role clarity, strain, work/family conflict, trust regarding management, justice, health, lack of personal experience of substance abuse, and possession of a university degree. Both, emotional contagion and emotional suppression positively moderated the relationship between workplace strain and compassion fatigue. Meaning of work mediated the relationship between	BO: 70% STS: 78%

						strain and compassion fatigue.	
Somoray, Shakespeare-Finch, & Armstrong, 2017	Australia	To investigate the role of personality traits and workplace belongingness in predicting the professional quality of life of mental health workers.	156 registered psychologists, counsellors, mediators, and social workers	ProQOL 5: BO, STS, CS	Five-Factor Model (FFM; McCrae & Costa, 1995)	Burnout was associated with sex, age, neuroticism, extraversion, agreeableness, conscientiousness, and workplace belongingness. Secondary traumatic stress was associated with sex, age, openness, agreeableness, conscientiousness, and workplace belongingness.	BO Low: 58% Average: 42% High: 0% STS Low: 68% Average: 32% High: 0%
Grunhaus, 2018	USA	To investigate the impact of work environment (role ambiguity, role conflict, and perceived servant leadership traits of supervisors), personal environment (professional self-care, gender, and survivor status), and client environment (percentage of trauma cases and size of caseload) on compassion fatigue.	241 counselling residents	CF-Short Scale: BO and STS	ProQOL Framework (Stamm, 2010)	Burnout was associated with components of servant supervisor leadership (conceptual skills, empowerment, helping subordinates grow and succeed, putting subordinates first, ethical behaviour, emotional healing, and creating value for the community), components of professional self-care (professional support, professional development, life balance, cognitive strategies, and daily balance), and components of work environment (role conflict, role ambiguity, caseload, and traumatised clients). Secondary traumatic stress was associated with components of professional self-care (life balance and daily balance), and components client environment (role conflict and role ambiguity).	NR
Linley & Joseph, 2007	UK	To explore factors associated with positive and negative wellbeing of therapists.	156 psychotherapists	ProQOL: BO, CF, CS	NR	Burnout was associated previous personal therapy, current personal therapy, training orientation in cognitive-behaviour therapy, existential therapy, current practice in cognitive-behaviour therapy, social support, and	NR

						working alliance with clients.	
						Compassion fatigue was negatively predicted by social support.	
Leonard, 2008	USA	To explore individual and workplace factors associated with compassion fatigue and compassion satisfaction.	98 trauma counsellors	ProQOL: BO, CF, CS	Trauma Theory, Cognitive-Affective Theory of Empathy, & Constructivist Self-Development Theory	Compassion fatigue was associated with amount of secondary exposure, over-involvement, and control.	NR
Butler, Carello, & Maguin, 2016	USA	To explore the impact of trauma-related exposure on self-care, health status and professional quality of life.	195 social work graduate trainees	ProQOL 5: BO, CS	NR	Burnout was associated with training retraumatization, field stress, and self-care effort change.	BO Low: 57.7% Average: 42.3% High: 0%
Lawson & Myers, 2010	USA	To explore relations among counsellor wellness, professional quality of life, and career-sustaining behaviours.	506 counsellors	ProQOL-R III	Indivisible Self Model of Wellness (IS-Wel; Myers & Sweeney, 2004, 2008)	Burnout was associated with percentage of clients on caseload and percentage of high-risk clients on caseload.	BO: 6.1% CF: 10.3%
Chang & Shin, 2021	South Korea	To study the mediating impact of compassion satisfaction and compassion fatigue (i.e., secondary traumatic stress) in the relation between work, client and personal environment, and burnout in South Korean community mental health professionals.	125 community mental health professionals	ProQOL 5	Compassion Satisfaction – Compassion Fatigue Model (Stamm, 2010)	Aggressive behaviour of patients in the workplace was positively associated with secondary traumatic stress.	BO: 6.1%
Zhang et al., 2021	China	To examine the serial mediation role of mindfulness and context-specific self-efficacy in the relation between self-oriented empathy and compassion fatigue in a sample of Chinese psychological hotline counsellors.	712 psychological hotline counsellors	ProQOL 5	Etiological model of compassion fatigue (Figley, 2002)	Total number of cases was not significantly associated with burnout and secondary traumatic stress. In addition, number of traumatic cases was not significantly associated with burnout and secondary traumatic stress. Dispositional mindfulness and	

context-specific self-efficacy independently and serially mediated the association between personal distress (a component of empathy) and compassion fatigue (burnout and secondary traumatic stress).

Note. ProQOL: Professional Quality of Life; BO: Burnout; STS: Secondary Traumatic Stress; CF: Compassion Fatigue; NR: Not reported

Theoretical Framework

Only 17 included studies (Burnett et al., 2017; Adams et al., 2006; Ray et al., 2013; Shar, 2019; Baldschuna et al., 2019; Tosone & Schaefer, 2010; Thompson et al., 2014; Campbell, 2013; Verhaeghe et al., 2014; MacRitchie & Leibowitz, 2010; Thompson, 2018; Somoray et al., 2017; Grunhaus, 2018; Leonard, 2008; Lawson & Myers, 2010; Chang & Shin, 2021; Zhang et al., 2021) explicitly stated theoretical frameworks adopted to conduct their studies (See Table 2 for more details). Five among those 17 studies (Ray et al., 2013; Shar, 2019; Baldschuna et al., 2019; Grunhaus, 2018; Chang & Shin, 2021) used Stamm's Professional Quality of Life Framework which serves as the basis for ProQOL 5 scale (Stamm, 2010). Three studies (Burnett et al., 2017; Thompson et al., 2014; Thompson, 2018) used the Transactional Model of Stress (Lazarus & Folkman, 1986) to hypothesize a research model. Four studies (Campbell, 2013; Verhaeghe et al., 2014; MacRitchie & Leibowitz, 2010; Leonard, 2008) adopted more than one theoretical framework to provide a rationale behind their proposed models. For instance, MacRitchie and Leibowitz (2010) combined the Trauma Transmission Model (Figley, 1995) and the Ecological Framework of Trauma (Dutton and Rubinstein, 1995) to support their hypothesized research model.

Lastly, the remaining four studies adopted theoretical frameworks from varied sub-disciplines in psychology such as, Attachment Theory (Bowlby, 1969/1982, 1973) from developmental psychology, Five-Factor Model (FFM; McCrae & Costa, 1995) from

personality psychology, and Indivisible Self Model of Wellness (IS-Well; Myers & Sweeney, 2004, 2008) and Stress-Process Framework (Pearlin, 1989; Thoits, 1995) from health psychology. None of the included studies examined compassion fatigue using any conceptual framework or model of work-related stress. Although, the Transactional Model of Stress (Lazarus & Folkman, 1986) is widely cited in occupational healthy psychology literature (e.g., Mao et al., 2019; Brough et al., 2018; Hershcovis et al., 2018), it remains a flexible, general model of stress, as opposed to a specific model of occupational or work-related stress.

Characteristics of Compassion Fatigue Measures

All included studies used self-report measures, scales, or questionnaires to examine compassion fatigue in their respective occupational groups. The majority of studies ($n = 20$; Burnett et al., 2017; Laverdière et al., 2019; Holstein, 2011; Sodeke-Gregson et al., 2013; Sallouma et al., 2019; Bell et al., 2019; Sutton, 2018; Shar, 2019; Fountain, 2015; Can & Watson, 2019; Itzhaki et al., 2018; Thompson et al., 2014; Towey-Swift & Wittington, 2019; Verhaeghe et al., 2014; Laverdière et al., 2018; Thompson, 2018; Somoray et al., 2017; Butler et al., 2016; Chang & Shin, 2021; Zhang et al., 2021) used the Professional Quality of Life Scale Version 5 (ProQOL 5; Stamm, 2010). ProQOL 5 includes three subscales: Secondary Traumatic Stress, Burnout, and Compassion Satisfaction (Stamm, 2010). Except for three studies (Sallouma et al., 2019; Can & Watson, 2019; Butler et al., 2016) that utilized only two dimensions, the remaining 17 studies administered all the three subscales. The internal consistency estimates (Cronbach's alpha) of subscales of English version of ProQOL 5 averaged across studies¹¹ were: $\alpha = .82$ for secondary traumatic stress ($n = 13$) and $\alpha = .76$ for burnout ($n = 14$).¹² These values are similar to the estimates provided by the test developer

¹¹The internal consistency estimates of subscales of ProQOL 5 reported by Verhaeghe et al. (2014) were not included because the study utilised the French as well as the Dutch versions of the scale.

¹²Averaged internal consistency estimate for Compassion Satisfaction subscale has been mentioned in the section, *Additional Findings* (p. 105).

(Stamm, 2010): $\alpha = .81$ for secondary traumatic stress and $\alpha = .75$ for burnout. No included study however, provided evidence for the construct validity of ProQOL 5 scale for their sample.

Other included studies ($n = 24$) used either versions of the Compassion Fatigue Self-Test for Psychotherapists (CFST; Figley, 1995) or the Professional Quality of Life Scale (ProQOL; Stamm, 2005). Three studies (Leigh, 2014; Ortlepp & Friedman, 2002; MacRitchie & Leibowitz, 2010) used the Compassion Fatigue Self-Test for Psychotherapists (CFST; Figley, 1995), two studies (Adams et al., 2006; Boscarino et al., 2004) used the Compassion Fatigue (CF) Scale—Revised (Gentry et al., 2002), and one study (Grunhaus, 2018) used the Compassion Fatigue Short Scale (CF-Short; Adams et al., 2006). The Professional Quality of Life Scale (ProQOL; Stamm, 2005) was used by seven included studies (Schwarz, 2013; Sprang et al., 2007; Jacobson, 2006; Deighton et al., 2007; Lounsbury, 2006; Linley & Joseph, 2007; Leonard, 2008). Three studies (Smallwood-Butts, 2012; Craig & Sprang, 2010; Cetrano et al., 2017) used the Professional Quality of Life Scale III (ProQOL-III; Stamm, 2005) and other three (Wells, 2004; Killian, 2008; Lawson & Myers, 2010) utilised its revised version i.e., the Professional Quality of Life Scale Revised-III (ProQOL-R III). Lastly, four studies (Ray et al., 2013; Baldschuna et al., 2019; Tosone & Schaefer, 2010; Campbell, 2013; Mangoulia et al., 2015) used the Professional Quality of Life–Revision IV Questionnaire (ProQOL R-IV; Stamm, 2005) to assess compassion fatigue.

Quality Assessment of Studies

The majority of studies included in the present review were appraised to be of “questionable” quality. For domain-wise scores, refer table 3.

Table 3*Detailed QSS-P scores for included studies*

Study	Introduction	Participants	Data	Ethics	Total Score	OSSP Score (%)	Quality
	(Max. Score: 4)	(Max. Score: 3)	(Max. Score:10)	(Max. Score: 3)	(Max. Score:20)		
Burnett et al., 2017	4	3	7	1	14	78%	Acceptable
Wells, 2004	4	0	7	1	12	67%	Questionable
Schwarz, 2013	3	1	5	1	10	56%	Questionable
Smallwood-Butts, 2012	4	2	5	0	11	61%	Questionable
Laverdière et al., 2019	3	1	5	1	10	56%	Questionable
Adams et al., 2006	2	2	7	1	12	67%	Questionable
Boscarino et al., 2004	1	2	7	1	11	61%	Questionable
Fulk, 2014	3	1	8	1	13	68%	Questionable
Holstein, 2011	4	3	6	1	14	74%	Acceptable
Sprang et al., 2007	3	1	4	1	9	50%	Questionable
Jacobson, 2006	3	1	5	0	9	50%	Questionable
Sodeke-Gregson et al., 2013	3	2	8	2	15	79%	Acceptable
Craig & Sprang, 2010	3	2	8	1	14	74%	Acceptable
Ray et al., 2013	4	3	7	2	16	84%	Acceptable
Sallouma et al., 2019	3	1	8	2	14	73%	Acceptable
Bell et al., 2019	4	1	5	1	11	61%	Questionable
Deighton et al., 2007	3	1	7	0	11	58%	Questionable
Sutton, 2018	4	3	8	2	17	85%	Acceptable
Shar, 2019	4	1	7	1	13	65%	Questionable
Killian, 2008	3	1	5	1	10	53%	Questionable
Cetrano et al., 2017	2	0	7	2	11	55%	Questionable
Fountain, 2015	4	3	9	2	18	90%	Acceptable
Can & Watson, 2019	3	3	7	2	15	75%	Acceptable
Baldschuna et al., 2019	3	2	7	1	13	65%	Questionable
Itzhaki et al., 2018	3	1	5	2	11	58%	Questionable

Tosone & Schaefer, 2010	4	3	8	1	16	80%	Acceptable
Thompson et al., 2014	3	2	7	1	13	65%	Questionable
Towey-Swift & Wittington, 2019	2	2	6	2	12	63%	Questionable
Ortlepp & Friedman, 2002	2	1	7	0	10	50%	Questionable
Campbell, 2013	4	3	8	2	17	85%	Acceptable
Mangoulia et al., 2015	2	1	8	1	12	60%	Questionable
Verhaeghe et al., 2014	2	1	6	2	11	58%	Questionable
Laverdière et al., 2018	2	1	5	0	8	42%	Questionable
Lounsbury, 2006	3	1	6	2	12	63%	Questionable
MacRitchie & Leibowitz, 2010	2	1	3	2	8	42%	Questionable
Thompson, 2018	3	3	7	2	15	75%	Acceptable
Somoray, et al., 2017	3	1	4	1	9	47%	Questionable
Grunhaus, 2018	4	3	8	2	17	85%	Acceptable
Linley & Joseph, 2007	1	1	5	0	7	35%	Questionable
Leonard, 2008	4	2	7	1	14	70%	Questionable
Butler et al., 2016	4	1	7	2	14	70%	Questionable
Lawson & Myers, 2010	4	1	7	0	12	60%	Questionable
Chang & Shin, 2021	2	2	4	2	10	50%	Questionable
Zhang et al., 2021	3	1	4	2	10	50%	Questionable

Thirteen included studies (Burnett et al., 2017; Holstein, 2011; Sodeke-Gregson et al., 2013; Craig & Sprang, 2010; Ray et al., 2013; Sallouma et al., 2019; Sutton, 2018; Fountain, 2015; Can & Watson, 2019; Tosone & Schaefer, 2010; Campbell, 2013; Thompson, 2018; Grunhaus, 2018) were evaluated to be of acceptable quality. The vast majority of included studies ($n = 31$) failed to cross the cut-off score for acceptable quality. In general, the quality assessment criteria, which were less commonly met or were partially met, included: the mention of attrition rate and the strategy to handle it, details of researcher(s) responsible for data collection (e.g.,

training, expertise, or other demographics), the inclusion of survey measure(s) in full in the report or in a supplement, and debriefing the participants at the end of data collection.

Qualitative Synthesis of Themes

As mentioned in the section *Strategy for Data Synthesis* (p. 61), an inductive content analysis was conducted to identify themes and sub-themes emerging from data. Following an adapted version of Thomas' coding process (2006), the present systematic review identified seven superordinate themes associated with the two components of compassion fatigue: burnout and secondary traumatic stress. The superordinate themes identified included: (i) workload; (ii) empathy; (iii) evidence-based practices; (iv) co-worker's support; (v) supervisor's support; (vi) organisational support; and (vii) sense of autonomy. Effect sizes for variables examined in included studies are reported in table 4.

The following sections elaborate on associations of identified superordinate themes with compassion fatigue in mental health professionals.

Workload

Workload or the amount of work conducted, and its perceived difficulty was the most frequently reported work-related factor associated with burnout as well as secondary traumatic stress. In the present review, workload was divided into two sub-themes namely, quantitative workload and qualitative workload. Quantitative workload refers to the objective, measurable amount of work (such as, number of working hours or number of clients) and qualitative workload refers to the perceived complexity of assigned task (such as, task burden or perceived workload).¹³

¹³ For more details on the distinction between quantitative and qualitative workload, refer to the works of Shaw and Weekley (1985) and Glaser et al. (1999).

Quantitative Workload.

In the current review, aspects of quantitative workload associated with compassion fatigue included caseload volume or number of clients (Deighton et al., 2007; Sutton, 2018; Zhang et al., 2021), number of working hours and work on weekends (Mangoulia et al., 2015), traumatic experiences at workplace (Boscarino et al., 2004; Craig & Sprang, 2010; Fountain, 2015; Itzhaki et al., 2018; Tosone & Schaefer, 2010; Ortlepp & Friedman, 2002; Laverdière et al., 2018; Lounsbury, 2006; Somoray et al., 2017; Leonard, 2008; Lawson & Myers, 2010; Verhaeghe et al., 2014; Zhang et al., 2021), and work with specific populations (Schwarz, 2013; Leigh, 2004; Baldschuna et al., 2019; Lawson & Myers, 2010).

Caseload Volume, Number of Working Hours, and Work on Weekends.

The association between caseload volume and compassion fatigue was examined by two studies included in the present review (Deighton et al., 2007; Sutton, 2018). The association however, varied with respect to operationalisation of caseload volume and professionals included in the sampling frame. *Weekly caseload or number of clients seen per week*, in a study on 100 psychotherapists, significantly predicted both burnout ($r = .398, p < .001$) and secondary traumatic stress ($r = .407, p < .05$; Deighton et al., 2007). In contrast, the *total number of clients on current caseload* was found to significantly predict only secondary traumatic stress ($p = .003$) among fourth-year clinical psychology and counselling psychology doctoral students (Sutton, 2018). The study by Sutton (2018) further showed that doctoral candidates with more than ten clients experienced higher levels of secondary traumatic stress than those with one or no client ($p = .02$).

Similarly, the number of working hours and work on weekends had differential impact on components of compassion fatigue. In the study by Mangoulia and colleagues (2015), psychiatric nurses who worked fewer hours reportedly experienced lower levels of burnout (p

= .018). However, those who worked fewer weekends per month were unexpectedly 1.2 to 2.6 times more likely to experience elevated levels of secondary traumatic stress ($p = .003$).

Traumatic Experiences at Workplace.

Mental health professionals' experiences of workplace trauma can be divided into two categories: number of traumatised clients on caseload and client-related violence. The number of traumatised clients on caseload was the most frequently reported aspect of quantitative workload associated with compassion fatigue in mental health professionals. Eleven studies (Boscarino et al., 2004; Craig & Sprang, 2010; Fountain, 2015; Tosone & Schaefer, 2010; Ortlepp & Friedman, 2002; Laverdière et al., 2018; Lounsbury, 2006; Somoray et al., 2017; Leonard, 2008; Lawson & Myers, 2010; Zhang et al., 2021) included in the current review explored how the trauma of a client who might be a victim of physical, psychological, or sexual abuse could impair the psychological wellbeing of a professional. The evidence investigating it suggested that mental health professionals working with traumatised clients on caseload were likely to experience compassion fatigue. Seven studies (Boscarino et al., 2004; Craig & Sprang, 2010; Fountain, 2015; Tosone & Schaefer, 2010; Lounsbury, 2006; Somoray et al., 2017; Leonard, 2008) supported the association between traumatised clients on caseload and the development of secondary traumatic stress and five studies (Craig & Sprang, 2010; Fountain, 2015; Lounsbury, 2006; Leonard, 2008; Lawson & Myers, 2010) suggested that traumatised clients on caseload could pose a potential risk for burnout. However, in one study (Ortlepp & Friedman, 2002), the experience of workplace trauma was negatively associated with burnout ($r = -.41, p < .001$) and secondary traumatic stress ($r = -.31, p < .01$). Also, in another study, the number of traumatic cases was not significantly associated with burnout ($r = .02, p > .05$) or secondary traumatic stress ($r = .03, p > .05$; Zhang et al., 2021).

It is important to highlight here that studies varied with respect to the definition or nature of trauma reported by clients of mental health professionals or by professionals themselves. For instance, in four studies (Fountain, 2015; Lounsbury, 2006; Lawson & Myers, 2010; Zhang et al., 2021), the proportion of traumatised clients on caseload was operationalised as the number of clients who were victims of traumatic incidents such as, physical abuse, sexual violence, domestic violence, and life-threatening accidents among others. Whereas, in other studies, the impact of certain specific tragedies or nature of caseload were investigated. For instance, two studies (Boscarino et al., 2004; Tosone & Schaefer, 2010) examined the impact of working with the victims of September 11 terrorist attacks, whilst the other two (Craig & Sprang, 2010; Leonard, 2008) explored the association between the percentage of clients diagnosed with Post-Traumatic Stress Disorder (PTSD) and compassion fatigue in mental health professionals.

Mental health professionals' experiences of client-related violence (i.e., violence inflicted by a client) were surveyed by only three studies (Fountain, 2015; Itzhaki et al., 2018; Verhaeghe et al., 2014) included in the present review. The results suggested that client-related violence was associated with burnout (Itzhaki et al., 2018; Verhaeghe et al., 2014) as well as secondary traumatic stress (Fountain, 2015; Itzhaki et al., 2018; Verhaeghe et al., 2014). Mental health professionals who were victims of physical and verbal abuse from patients or clients were likely to experience chronic levels of compassion fatigue (Itzhaki et al., 2018). However, it is pivotal to note that client-related violence as a predictor variable was not examined by research on clinical psychologists, counsellors, or psychotherapists. In contrast, it was investigated only by studies on field-professionals such as, social workers (Fountain, 2015) and mental health nurses (Itzhaki et al., 2018; Verhaeghe et al., 2014).

Work with Specific Populations.

Psychotherapeutic work with two specific groups that could pose a potential threat for development of compassion fatigue included: children in welfare sector and clients with severe mental health conditions. Two studies (Smallwood-Butts, 2012; Baldschuna et al., 2019) included in the current review suggested that mental health professionals employed in child protection services were more vulnerable to experience burnout. A large study on social workers ($n = 888$) demonstrated that social workers without child protection duties reported significantly lower levels of burnout ($t(885) = -4.39, p < .001$) and secondary traumatic stress ($t(885) = -6.07, p < .001$) than their counterparts with such duties (Baldschuna et al., 2019).

For caseload comprising of clients with severe mental health conditions, the evidence is mixed. The study by Schwarz (2013) and Leigh (2014) suggested that therapeutic work with clients with personality disorder was associated only with secondary traumatic stress. However, empathic engagement with high-risk clients (i.e., clients who are dangerous to self or others) in the study by Lawson and Myers (2010) was found to significantly predict only burnout ($r = .20, p < .001$). Whereas in a cross-sectional study with 125 community mental health professionals, aggressive behaviour of psychiatric patients was found to predict both burnout ($r = .62, p < .001$) as well as secondary traumatic stress ($r = .67, p < .001$; Chang & Shin, 2021).

Qualitative Workload.

Aspects of qualitative workload that were associated with compassion fatigue included: perceived workload (Burnett, 2017; Deighton et al., 2007; Ray et al., 2013; Towey-Swift & Whittington, 2019; Laverdière et al., 2018; Thompson, 2018) and perceived stress (Jacobson, 2006). Following sections elucidate relations between facets of qualitative workload and compassion fatigue.

Perceived Workload.

Mental health professionals' perceptions of their workload were examined in relation to burnout and secondary traumatic stress in six studies included in the current review (Burnett, 2017; Deighton et al., 2006; Ray et al., 2013; Towey-Swift & Whittington, 2019; Laverdière et al., 2018; Thompson, 2018). The results suggested that perceived demands of workload such as, shortage of time to complete all tasks or uneven distribution of work led to a surge in levels of compassion fatigue in mental health professionals (Burnett, 2017; Deighton et al., 2007; Thompson, 2018). The study by Deighton and colleagues (2007) suggested that the job requirement to undertake tasks unrelated to psychotherapy or core job role predicted burnout and secondary traumatic stress in therapists working with victims of trauma. Conversely, a sense of congruence or person-job match between expectations of mental health professionals and their jobs in terms of workload alleviated both burnout as well as secondary traumatic stress (Ray et al., 2013; Towey-Swift & Whittington, 2019).

Perceived Stress.

The impact of perceived work-related stress emanating from engagement with traumatised clients or groups on compassion fatigue was examined by only one study included in this review. In a study on 263 employee assistance professionals, Jacobson (2006) found that professionals who experienced work-related stress due to engagement with traumatised clients or groups reported higher levels of burnout and secondary traumatic stress than their counterparts who did not report such experiences.

Empathy

The association between empathy or the ability to psychologically place oneself in another person's position and compassion fatigue was examined by only six studies included in this

review (Laverdière et al., 2019; Shar, 2019; Laverdière et al., 2018; MacRitchie & Leibowitz, 2010; Linley & Stephen, 2007; Zhang et al., 2021). Two sub-themes included under this superordinate theme were: burden of empathy and empathic alliance. The former refers to certain aspects of empathic understanding that foster a sense of emotional exhaustion and an inability to mentally distance oneself from a client's narrative. The latter (i.e., empathic alliance) on the other hand, addresses the therapeutic relationship between a mental health professional and their client. As these terms suggest, burden of empathy was likely to reinforce compassion fatigue whereas, empathic alliance had the potential to inoculate against it. More details on respective impacts of burden of empathy and empathic alliance are provided in following sections.

Burden of Empathy.

The adverse effect of burden of empathy was examined by five studies (Laverdière et al., 2018; MacRitchie & Leibowitz, 2010; Laverdière et al., 2019; Shar, 2019; Zhang et al., 2021). Of these five, two studies operationalised and measured the requirement to empathise with clients as a holistic, unitary construct (Laverdière et al., 2018; MacRitchie & Leibowitz, 2010). Their results suggested that empathy was positively associated with burnout (Laverdière et al., 2018) and secondary traumatic stress (MacRitchie & Leibowitz, 2010). In remaining three studies (Laverdière et al., 2019; Shar, 2019; Zhang et al., 2021), associations between different facets of empathy (viz. personal distress, empathic concern, and perspective taking) and compassion fatigue were investigated. Of these three facets, empathic concern¹⁴ (Shar, 2019) was associated only with secondary traumatic stress whereas, personal distress¹⁵ was associated with both burnout (Laverdière et al., 2019; Shar, 2019; Zhang et al., 2021) and

¹⁴ Empathic concern is defined as “the tendency to experience feelings of warmth, compassion, and concern for other people.” (Davis, 1983, p. 117)

¹⁵ Personal distress refers to “one's own feelings of personal unease and discomfort in reaction to the emotions of others.” (Davis, 1983, p. 117)

secondary traumatic stress (Laverdière et al., 2019; Shar, 2019; Zhang et al., 2021). Perspective-taking was negatively associated with compassion fatigue (Laverdière et al., 2019; Shar, 2019) thus, it was included under the sub-theme *Empathic Alliance*.

Empathic Alliance.

The negative impact of empathic understanding on compassion fatigue was explored by three studies (Laverdière et al., 2019; Shar, 2019; Linley & Joseph, 2007). The tendency to adopt a client's point of view (i.e., perspective-taking) and therapeutic relationship with clients were identified as protective factors against burnout and secondary traumatic stress (Laverdière et al., 2019; Shar, 2019; Linley & Joseph, 2007).

Evidence-Based Practices

Research on the relation between use of evidence-based psychotherapeutic practices and compassion fatigue in mental health professionals has produced mixed findings. Whilst orientation in certain therapeutic approaches, in particular cognitive-behavioural therapy or existential therapy have been found to contribute to burnout (Linley & Stephen, 2007) and secondary traumatic stress (Sodeke-Gregson et al., 2013), the use of evidence-based practices in general, have been found to mitigate the onset of compassion fatigue (Smallwood-Butts, 2012; Craig & Sprang, 2010).

The evidence investigating the efficacy of evidence-based practices lacks parsimony. For instance, the use of *working through trauma*, an empirical practice to address secondary trauma, was found to promote secondary traumatic stress ($r = .24, p < .01$) but prevent burnout ($r = -.21, p < .05$; Deighton et al., 2007). Whereas the provision of specialised trauma training was found to prevent burnout (Craig & Sprang, 2010; Sodeke-Gregson et al., 2013) as well as secondary traumatic stress (Sprang et al., 2007).

Co-Worker's Support

Support from one's colleagues in the form of a positive team environment, a sense of trust, and emotional support were found to attenuate the development of burnout and secondary traumatic stress in mental health professionals (Holstein, 2011; Sodeke-Gregson et al., 2013; Ray et al., 2013; Bell et al., 2019; Cetrano et al., 2017; Towey-Swift & Whittington, 2019; Somoray et al., 2017). The negative association between collegial support and compassion fatigue was bolstered by the finding that the level of burnout escalated in the absence of teamwork and cordial relations with co-workers, as evidenced in the study by Mangoulia and colleagues (2015).

Supervisor's Support

Support from supervisor emerged as a risk as well as a protective factor in included studies (Sodeke-Gregson et al., 2013; Bell et al., 2019; Lounsbury, 2006; Grunhaus, 2018). Whilst hours of supervision were positively associated with secondary traumatic stress (Sodeke-Gregson et al., 2013; Lounsbury, 2006), support provided by supervisors was conversely related to burnout (Sodeke-Gregson et al., 2013; Bell et al., 2019). Burnout was also inversely related to seven facets of servant leadership style of supervisors: conceptual skills ($r = -.22, p < .05$); empowerment ($r = -.33, p < .05$); helping subordinates grow and succeed ($r = -.37, p < .05$); putting subordinates first ($r = -.27, p < .05$); ethical behaviour ($r = -.28, p < .05$); emotional healing ($r = -.32, p < .05$); and, creating value for the community ($r = -.30, p < .05$; Grunhaus, 2018).

Organisational Support

The provision of organisational support emerged as a job resource averting the development of burnout in mental health professionals. Studies included in the present review indicated that

mental health professionals who availed services provided by employee assistance professionals in their organisations (Jacobson, 2006) and received adequate information to work effectively with traumatised clients (Adams et al., 2006; Boscarino et al., 2004) reported lower levels of burnout and secondary traumatic stress. Also, the availability of professional support ($r = -.22, p < .05$) and opportunities for professional development ($r = -.43, p < .05$) were found to protect against burnout (Grunhaus, 2018). The lack of or infrequent utilisation of organisational resources and support in a study by Sallouma and colleagues (2019) was found to contribute to professionals' experience of burnout ($r = -.29, p < .001$).

Sense of Autonomy

Sense of autonomy or control over working conditions was associated with compassion fatigue in four studies (Ray et al., 2013; Towey-Swift & Whittington, 2019; Thompson, 2018; Leonard, 2008). However, the effect was equivocally distributed between burnout and secondary traumatic stress. For instance, sense of control over working conditions allayed the development of secondary traumatic stress in three studies (Ray et al., 2013; Towey-Swift & Whittington, 2019; Leonard, 2008) but was found to prevent burnout in only one study (Towey-Swift & Whittington, 2019). In the research by Thompson (2018), where scores on burnout and secondary traumatic stress were combined, employees' perceived latitude of decision-making was found to prevent compassion fatigue.

Table 4

Effect sizes (r values) of variables examined in included studies

Study	Sample	Measure	Correlates	Effect size (r)		
				BO	CF/STS	CF (BO + STS)
Burnett et al., 2017	121 licensed mental health professionals employed in the United States Military installations	ProQOL 5	Age		$r = -.232^{**}$	
			Morale		$r = .231^*$	
			Weekly working hours		$r = .162$ (NS)	

Wells, 2004	78 school counsellors	ProQOL-R III	Caseload	$r = .004^{\Delta}$	$r = .007^{\Delta}$	
Schwarz, 2013	36 mental health professionals	ProQOL	Percentage of caseload with personality disorder	$r = .27$ (NS)	$r = .52^{***}$	
			Training	$r = .001^{\Delta}$	$r = .003^{\Delta}$	
Smallwood-Butts, 2012	248 mental health professionals	ProQOL-III	Use of evidence-based practices	$r = -.305^{**}$	$r = -.288^{**}$	$r = -.304^{**}$
			Use of non-evidence-based practices	$r = -.264^{**}$	$r = -.108$ (NS)	$r = -.230^{**}$
Laverdière, Ogrodniczuk, & Kealy, 2019	240 psychologists and registered psychotherapists	ProQOL 5	Perspective taking	$r = -.14^{\Delta}$		
			Personal distress	$r = .35^{\Delta}$	$r = .31^{\Delta}$	
Adams, Boscarino, & Figley, 2006	236 social workers New York-based who were involved in counselling clients affected by 09/11 terrorist attacks	CF Scale-R	Psychological distress	$r = .481^{***}$	$r = .421^{***}$	
			Exposure to stressful life events	$r = .242^{***}$	$r = .131$ (NS)	
			Exposure to lifetime traumatic events	$r = .092$ (NS)	$r = .132$ (NS)	
			09/11 counselling involvement	$r = .106$ (NS)	$r = .145$ (NS)	
			Percentage of survivors of violence on caseload	$r = .034$ (NS)	$r = .020$ (NS)	
			Social support	$r = -.204^{**}$	$r = -.078$ (NS)	
			Availability of adequate information to work effectively	$r = -.191^{**}$	$r = -.144$ (NS)	
			Sense of mastery	$r = -.329^{**}$	$r = -.147$ (NS)	
Boscarino, Figley, & Adams, 2004	236 New-York based social workers involved in counselling clients affected by 09/11 terrorist attacks	CF Scale-R	Race/ethnicity	NR	NR	
			Gender	NR	NR	
			Marital Status	NR	NR	
			Years of professional experience	NR	NR	
			Helping those affected by 09/11 attacks	NR	NR	
			Percentage of traumatised clients on caseload	NR	NR	
			Exposure to traumatic events during lifetime	NR	NR	
			Availability of adequate information to work effectively	NR	NR	
Leigh, 2014	119 doctorate-level clinical psychologists	CFST	Orientation in cognitive-behavioural therapy		$r = .07$ (NS)	
			Self-efficacy		$r = -.15$ (NS)	

			Caseload (number of clients)		$r = .08$ (NS)	
			Positive views about work		$r = -.34^{***}$	
			Percentage of clients with personality disorders on caseload		$r = .25^{**}$	
			Gender		$r = .05$ (NS)	
			Percentage of elderly clients on caseload		$r = .03$ (NS)	
			Percentage of clients with diagnosed with a terminal disease like cancer or AIDS		$r = .11$ (NS)	
			Percentage of minority ethnic clients		$r = .16$ (NS)	
			Percentage of clients with eating disorders		$r = -.02$ (NS)	
Holstein, 2011	98 psychotherapists	ProQOL 5	Ethnicity (Caucasian)	$r = -.27^*$		
			Educational qualification (Doctorate)	$r = -.23^*$		$r = -.25^*$
			Actual number of working hours	$r = .06$ (NS)	$r = -.06$ (NS)	
			Caseload	$r = .01$ (NS)	$r = -.05$ (NS)	
			Number of hours of supervision	$r = -.06$ (NS)	$r = -.08$ (NS)	
			Involvement in peer group	$r = -.11$ (NS)	$r = -.03$ (NS)	
			Personal therapy	$r = .01$ (NS)	$r = -.03$ (NS)	
			Physically comfortable environment	$r = -.24^*$	$r = -.14$ (NS)	
			Regular breaks	$r = -.13$ (NS)	$r = .02$ (NS)	
			Eating lunch with co-workers	$r = -.19$ (NS)	$r = -.11$ (NS)	
			Positive team environment	$r = -.27^{**}$	$r = -.21^*$	
			Efforts made by organisation to make new employees feel comfortable	$r = -.31^{**}$	$r = -.25$ (NS)	
			Organisation's tolerance of differences	$r = -.29^{**}$	$r = -.21^*$	
			Extent to which honesty is encouraged in the organisation	$r = -.31^{**}$	$r = -.20$ (NS)	
			Extent to which gossip is discouraged	$r = -.28^{**}$	$r = -.18^*$	
Sprang, Clark, & Whitt-Woosley, 2007	1121 mental health professionals (psychologists,	ProQOL	Specialized trauma training	$r = .02^{\Delta}$	$r = .1^{\Delta}$	

	psychiatrists, social workers, marriage and family therapists, professional counsellors, and drug and alcohol counsellors)					
Jacobson, 2006	325 employee assistance professionals	ProQOL	Positive coping	$r = .169^*$		
			Negative coping	$r = .469^{**}$	$r = .426^{**}$	
Sodeke-Gregson, Holtum & Billings, 2013	253 psychotherapists	ProQOL 5	Service setting	$r = .008$ (NS)	$r = -.116$ (NS)	
			Age	$r = -.200^{**}$	$r = -.043$ (NS)	
			Gender	$r = .060$ (NS)	$r = .102$ (NS)	
			Highest qualification	$r = -.157^*$	$r = .051$ (NS)	
			Number of years post qualification	$r = -.120$ (NS)	$r = -.135^*$	
			Core professions	$r = -.095$ (NS)	$r = -.070$ (NS)	
			Number of sessions	$r = -.035$ (NS)	$r = -.092$ (NS)	
			Number of clients on caseload	$r = .013$ (NS)	$r = -.054$ (NS)	
			Number of trauma-focused clients on caseload	$r = -.027$ (NS)	$r = .120$ (NS)	
			Predominate therapeutic approach	$r = .027$ (NS)	$r = .145^*$	
			Hours of individual supervision per month	$r = -.006$ (NS)	$r = .187^{**}$	
			Hours of group supervision per month	$r = .006$ (NS)	$r = .035$ (NS)	
			Hours of peer supervision per month	$r = .034$ (NS)	$r = -.003$ (NS)	
			Hours of consultant supervision per month	$r = -.039$ (NS)	$r = .123$ (NS)	
			Days of trauma-specific training during main training course	$r = -.070$ (NS)	$r = .118$ (NS)	
			Days of trauma specific training since qualification	$r = -.155^*$	$r = -.054$ (NS)	
			Personal trauma history	$r = .017$ (NS)	$r = -.139^*$	
			CSI-Beliefs: leisure	$r = -.145^*$	$r = .046$ (NS)	
			CSI-Beliefs: self-care	$r = -.099$ (NS)	$r = .050$ (NS)	
			CSI-Beliefs: supervision	$r = -.189^{**}$	$r = .013$ (NS)	
			CSI-Time: leisure	$r = -.094$ (NS)	$r = -.047$ (NS)	
			CSI-Time: self-care	$r = -.173^{**}$	$r = .172^{**}$	
			CSI-Time: supervision	$r = -.204^{**}$	$r = .115$ (NS)	
			CSI-Time: R&D	$r = -.192^{**}$	$r = .063$ (NS)	

			Perceived support by management	$r = -.328^{**}$	$r = -.111$ (NS)
			Perceived support by management staff	$r = -.113$ (NS)	$r = .063$ (NS)
			Perceived support by peers	$r = -.155^*$	$r = -.057$ (NS)
			Perceived support of supervision	$r = -.249^{**}$	$r = .063$
Craig & Sprang, 2010	532 clinical psychologists and clinical social workers	ProQOL-III	Specialised trauma training	$r = -.01^{\Delta}$	
			Workplace settings (inpatient)	$r = .34^{\Delta}$	$r = .31^{\Delta}$
Ray, Wong, White, & Heaslip, 2013	169 frontline mental health professionals	ProQOL-R IV	Person-job match in:		
			• Workload		$r = -.45^{**}$
			• Control		$r = -.19^*$
			• Reward		$r = -.28^{**}$
			• Community		$r = -.25^{**}$
			• Values		$r = -.05$ (NS)
			• Fairness		$r = -.26^{**}$
Sallouma, Choib, & Stover, 2019	177 child welfare workers	ProQOL 5	Less utilization of organisational resources and practices	$r = -.29^{**}$	$r = -.05^*$
			High utilization of personal self-care practices	$r = -.44^{***}$	$r = -.25^{**}$
			Organisational practices	$r = -.11$ (NS)	$r = .02$ (NS)
Bell, Hopkin, & Forrester, 2019	36 mental health nurses and correctional officers	ProQOL 5	Exposure to traumatic events	NR	NR
			Organisational support	NR	NR
			Peer support	NR	NR
Deighton, Gurriss, & Traue, 2007	100 psychotherapists working with torture victims	ProQOL	Weekly caseload	$r = .398^{***}$	$r = .407^*$
			Degree of working through trauma	$r = -.21^*$	$r = .19$ (NS)
			Advocacy of working through trauma	$r = .16$ (NS)	$r = .24^{**}$
			Discrepancy between degree and advocacy of working through trauma	$r = .31^{**}$	$r = .35^{***}$
			Task burden	$r = .51^{***}$	$r = .42^{***}$
Sutton, 2018	48 fourth-year clinical psychology and counselling psychology doctoral students	ProQOL 5	Personal factors	NR	NR
			Training factors	NR	NR
			Supervisory factors	NR	NR
Shar, 2019	648 substance abuse counsellors	ProQOL 5	Work environment	NR	NR
			Client-helper environment	NR	NR

			Personal environment	NR	NR	
Killian, 2008	104 psychotherapists specialising in the treatment of trauma survivors	ProQOL-R III	Social Support	NR	NR	
			Personal history of trauma	NR	NR	
			Self-care	NR	NR	
			Affective coping	NR	NR	
			Emotional self-awareness	NR	NR	
			Sense of autonomy/Locus of control	NR	NR	
			Work drain	NR	NR	
			Perceptions of work environment	NR	NR	
Cetrano, Tedeschi, Rabbi, Gosetti, Lora, Lamonaca, Manthorpe & Amaddeo, 2017	400 mental health professionals	ProQOL III	Quality of working life	NR	NR	
Fountain, 2015	355 licensed clinical social workers and licensed marriage and family therapists	ProQOL 5	Personal experience of traumatic events	NR	NR	
			Percentage of caseload with clients exposed to traumatic events	NR	NR	
			Experience of client violence	NR	NR	
			Duration of practice	NR	NR	
Can & Watson, 2019	86 counsellors-in-training	ProQOL 5	Supervisory working alliance			r = .04 (NS)
			Empathic concern			r = -.06 (NS)
			Resilience			r = -.47**
			Flourishing			r = -.45**
Baldschuna, Hämäläinen, Töttö, & Salob, 2019	888 social workers	ProQOL-R IV	Child protection duties	NR	NR	
Itzhaki, Bluvstein, Peles Bortz, Kostitsky, Bar Noy, Filshinsky & Theilla, 2018	114 mental health nurses	ProQOL 5	Physical violence	r = .08 (NS)	r = .05 (NS)	
			Verbal violence	r = .16 (NS)	r = .02 (NS)	
			Work stress	r = .50**	r = .16 (NS)	
			Age	r = -.16 (NS)	r = -.09 (NS)	
			Years as a nurse	r = -.18*	r = -.14 (NS)	
Tosone & Schaefer, 2010	481 social workers following 09/11 terrorist attacks	ProQOL-R-IV	Resilience	NR	r = -.168***	
			Attachment	NR	NR	
Thompson, Amatea, Thompson, 2014	213 mental health counsellors	ProQOL 5	Positive working conditions	r = -.643***	r = -.361***	
			Female gender	r = .076 (NS)	r = .223***	

			Years in field	$r = -.219^{***}$	$r = -.186^{***}$
			Mindfulness	$r = -.546^{***}$	$r = -.448^{***}$
			Emotion-focused coping	$r = -.037$ (NS)	$r = .097$ (NS)
			Problem-focused coping	$r = .087$ (NS)	$r = .110$ (NS)
			Maladaptive coping	$r = .466^{**}$	$r = .411^{***}$
Towey-Swift & Wittington, 2019	132 mental health professionals	ProQOL 5	Person-job congruence:		
			• Workload	$r = -.480^{**}$	$r = -.362^{**}$
			• Control	$r = -.430^{**}$	$r = -.235^{**}$
			• Reward	$r = -.483^{**}$	$r = -.284^{**}$
			• Community	$r = -.320^{**}$	$r = -.104$ (NS)
			• Fairness	$r = -.429^{**}$	$r = -.264^{**}$
			• Values	$r = -.454^{**}$	$r = -.243^{**}$
			Recovery	$r = -.140$ (NS)	$r = -.053$ (NS)
			Years in setting	$r = .178^*$	NR
			Years in profession	$r = .246^{**}$	NR
Ortlepp & Friedman, 2002	130 non-professional trauma counsellors	CSFT	Workplace trauma	$r = -.41^{***}$	$r = -.31^{**}$
			Programme coordination	$r = -.29^{**}$	$r = -.37^{***}$
			Self-efficacy	$r = -.43^*$	$r = -.25^{**}$
			Stakeholder commitment	$r = -.26^{**}$	$r = -.21^{**}$
			Sense of coherence	$r = -.59^{***}$	$r = -.56^{***}$
			Social support	$r = -.38^{***}$	$r = -.39^{***}$
Campbell, 2013	362 mental health counsellors	ProQOL-R IV	Level of education	NR	NR
			Gender	NR	NR
			Years in social service field	NR	NR
			Type of licensure	NR	NR
			Age	NR	NR
			Type of professional setting	NR	NR
			Stress level	NR	NR
			Access to supervision	NR	NR
Mangoulia, Koukia, Alevizopoulos, Fildissis, Katostaras, 2015	174 psychiatric nurses	ProQOL-R IV	Years in hospital		$\rho = -.17^*$
			Years in another facility		$\rho = -.17^*$
			Patients in the unit		$\rho = .15^*$
			Weekends worked per month		$\rho = -.18^*$
Verhaeghe et al., 2014	219 mental health nurses	ProQOL 5	Patient attribution and responsibility for aggression	$r = -.148^*$	NS

			Staff Safety	NS	NS
			Predictability of incidents	NS	NS
			Competence in managing violent behaviour	NS	$r = .192^{**}$
			Confidence of staff in dealing with aggressive incidents	NS	NS
			Self-efficacy	NS	$r = -.218^{**}$
Laverdière, Kealy, Ogrodniczuk, Chamberland, & Descôteaux, 2018	240 psychotherapists	ProQOL 5	Caseload volume	$r = .14^*$	NR
			Independent practice	$r = .16^{\Delta}$	NR
			Personal therapy	$r = .19^*$	$r = .31^{***}$
			Empathy	$r = -.27^{***}$	$r = -.10$ (NS)
			Supervision	$r = -.02$ (NS)	$r = .08$ (NS)
			Long-term psychotherapy	NR	$r = .18^{\Delta}$
Lounsbury, 2006	130 crisis counsellors	ProQOL	Age	$r = .01$ (NS)	$r = .05$ (NS)
			Years working as a crisis clinician	$r = .03$ (NS)	$r = .05$ (NS)
			Years working in mental health field	$r = .01$ (NS)	$r = .11$ (NS)
			Hours worked per week	$r = .04$ (NS)	$r = .04$ (NS)
			Number of traumatic events	$r = .05$ (NS)	$r = .10$ (NS)
			STS in school curriculum	$r = .07$ (NS)	$r = .11$ (NS)
			Supervision hours	$r = .05$ (NS)	$r = .19^*$
			Gender	$r = -.13$ (NS)	$r = -.08$ (NS)
			Educational level	$r = -.03$ (NS)	$r = .06$ (NS)
			Percentage of traumatised clients seen per week	$r = .22^*$	$r = .28^{**}$
			Personal history of trauma	$r = .14$ (NS)	$r = .14$ (NS)
			Active coping	$r = -.12$ (NS)	$r = .07$ (NS)
			Planning	$r = -.01$ (NS)	$r = .15$ (NS)
			Positive reframing	$r = .12$ (NS)	$r = .21^*$
			Acceptance	$r = -.05$ (NS)	$r = .04$ (NS)
			Humour	$r = .33^{**}$	$r = .26^{**}$
			Religion	$r = .04$ (NS)	$r = .17$ (NS)
			Emotional support	$r = -.12$ (NS)	$r = .01$ (NS)
			Instrumental support	$r = .06$ (NS)	$r = .09$ (NS)
			Self-distraction	$r = .23^*$	$r = .36^{**}$
			Denial	$r = .22^*$	$r = .20^*$
			Venting	$r = .17$ (NS)	$r = .26^{**}$

			Substance use	$r = .21^*$	$r = .20^*$
			Behavioural disengagement	$r = .30^{**}$	$r = .37^{**}$
			Self-blame	$r = .16$ (NS)	$r = .36^{**}$
			Exercise	$r = -.13$ (NS)	$r = -.07$ (NS)
			Massage or other body work	$r = -.11$ (NS)	$r = -.07$ (NS)
			Adequate sleep	$r = -.34^*$	$r = -.37^*$
			Eating nutritiously	$r = -.22^*$	$r = -.18^*$
			Engaging in enjoyable activities	$r = -.31^{**}$	$r = -.20^*$
			Relaxation	$r = -.19^*$	$r = -.10$ (NS)
			Contact with nature	$r = -.19^*$	$r = -.15$ (NS)
			Creative expressions	$r = -.13$ (NS)	$r = -.04$ (NS)
			Skill development	$r = -.06$ (NS)	$r = .02$ (NS)
			Meditation/spiritual practice	$r = -.03$ (NS)	$r = .05$ (NS)
			Self-evaluation/self-awareness	$r = -.15$ (NS)	$r = -.11$ (NS)
			Use of humour	$r = .01$ (NS)	$r = .06$ (NS)
			Playing with children	$r = .03$ (NS)	$r = .13$ (NS)
			Allowing others to help	$r = -.22^*$	$r = -.18^*$
			Social activism/community development	$r = -.06$ (NS)	$r = .05$ (NS)
			Total self-care	$r = -.28^{**}$	$r = .09$ (NS)
MacRitchie & Leibowitz, 2010	64 trauma counsellors	CFST	Social support		$r = -.28^*$
Thompson, 2018	114 substance misuse professionals	ProQOL 5	Strain		$r = .630^{***}$
			Intention to leave		$r = .269^{**}$
			Emotional suppression		$r = .429^{***}$
			Cognitive reappraisal		$r = -.372^{***}$
			Emotional contagion		$r = .387^{***}$
			Negative events		$r = .327^{***}$
			Quantitative demands		$r = .23^*$
			Decision authority		$r = -.38^{***}$
			Possibilities for development		$r = -.34^{**}$
			Meaning of work		$r = -.54^{***}$
			Commitment		$r = -.33^{**}$
			Predictability		$r = -.48^{***}$
			Rewards		$r = -.45^{***}$

			Role clarity			$r = -.36^{***}$			
			Work/family conflict			$r = .64^{***}$			
			Trust regarding management			$r = -.28^{**}$			
			Justice			$r = -.29^{**}$			
			Health			$r = -.49^{***}$			
			Lack of personal experience of substance abuse			$r = .20^{\Delta}$			
			Possession of a university degree			$r = .24^{\Delta}$			
Somoray, Shakespeare-Finch, & Armstrong, 2017	156 registered psychologists, counsellors, mediators, and social workers	ProQOL 5	Sex	$r = .12$ (NS)	$r = .15$ (NS)				
			Age	$r = -.39^{**}$	$r = .02$ (NS)				
			Personal trauma	$r = -.07$ (NS)	$r = .24^{**}$				
			Work trauma	$r = .08$ (NS)	$r = .27^{**}$				
			Neuroticism	$r = .58^{**}$	$r = .50^{**}$				
			Extraversion	$r = -.40^{**}$	$r = -.27^{**}$				
			Openness	$r = -.12$ (NS)	$r = -.05$ (NS)				
			Agreeableness	$r = -.37^{**}$	$r = -.30^{**}$				
			Conscientiousness	$r = -.28^{**}$	$r = -.21^{*}$				
			Workplace belongingness	$r = -.56^{**}$	$r = -.19^{*}$				
						Components of servant leadership of supervisor:			
						• Conceptual skills	$r = -.22^{*}$	$r = -.11$ (NS)	
						• Empowerment	$r = -.33^{*}$	$r = -.10$ (NS)	
			• Helping subordinates grow and succeed	$r = -.37^{*}$	$r = -.09$ (NS)				
			• Putting subordinates first	$r = -.27^{*}$	$r = -.05$ (NS)				
			• Ethical behaviour	$r = -.28^{*}$	$r = -.14$ (NS)				
			• Emotional healing	$r = -.32^{*}$	$r = -.11$ (NS)				
			• Creating value for the community	$r = -.30^{*}$	$r = -.08$ (NS)				
			Components of professional self-care:						
			• Professional support	$r = -.22^{*}$	$r = -.17$ (NS)				
			• Professional development	$r = -.43^{*}$	$r = -.18$ (NS)				

			• Life balance	$r = -.25^*$	$r = -.26^*$
			• Cognitive strategies	$r = -.29^*$	$r = -.18$ (NS)
			• Daily balance	$r = -.34^*$	$r = -.30^*$
			Components of work environment:		
			• Role conflict	$r = .49^*$	$r = .37^*$
			• Role ambiguity	$r = .48^*$	$r = .33^*$
			• Caseload	$r = .11^*$	$r = .13$ (NS)
			• Traumatized clients	$r = .09^*$	$r = .17$ (NS)
Linley & Joseph, 2007	156 psychotherapists	ProQOL	Personal psychotherapy	NR	NR
			Clinical supervision	NR	NR
			Personal trauma history	NR	NR
			Therapist gender	NR	NR
			Therapeutic training orientation	NR	NR
			Therapeutic practice orientation	NR	NR
			Length of time working as a therapist	NR	NR
			Current workload	NR	NR
Leonard, 2008	98 trauma counsellors	ProQOL	Amount of secondary exposure		$r = .371^*$
			Years of clinical experience		$r = -.107$ (NS)
			Personal trauma history		$r = .152$ (NS)
			Negative clientele		$r = .118$ (NS)
			Workplace support		$r = -.058$ (NS)
			Over-involvement		$r = .258^*$
			Control		$r = .338^{**}$
Butler, Carello, & Maguin, 2016	195 social work graduate trainees	ProQOL 5	Age	$r = -.12$ (NS)	$r = -.14$ (NS)
			Field clients traumatized	$r = -.07$ (NS)	$r = .001$ (NS)
			Field work addresses trauma	$r = -.15$ (NS)	$r = -.03$ (NS)
			PTSD criterion experiences	$r = .16$ (NS)	$r = .23^{**}$
			Training retraumatization	$r = .28^{**}$	$r = .44^{***}$
			Field stress	$r = .27^{**}$	$r = .30^{***}$
			Coursework stress	$r = .12$ (NS)	$r = .24^{**}$
			Self-care importance	$r = -.04$ (NS)	$r = .06$ (NS)
			Self-care effort change	$r = -.23^*$	$r = -.20^{**}$

Lawson & Myers, 2010	506 counsellors	ProQOL-R III	Percentage of clients on caseload	$r = .14^{**}$	
			Percentage of high-risk clients on caseload	$r = .20^{***}$	
Chang & Shin, 2021	125 community mental health professionals	ProQOL 5	Aggressive behaviour at workplace	$r = .62^{***}$	$r = .67^{***}$
Zhang et al., 2021	217 psychological hotline counsellors	ProQOL 5	Total number of cases	$r = -.02$ (NS)	$r = .04$ (NS)
			Number of traumatic cases	$r = .02$ (NS)	$r = .03$ (NS)
			Personal distress	$r = .44^{**}$	$r = .52^{**}$

Note. ProQOL: Professional Quality of Life; BO: Burnout; STS: Secondary Traumatic Stress; CF: Compassion Fatigue; CFST: Compassion Fatigue/Satisfaction Self-Test; CSI: Coping Strategies Inventory; * $p < .05$; ** $p < .01$; *** $p < .001$; ^p value not reported; ^r value calculated using effect size (Cohen's d)

Additional Findings

Supplementary Factors Associated with Compassion Fatigue

In addition to seven major themes explained above, some work-related factors which were excluded in inductive content analysis but were nevertheless examined in relation to compassion fatigue in included studies are succinctly described here. Role conflict and role ambiguity were found to contribute to mental health professionals' experience of burnout and secondary traumatic stress in the research by Grunhaus (2018) and Thompson (2018). Ergonomic difficulties were identified as a risk factor for the development of burnout (Holstein, 2011; Cetrano et al., 2017) and secondary traumatic stress (Cetrano et al., 2017). Burnout and secondary traumatic stress were also positively associated with employment in community behavioural health settings (Holstein, 2011).

In addition, components of compassion fatigue were negatively associated with person-job congruence in terms of rewards, fairness, and values (Ray et al., 2013; Towey-Swift & Whittington, 2019), positive working conditions (Thompson et al., 2014), and tolerance of differences, promotion of honesty and disdain for gossip (Holstein, 2011). Efforts made by an organisation to make new employees feel comfortable (Holstein, 2011) and employees'

perceived sense of organisational justice, predictability, and rewards (Thompson, 2018) were also found to prevent compassion fatigue.

Association between Secondary Traumatic Stress and Burnout

Nine studies (Sodeke-Gregson et al., 2013; Itzhaki et al., 2018; Towey-Swift & Wittington, 2019; Campbell, 2013; Mangoulia et al., 2015; Lounsbury, 2006; Somoray et al., 2017; Butler et al., 2016; Deighton et al., 2007) reported the correlation between secondary traumatic stress and burnout. The degree of relation examined using the Professional Quality of Life Scale (ProQOL), was found to be positive and ranged from medium ($r = .54, p < .01$; Sodeke-Gregson et al., 2013) to strong ($r = .819, p < .001$; Deighton et al., 2007). Averaged correlation coefficient from nine studies ($n = 1616$) was medium in strength ($r = .604$), similar to the study by Stamm (2010), $r = .58$. This reflects the shared variance between the burnout and secondary traumatic stress sub-scales of ProQOL 5 (Stamm, 2010). In only one study (Deighton et al., 2007), the degree of correlation between the two constructs was observed to be very strong.

One study measured secondary traumatic stress using the Secondary Traumatic Stress Scale (Bride et al., 2004) and found its association with burnout subscale of ProQOL 5 (Stamm, 2010) to be moderate in its strength ($r = .62, p < .01$; Butler et al., 2017). In another cross-sectional study (Ray et al., 2013), scores on the secondary traumatic stress sub-scale of ProQOL 5 (Stamm, 2010) were correlated with three dimensions of burnout measured using the Maslach Burnout Inventory (MBI; Schaufeli et al., 1996). Its results suggested that the relation between two constructs was moderate in degree (Ray et al., 2013): secondary traumatic stress and emotional exhaustion ($r = .59, p < .01$); secondary traumatic stress and cynicism ($r = .39, p < .01$); and secondary traumatic stress and reduced personal achievement ($r = -.21, p < .01$).

Compassion Satisfaction

Compassion satisfaction refers to the pleasure one derives from helping or assisting others (Stamm, 2010). The relation between compassion satisfaction and components of compassion fatigue (secondary traumatic stress and burnout) was also reported by some studies included in the present review. The negative relation between compassion satisfaction and secondary traumatic stress ranged from -0.16 (Somoray et al., 2017) to -0.44 (Towey-Swift & Wittington, 2019). Correlation coefficients averaged across six studies (Sodeke-Gregson et al., 2013; Thompson et al., 2014; Towey-Swift & Wittington, 2019; Campbell, 2013; Mangoulia et al., 2015; Somoray et al., 2017) equaled -.265. For compassion satisfaction and burnout (Sodeke-Gregson et al., 2013; Thompson et al., 2014; Towey-Swift & Wittington, 2019; Campbell, 2013; Mangoulia et al., 2015; Lounsbury, 2006; Somoray et al., 2017), the relation was found to be average in strength ($r = -.63$), with a range of -0.42 (Lounsbury, 2006) to -0.78 (Towey-Swift & Wittington, 2019). Also, the internal consistency estimate of compassion satisfaction subscale of ProQOL 5 (Stamm, 2010) averaged across twelve studies (Laverdière et al., 2019; Holstein, 2011; Sodeke-Gregson et al., 2013; Bell et al., 2019; Sutton, 2018; Shar, 2019; Itzhaki et al., 2018; Thompson et al., 2014; Towey-Swift & Wittington, 2019; Laverdière et al., 2018; Somoray et al., 2017; Butler et al., 2016) was 0.89 which is similar to the original estimate ($\alpha = .88$) reported by the scale developer (Stamm, 2010).

In addition, job resources that were found to allay the effects of burnout or secondary traumatic stress were found to promote compassion satisfaction in the same occupational group. The most frequently reported job resource was co-workers' support (Mangoulia et al., 2015; Somoray et al., 2017; Bell et al., 2019; Deighton et al., 2007; Cetrano et al., 2017). Emotional support from colleagues ($\beta = 5.33, p < .001$; Bell et al., 2019) and a having a sense of community ($r = .40, p < .01$; Ray et al., 2013) or belongingness ($\beta = .35, p < .01$; Somoray et al., 2017) at workplace were found to promote compassion satisfaction among mental health professionals. A cross-sectional study on Greek psychiatric nurses (Mangoulia et al., 2015)

indicated that nurses who reported that the staff always worked as a team ($M = 32.9$, $SD = 9.4$) experienced higher levels of compassion satisfaction than those who reported less frequent teamwork ($M = 22.3$, $SD = 7.5$), $F(4, 169) = 7.40$, $p < .001$. Support from supervisor or manager was also found to reinforce a sense of satisfaction in mental health professionals for helping their clients (Bell et al., 2019). Lastly, use of evidence-based practices was found to escalate compassion satisfaction (Bell et al., 2019; Deighton et al., 2007; Linley & Joseph, 2007). A study on US-based clinical psychologists and clinical social workers (Craig & Sprang, 2010) showed that professionals with trauma training ($M = 43.8$, $SD = 5.2$) reported higher compassion satisfaction than professionals without it ($M = 41.4$, $SD = 6.6$), $t(499) = -4.42$, $p < .001$. Also, professionals with training and practice in transpersonal therapy were more likely to be satisfied with their work in mental healthcare (Linley & Joseph, 2007).

Discussion

The aim of this systematic review was to systematically collate, synthesise, and scrutinise existing empirical evidence investigating the role of work-related factors in the advancement and prevention of compassion fatigue in mental health professionals. A small but growing body of research has examined the association between work-related factors and compassion fatigue in mental health professionals (Creamer & Liddle, 2005; Sprang et al., 2007; Craig & Sprang, 2010; Finzi-Dottan & Kormosh, 2016; Phelps et al., 2009; Badger et al., 2008). This job demand—job resource—psychological cost relationship could have a deleterious impact on the psychological wellbeing of professionals and the quality of services they deliver to their clients (Delgadillo et al., 2018; Koutra et al., 2022). In spite of this, studies exploring this construct have focused more on the role of relatively stable individual-level traits than potentially alterable work-related characteristics. The review aimed to address this gap. It identified a moderate number of quantitative studies ($n = 44$) conducted across twelve different countries and representing a heterogeneous sample of mental health professionals.

Information extracted from included studies were used to conduct an inductive content analysis (Thomas, 2006) to identify themes and sub-themes of work-related factors associated with compassion fatigue in mental health professionals. Seven superordinate themes identified included: workload, empathy, evidence-based practices, co-worker's support, supervisor's support, organisational support, and sense of autonomy. The present section proceeds by elaborating the association between each identified theme and components of compassion fatigue. In addition, it discusses supplementary findings related to compassion satisfaction and concludes by highlighting methodological limitations of included studies and scientific and practical implications of findings of current review.

Workload and Compassion Fatigue

The additive impact of quantitative and qualitative workload on compassion fatigue was supported by studies included in the present review. Aspects of quantitative workload identified as potential risk factors for development of compassion fatigue included: volume or size of caseload (Deighton et al., 2007; Sutton, 2018; Zhang et al., 2021); number of working hours (Mangoulia et al., 2015); number of traumatised clients on caseload (Boscarino et al., 2004; Craig & Sprang, 2010; Fountain, 2015; Tosone & Schaefer, 2010; Ortlepp & Friedman, 2002; Laverdière et al., 2018; Lounsbury, 2006; Somoray et al., 2017; Leonard, 2008; Lawson & Myers, 2010; Zhang et al., 2021); experience of client-related violence (Fountain, 2015; Itzhaki et al., 2018; Verhaeghe et al., 2014); and, work with specific vulnerable groups such as, children under the care of child protection services (Smallwood-Butts, 2012; Baldschuna et al., 2019) or clients with severe mental health conditions (Schwarz, 2013; Lawson & Myers, 2010; Chang & Shin, 2021). In addition, mental health professionals' perceptions pertaining to complexity or difficulty of assigned work (i.e., qualitative workload) also contributed to experiences of compassion fatigue. As mentioned in the preceding section, perceived workload (Burnett, 2017; Deighton et al., 2006; Ray et al., 2013; Towey-Swift & Whittington, 2019;

Thompson, 2018) and perceived stress (Jacobson, 2006) were two aspects of qualitative workload which were found to be associated with compassion fatigue.

A comparison of effect sizes (see Table 4) suggests that except for number of traumatised clients on caseload and experience of client-related violence, aspects of quantitative and qualitative workload were better predictive of burnout than of secondary traumatic stress. This implies that psychosocial hazards at workplace are likely to exhaust professionals' resources which could further promote affective, behavioural and cognitive withdrawal from work or clients. The role of increased workload or work demands in contributing to elevated levels of burnout has also been replicated in previous research (Lee et al., 2020; Jianlin et al., 2020; Jovanović et al., 2016; Hamaideh, 2011; Kumar et al., 2011; Lasalvia et al., 2009). According to the conservation of resources (COR) model (Hobfoll, 1989), threat to personal resources (such as energy or individual traits) propel avoidance or escape behaviour to protect or conserve the existing, depleting repository of resources (Hobfoll, 1989). This suggests that compromised empathic resources could lead mental health professionals to distance themselves from their clients to safeguard their own mental health and wellbeing, and to prevent a ripple effect of a dearth of resources on other aspects of life. A cross-sectional study adopting the COR model (Hobfoll, 1989) showed that differentiation of self from clients, specifically in social workers working with highly traumatised groups, was negatively associated with burnout, which was further negatively related to marital quality (Finzi-Dottan & Kormosh, 2016). However, it should be noted that the study collected data using convenience sampling, thereby introducing potential sampling bias.

The positive association between the number of traumatised clients on caseload and secondary traumatic stress (Boscarino et al., 2004; Craig & Sprang, 2010; Fountain, 2015; Tosone & Schaefer, 2010; Lounsbury, 2006; Somoray et al., 2017; Leonard, 2008) implies that second-hand trauma or indirect exposure to trauma has the potential to alter the life-script of a

mental health professional. According to the constructivist self-development theory (McCann & Pearlman, 1990; McCann & Pearlman, 1992; Pearlman & Saakvitne, 1995) which is often used to explain a similar phenomenon known as vicarious trauma, an individual develops cognitive schemas to interpret experiences of his or her life (Pearlman & Saakvitne, 1995). The divulgence of a client's traumatised narrative could alter a professional's cognitive schemas or perceived realities (McCann & Pearlman, 1992). A deep sense of empathy with a client's traumatised narrative (MacRitchie & Leibowitz, 2010) could foster the development of an intimate therapeutic alliance wherein a professional might imitate a client's overt and covert experiences to such an extent that the psychological distinction between the professional and the client might cease to exist albeit to a limited extent (more details on the role of empathy in contributing to secondary traumatic stress can be found in the section *The Impact of Empathy on Compassion Fatigue*). The contribution of client-related violence in leading to the onset of secondary traumatic stress (Fountain, 2015; Itzhaki et al., 2018; Verhaeghe et al., 2014) might also be moderated by empathy towards a client. A mental health professional empathising with a traumatised client might understand that the client's violent actions may not necessarily be under their control and could be a potential consequence of their endured trauma.

The Impact of Empathy on Compassion Fatigue

Mental health professionals are required to empathise with clients to develop a constructive therapeutic alliance that can aid the course of treatment (Gladding, 2013; Kohut, 2010; Flückiger et al., 2012; Elliott et al., 2011). However, empathy also has the potential to exhaust a professional's emotional resources making them vulnerable to burnout or secondary traumatic stress. In the present review, empathy was divided into two sub-themes namely, burden of empathy and empathic alliance. Burden of empathy was found to contribute to professionals' experience of burnout and secondary traumatic stress (Laverdière et al., 2018; MacRitchie & Leibowitz, 2010; Shar, 2019; Zhang et al., 2021) whilst empathic alliance was

found to be a protective factor against burnout and secondary traumatic stress (Laverdière et al., 2019; Shar, 2019; Linley & Joseph, 2007). The former part of this finding confirms the assumption of COR model (Hobfoll, 1989) mentioned above. A mental health professional whose empathic resources are exhausted might consciously or unconsciously withdraw from their clients in order restore emotional capacities.

The mitigating impact of empathic alliance on compassion fatigue further suggests that the therapeutic relation established between a mental health professional and their client could enhance a professional's self-efficacy thereby helping them recognise the *deeper meaning of their work*. In some included studies, therapeutic alliance with clients (Shar, 2019; Linley & Joseph, 2007), professional self-efficacy (Ortlepp & Friedman, 2002; Verhaeghe et al., 2014), and perceived meaning of work (Thompson, 2018) were found to be negatively associated with compassion fatigue. However, no included study examined the mediating role of professional self-efficacy in the relation between therapeutic alliance and compassion fatigue or therapeutic alliance and perceived meaning of work. It is a potential gap in literature for future research.

Use of Evidence-Based Practices

According to guidelines for evidence-based practices in mental healthcare issued by the National Institute for Health and Care Excellence (NICE), cognitive-behavioural therapy is highly recommended for a range of mental health problems such as post-traumatic stress disorder, depression, bulimia nervosa, and schizophrenia (Berkshire Healthcare NHS Foundation Trust, University of Reading, & Charlie Waller Memorial Trust, 2009). Its response rate for treatment of anxiety disorders, according to one estimate, averaged 49.5% at post-treatment stage and 53.6% at follow-up stage (Loerinc et al., 2015). However, cognitive-behavioural therapy despite being beneficial for clients, is likely to promote burnout in mental health professionals. In the study by Linley and Joseph (2007), training and current practice in cognitive-behavioural therapy were found to increase risk for burnout in clinical psychologists

and psychotherapists. This finding however was not replicated in another study (Leigh, 2004). In the study by Leigh (2004), the association between orientation in cognitive-behavioural therapy and compassion fatigue was found to be very weak in degree and not statistically significant.

Other evidence-based practices examined in relation to compassion fatigue included training in existential therapy (Linley & Joseph, 2007) and use of working through trauma (Deighton et al., 2007). Training orientation in existential therapy contributed to professionals' experience of burnout (Linley & Joseph, 2007). Working through trauma in the research by Deighton and colleagues (2007) produced mixed findings. Therapists who advocated working through trauma but did not practice it reported higher levels of secondary traumatic stress than those who advocated as well as practiced it (Deighton et al., 2007). Further, the degree of working through trauma was negatively associated with burnout (Deighton et al., 2007). This suggests that individual characteristics of mental health professionals could moderate the impact of evidence-based practices on psychological health and wellbeing. For instance, in a study on 54 student counsellors and student cognitive-behavioural psychotherapists, participants who reported higher levels of self-care were likely to experience lower levels of burnout and secondary traumatic stress than their counterparts who reported lower levels of self-care (Beaumont et al., 2016).

Assuasive Potential of Support from Co-Workers

Studies included in the present review demonstrated that support from co-workers played a pivotal role in preventing mental health professionals from experiencing burnout and secondary traumatic stress (Holstein, 2011; Sodeke-Gregson et al., 2013; Ray et al., 2013; Bell et al., 2019; Cetrano et al., 2017; Towey-Swift & Whittington, 2019; Somoray et al., 2017; Mangoulia et al., 2015). This suggests that shared experiences of employees in mental healthcare could foster a sense of peer-support which could further provide an outlet for catharsis. It might also aid in

rejuvenating drained psychological resources and revitalising vigour for offering therapeutic services to clients. Previous research on role of work-based social support in preventing burnout in mental health professionals suggests that support from colleagues is related to lower levels of emotional exhaustion and depersonalisation, and higher levels of personal accomplishment (Ben-Zur & Michael, 2007; McCormack et al., 2015). A 2012 study conducted on mental healthcare personnel in the UK found that support from colleagues enhanced professionals' work engagement (Johnson et al., 2012). Also, meta-analytic evidence exploring risk and preventive factors for secondary traumatic stress in trauma workers suggests that optimal levels of social support aid in averting the likelihood of experiencing secondary traumatic stress (Hensel et al., 2015).

In addition, support from co-workers could also have the potential to improve the quality of the therapeutic relationship established with clients via an enriched sense of pleasure or satisfaction derived from work. The present review showed that sense of community at workplace (Ray et al., 2013; Towey-Swift & Wittington, 2019; Mangoulia et al., 2015) and emotional support offered by colleagues (Bell et al., 2019) enhanced mental health professionals' level of compassion satisfaction which was further positively related to perceived significance of therapeutic alliance (Shar, 2019). This implies that peer-support has the potential to ameliorate services provided by mental health professionals which could further positively impact the course of treatment for clients.

Ambiguous Impact of Supervisor's Support on Compassion Fatigue

The present review found that research on association between supervisor's support and compassion fatigue lacks parsimony. Whilst hours of supervision were positively associated with secondary traumatic stress (Sodeke-Gregson et al., 2013; Lounsbury, 2006), the general support offered by supervisors prevented burnout (Sodeke-Gregson et al., 2013; Bell et al., 2019; Grunhaus, 2018). The latter part of this finding implies that moral or emotional support

offered by a supervisor, usually an experienced professional, might assist mental health professionals in the management of certain job demands associated with burnout. For instance, a supervisor might share his or her own experiences, which could provide support to novice professionals. Moreover, since increasing age (Sprang et al., 2011; Cohen et al., 2006; Nelson-Gardell & Harris, 2003; Thomas & Otis, 2010) and work experience (Udipi et al., 2008; Potter et al., 2010) are two of the most frequently reported protective factors against compassion fatigue, listening to an experienced professional might afford effective coping strategies to mental health professionals vulnerable to burnout or secondary traumatic stress. In a recent study on American school counsellors, satisfaction with supervision was found to prevent burnout (Fye et al., 2020) and in another study on nursing staff in forensic psychiatric settings, clinical supervision was negatively associated with depersonalisation (Berry & Robertson, 2019).

The positive impact of hours of supervision on secondary traumatic stress (Sodeke-Gregson et al., 2013; Lounsbury, 2006), although an unanticipated finding, implies that supervision might inhibit psychological detachment from clients' narrative thereby reinforcing a prolonged mental engagement with cases resulting in experiences of secondary trauma. For instance, discussion about a client's case with a supervisor might prevent emotional exhaustion in a professional but it might foster an untethered psychological attachment averting disengagement. It is pivotal to highlight that this relation warrants further research.

The Provision of Organisational Resources and Support

The availability and use of organisational resources and support emerged as a factor inoculating mental health professionals against detrimental effects of compassion fatigue (Adams et al., 2006; Boscarino et al., 2004; Jacobson, 2006; Grunhaus, 2018; Sallouma et al., 2019). It endows professionals with essential skills and competencies vital for working effectively with sensitive cases or clients experiencing psychological or physical trauma and

ensuring at the same time that it does not exhaust their personal resources. Two empirical investigations on social workers involved in recovery and counselling efforts for September 11 terrorist attacks in New York City, US demonstrated that provision of adequate information to work with victims of attack or bereaved clients was conducive in protecting personnel against burnout and secondary traumatic stress (Adams et al., 2006; Boscarino et al., 2004). However, data for these studies were retrospective, i.e., it was collected almost three years after the traumatic incident took place thus, making it vulnerable to recall bias.

It is important to recognise that the support offered by an organisation is not only restricted to provision of information or opportunities for professional development. It could also include under its ambit, measures to safeguard psychological or emotional wellbeing of employees. For instance, in the study by Jacobson (2006), employee assistance professionals who availed services offered by employee assistance professionals at their own organisation were less likely to experience secondary traumatic stress. This suggests that organisational support needs to include a diverse range of resources to prevent the development of compassion fatigue in employees.

Relation between Perceived Autonomy and Compassion Fatigue

Similar to ambiguous relationship between supervision and compassion fatigue, research on the role of mental health professionals' perceived sense of autonomy in contributing to or impeding compassion fatigue lacks clarity. Employees' perceived control over working conditions prevented secondary traumatic stress (Ray et al., 2013; Towey-Swift & Whittington, 2019; Leonard, 2008) in three studies included in this review but was found to inhibit burnout in only one study (Towey-Swift & Whittington, 2019). This association needs to be examined further in empirical research. However, based on limited evidence captured by this review, it can be inferred that when accorded the facility to craft own job, employees in mental healthcare organisations report low levels of burnout and secondary traumatic. This could be due to

control employees exert on the nature of their caseload such as, professionals may not include more than a certain number of traumatised clients on their caseload or may allocate certain hours for self-care. This association has also been replicated in previous research with high levels of work control being negatively associated with burnout (Day et al., 2017; Scanlan & Still, 2019) and secondary traumatic stress (Kulkarni et al., 2013; Bock et al., 2020).

Association between Compassion Fatigue and Compassion Satisfaction

The present review also found that compassion fatigue was negatively associated with compassion satisfaction (Sodeke-Gregson et al., 2013; Thompson et al., 2014; Towey-Swift & Wittington, 2019; Campbell, 2013; Mangoulia et al., 2015; Lounsbury, 2006; Somoray et al., 2017). Thus, work-related factors associated with lower levels of compassion fatigue were also found to be associated with higher levels of compassion satisfaction (e.g., Mangoulia et al., 2015; Somoray et al., 2017; Bell et al., 2019; Deighton et al., 2007; Cetrano et al., 2017; Linley & Joseph, 2007). This finding is consistent with tenets of Job Demands-Resources (JD-R) Model (Demerouti et al., 2001) which suggests that burnout and work engagement are two ends of a spectrum and that job resources which enhance employees' levels of work engagement are also benevolent in reducing burnout (Demerouti et al., 2001). However, it is imperative to highlight that the degree of bivariate relation between compassion satisfaction and secondary traumatic stress (Sodeke-Gregson et al., 2013; Thompson et al., 2014; Towey-Swift & Wittington, 2019; Campbell, 2013; Mangoulia et al., 2015; Somoray et al., 2017) remains low in contrast to moderate degree of relation between compassion satisfaction and burnout ((Sodeke-Gregson et al., 2013; Thompson et al., 2014; Towey-Swift & Wittington, 2019; Campbell, 2013; Mangoulia et al., 2015; Lounsbury, 2006; Somoray et al., 2017). This is a pivotal finding for research examining the efficacy of interventions aimed at enhancing compassion satisfaction or reducing compassion fatigue. Whilst burnout and secondary traumatic stress are related to one another, they are two independent constructs that vary in

terms of their association with compassion satisfaction. Therefore, whilst an intervention intended to escalate compassion satisfaction might be successful in reducing burnout, its likelihood for reducing secondary traumatic stress remains low.

Limitations of Studies Included in the Present Review

The lack of theoretically-driven research regarding the impact of work-related factors on compassion fatigue in mental health professionals also has important implications. Since theory-driven research accords a more comprehensive and empirically-sound understanding of a phenomenon (D’Oria, 2020), its dearth inhibits examining more accurate hypotheses or research questions by failing to explain interactions among forces impacting the outcome(s) under investigation. For instance, in a cross-sectional study on British psychotherapists, working alliance with clients was found to enhance compassion satisfaction and reduce burnout (Linley & Joseph, 2007). The researchers (Linley & Joseph, 2007) explained the contribution of this alliance as, “the channel through which the therapist experiences positive psychological changes in grappling vicariously with the suffering and distress of his or her clients” (p. 399). Although succinct, this explanation could have been enriched with the aid of organismic valuing theory which suggests that accommodation of clients’ negative cognitive schemas into one’s world-view could foster post-adversarial growth (or compassion satisfaction in this case) despite negative wellbeing (or burnout; Joseph & Linley, 2005). This shows that positioning a finding in the context of a theoretical model offers a framework for its description which could further be used for guiding applied research.

Only 17 research studies (Burnett et al., 2017; Adams et al., 2006; Ray et al., 2013; Shar, 2019; Baldschuna et al., 2019; Tosone & Schaefer, 2010; Thompson et al., 2014; Campbell, 2013; Verhaeghe et al., 2014; MacRitchie & Leibowitz, 2010; Thompson, 2018; Somoray et al., 2017; Grunhaus, 2018; Leonard, 2008; Lawson & Myers, 2010; Chang & Shin, 2021; Zhang et al., 2021) included in the present review formally stated a theoretical rationale

underlying their proposed research questions or models. Some studies (e.g., Ray et al., 2013; Baldschuna et al., 2019; Grunhaus, 2018) mentioned Stamm's Professional Quality of Life Framework (2010) but only to elucidate the concept of compassion fatigue and not to provide a justification for their research questions or hypotheses. This is a concerning finding because theory-driven research not only advances our understanding of complex interactions of systems influencing a phenomenon (Sidani & Sechrest, 1999; Vanderplasschen & De Maeyer, 2014) but also facilitates the development and delivery of appropriate and effective interventions aimed at attenuating or aggravating the impact of a phenomenon (Broekaert et al., 2010). Therefore, the scarcity of theoretically-driven research endangers the design and implementation of systematic interventions, which could further imperil the quality of services provided by mental health professionals. On the other hand, an opposing view in the literature advocated by practitioners and applied researchers is that research aimed at filling gaps in a theory is tantamount to "advancing theory for theory's sake, rather than theory for utility's sake." (Corley & Gioia, 2011, p. 22) This suggests that non-theory-driven research could also make useful contributions to practice. A comprehensive review of the debate between promoters and opponents of theory-guided research is beyond the scope of this chapter. For further details, readers are directed towards a commentary by Corley and Gioia (2011).

It is vital to highlight here that studies included in the review varied in their methodological quality, with majority of studies not meeting high standards of empirical rigour. Only thirteen studies were rated as "acceptable" (Burnett et al., 2017; Holstein, 2011; Sodeke-Gregson, Holttum & Billings, 2013; Craig & Sprang, 2010; Ray et al., 2013; Sallouma et al., 2019; Sutton, 2018; Fountain, 2015; Can & Watson, 2019; Campbell, 2013; Thompson, 2018; Grunhaus, 2018). In addition, all studies included in the present review adopted a cross-sectional design which inhibits establishing causal relations and temporal order (Neuman, 2014), and is vulnerable to common-method variance bias (Podsakoff et al., 2003). This is a

critical finding as compassion fatigue has been found to compromise physical and psychological health and wellbeing of mental health professionals. Therefore, the dearth of high-quality empirical research exploring the role of work-related factors is likely to mask our understanding of the impact of compassion fatigue on mental health of mental health professionals. Furthermore, it could also hinder the exploration of pathways to alleviate its consequences on therapeutic services offered by mental health professionals to their clients.

Implications and Directions for Further Research

The findings of current review suggest that work-related factors have the potential to contribute to the development of compassion fatigue in mental health professionals. Hindering work demands (such as workplace trauma, workload, and burden of empathy) appear to act as catalysts in the advancement of this psychological strain. In contrast, job resources (such as co-workers' support, supervisor's support, use of evidence-based practices, organisational support, and employees' perceived autonomy) have the capacity to alleviate or halt its progress. This implies the need to provide essential emotional or informative resources to assist in the development of mental health professionals' personal capacities to help them cope with the emotionally and cognitively taxing nature of their profession.

The positive relationship between support offered by a supervisor and compassion satisfaction implies the need for providing soft-skills (e.g., coaching-related skills) training to supervisors to support them in their nurturing role. In a recent systematic review, Bradley and Becker (2021) identified supervisor characteristics and practices in mental healthcare that are positively associated with the restorative domain of supervision i.e., those aspects of supervision that are positively associated with rejuvenating the personal resources of healthcare personnel and reducing burnout (Proctor, 1986). Their findings indicated that the perceived quality of supervisor-professional relationship (i.e., the degree to which a professional feels comfortable in confiding in their supervisor and seeking their counsel if required), and the

display of empathy and praise were positively associated with supervisees' psychological well-being (Bradley & Becker, 2021). These characteristics can be developed through training. A realist synthesis by Rees et al. (2020) found that irrespective of discipline and organisational context, short-duration (i.e., less than a week) supervision training interventions for healthcare supervisors are positively associated with developing their avuncular supervision characteristics, which are further positively associated with the well-being and professional development of their supervisees.

In addition, the beneficial role of emotional support from colleagues suggests that organisations should promote collaboration between employees or undertake team-building initiatives to foster supportive relations among employees. One exercise that mental health organisations could undertake is to conduct Schwartz Rounds. Maben et al. (2021) in a recent realist evaluation, detailed the conducive role played by Schwartz Rounds in improving the mental health and well-being of healthcare professionals. In a traditional Schwartz Round, a panel of inter-disciplinary staff members share the positive and negative impact of engagement with a patient and their family members with attendees who follow it up with a group reflection and discussion (Maben et al., 2021). It has been found to improve the psychological wellbeing of healthcare staff, interpersonal relations among colleagues, compassion towards patients and their families, and improved quality of care delivered to patients, which could have positive treatment outcomes (Maben et al., 2021). It is likely to foster peer support and considering that mental health teams are usually multi-disciplinary in nature (e.g., psychiatrists, clinical psychologists, and clinical social workers often work together on a set of cases), Schwartz Rounds could be an effective intervention for mental health organisations to implement because the panel as well as the attendees in a Schwartz Round are members of clinical and non-clinical staff (Maben et al., 2021). However, it is important to mention that it could also endanger the confidentiality of clients' information. Since confidentiality is a legal and ethical

pillar of mental healthcare (British Psychological Society, 2017), increased interaction with one's co-workers could risk its violation. Therefore, an organisation must be cautious while reinforcing peer interaction and support among mental health professionals.

The present review also contributes to scientific research on compassion fatigue in mental health professionals. According to the 2019 annual report of Health and Safety Executive (HSE), the average prevalence of work-related stress, depression, or anxiety in human health and social work sector was 2,120 cases per 100,000 workers (HSE, 2019). Workload, lack of managerial support, and experiences of violence at work were some risk factors for stress identified in the report (HSE, 2019). Similar factors have also been identified in the present review as risk factors for compassion fatigue. Moreover, compassion fatigue has also been associated with stress, anxiety, depression, and health impairment in previous research (Canfield, 2005; Mathieu, 2007; Jacobson, 2006; Kinman & Grant, 2020). However, no scientific investigation in literature has synthesised work-related factors associated with compassion fatigue in mental healthcare professionals. The present review, to my best knowledge, is the first systematic review to collate and critically analyse existing evidence exploring occupational covariates of compassion fatigue in mental health professionals.

In addition, the review uncovered a shortage of research on compassion fatigue in mental health professionals working in the UK. Majority of the included studies were conducted in the United States (US). Only 5 included studies were conducted on mental health professionals based in the UK (Sodeke-Gregson et al., 2013; Bell et al., 2019; Towey-Swift & Wittington, 2019; Thompson, 2018; Linley & Joseph, 2007) and indicated variations in the prevalence estimates of compassion fatigue components. Differences were also found in prevalence estimates among countries. For example, no UK-based study in the present review reported high prevalence of secondary traumatic stress in its sample in comparison with three studies from other countries - one study from Greece (Mangoulia et al., 2015) and two studies from

the US (Jacobson, 2006; Craig & Sprang, 2010). For burnout, only two studies indicated high prevalence (Bell et al., 2019 [6%]; Towey-Swift & Wittington, 2019 [32%]) in contrast with four studies from other countries (Sallouma et al., 2019; Campbell, 2013; Mangoulia et al., 2015; Laverdière et al., 2018). This is an important finding to highlight because mental health professionals in UK's National Health Service (NHS) report elevated rates of sickness absenteeism and annual staff turnover due to poor mental health and well-being (Committee of Public Accounts, 2023). Thus, it highlights the need for conducting more contextualised, region-specific research to enhance the understanding of job demands and job resources affecting the levels of compassion fatigue in mental health professionals based in the UK.

Moreover, no included study explored the experiences of private practitioners (i.e., self-employed professionals working in independent settings). It is important to study their experiences because there is a push towards involving private practitioners in public healthcare to combat staff shortage (Callan & Fry, 2012) and long waiting lists (Jones, 2022). Private practitioners' experience of compassion fatigue might differ to their counterparts in the NHS because of different working conditions and challenges. For example, Golding and Moss (2019) stated that although private practitioners enjoy greater job control than their colleagues in organisational settings, there are some challenges that are unique to them such as, absence of co-workers, the responsibility of organising one's own supervision and pension plans, and filing tax returns among others. This could contribute to differences in lived experiences of compassion fatigue and its associated risk and preventive factors. Thus, by simultaneously studying the experiences of employees and private practitioners, the qualitative study discussed in the succeeding chapter aims to fill the two above-mentioned gaps in research literature.¹⁶

¹⁶ As stated in Chapter 1 and Appendix F (p. 383), this review was supposed to be followed by a longitudinal study on job demands and job resources associated with compassion fatigue in mental health professionals based in the UK but, due to the challenges imposed by the COVID-19 pandemic, significant alterations had to be made to this plan. Instead of a longitudinal study, the qualitative study described in the following chapter presents an in-depth discussion on various work-related factors associated with components of compassion fatigue. It adopts

The review uncovered several methodological flaws in the literature obviating the progress of research and its application in practice. One of the major gaps discovered in the current review was dearth of longitudinal studies exploring the relation between work-related factors and compassion fatigue. Since cross-sectional research only indicates the covariance between two or more variables, its findings cannot be used for establishing causal relations or temporal order (Neuman, 2014). For instance, encounter with traumatised clients was found to be associated with burnout and secondary traumatic stress by some studies included in the review (Jacobson, 2006; Butler et al., 2017; Itzhaki et al., 2018). It suggests a relation between the two variables but leaves various important questions unanswered such as, *does psychological impact of therapeutic work with traumatised clients wane over time or not, what percentage of traumatised clients on the caseload is perceived as exhausting by mental health professionals, and how workload and therapeutic orientation of professionals interact with each-other in predicting compassion fatigue?* Future research adopting cross-lagged panel designs with more than two waves of data collection would be valuable in addressing some of these questions (Ployhart & Vandenberg, 2010; Singer & Willett, 2003; Kelloway & Francis, 2013). Another reason for advocating longitudinal research is that, by observing relations among variables over a period of time, it aids the clarification of relations found in cross-sectional studies (Taris & Kompier, 2014). The present doctoral project originally planned to conduct a longitudinal study, but due to challenges imposed by the COVID-19 pandemic (detailed Appendix F (p. 383)), it could not be actualised.

The lack of use of standardised, multiple-item scales to assess workplace trauma was also one of the major gaps identified in the literature. Despite workplace trauma being a widely studied work-related factor (Jacobson, 2006; Bell et al., 2019; Boscarino et al., 2004; Butler et

a holistic perspective to elucidate the impact of the pandemic on professional practice and wellbeing of mental health professionals based in organisational settings, private practice, or both.

al., 2017; Cetrano et al., 2017; Verhaeghe et al., 2016; Itzhaki et al., 2018), no included study used a standardised scale, checklist, or questionnaire to quantify it. Instead, it was measured using a single item (yes/no) or a non-standardised four-item scale in one study (Itzhaki et al., 2018). This could hinder its accurate measurement and observed relations with components of compassion fatigue. Although, single-item measures are becoming increasingly popular in research for assessment of various psychological conditions, they are often viewed with scepticism (Houdmont et al., 2019). Empirical evidence examining their efficacy have produced mixed findings with some studies arguing that they demonstrate adequate and, in some cases, even better estimates of reliability and validity in contrast to, multiple-item measures (Fisher et al., 2016; Elo et al., 2003; Littman et al., 2006; Hoepfner et al., 2011). At the same time, others opine that single-item measures are unsuitable for measuring complex constructs (Loo, 2002) and exhibit lower levels of internal consistency reliability and convergent validity when compared with studies using measures with multiple items (Fisher et al., 2016). A comparison of predictive validities of workplace trauma measured using a single-item scale or a multiple-item scale in predicting compassion fatigue is a question for future research.

Further, no study included in the present review used latest, up-to-date normative benchmarks (De La Rosa et al., 2018) for classifying participants into different categories. The latest cut-off scores that were based on a review of 30 studies (De La Rosa et al., 2018) differ from original cut-off scores provided by Stamm (2010). Also, ProQOL scale was originally intended for psychotherapists therefore, the use of its cut-off criteria for other healthcare professionals might neglect differences among varying professional groups. For instance, the level of threshold for burnout or secondary traumatic stress might differ greatly between psychiatric nurses and counsellors owing to the differences in the nature of their caseloads. This suggests that continued use of the original normative data could obscure prevalence rates

of components of compassion fatigue in different occupational groups. Future empirical research is required to develop latest norms for ProQOL 5 scale (Stamm, 2010) for different professional groups.

Limitations

Despite having a rigorous search strategy to undertake the current systematic review, its findings must be interpreted within the context of its potential limitations. The scope of this review was limited by the language restriction imposed on included studies. Inclusion of studies published in other languages and from a diverse set of national and international contexts could have enhanced findings in terms of their applicability in varied settings. Secondly, the review considered mental health professionals as a homogenous group when in reality the group is varied in terms of its training, job role, organisational settings and caseload. For instance, mental health nurses are permitted to prescribe meditations and usually work with high-intensity cases (e.g., psychosis) whereas counsellors generally use psychotherapies and work with less intense cases. This heterogeneity was compounded by studies from multiple countries and diverse contexts. Also, each stage of PRISMA cycle (Moher et al., 2009) in the present review was carried out independently by a single reviewer (JS). This could have introduced researcher-biases further leading to discrepancies in scores assigned to studies for their methodological quality. Future systematic reviews of the evidence on compassion fatigue in mental health professionals should control for the above-mentioned biases.

Conclusion

The present review is the first systematic review to synthesise research on job demands and job resources associated with compassion fatigue in mental health professionals. It adopted an organized, scientific approach to review literature on the construct. The results of this review identified seven factors associated with compassion fatigue: workload, empathy, co-worker's support, supervisor's support, evidence-based practices, organisational support, and sense of

autonomy. The findings of this review have implications for both practice and theory by exposing critical gaps in the literature and by elaborating practical implications of findings. Although, the limitations of this review could have influenced the study selection and data extraction processes which could have impacted the findings, our conclusions are in line with wider occupational psychology literature on workplace factors and stress.

CHAPTER THREE

WORK-RELATED EXPERIENCES OF MENTAL HEALTH PROFESSIONALS DURING COVID-19 PANDEMIC: A QUALITATIVE STUDY

Abstract

The imposition of nation-wide lockdowns and sporadic transition to remote work during first and second waves of COVID-19 pandemic produced unforeseen psychological challenges which were likely to impact the medium of care and workload of mental health professionals. The present study explored the lived occupational experiences of clinical psychologists, counsellors, and psychotherapists working in public health sector (also known as the National Health Service) and private practice in the UK during COVID-19 pandemic. Nineteen professionals (11 employed in the NHS and 8 working in independent settings) were interviewed about their professional experiences during the first and second waves of the pandemic. Data were analysed using interpretative phenomenological analysis. Three main themes emerged from the analysis: (i) transition from face to face to online therapy; (ii) novel changes and wellbeing; and (iii) uncertain professional support in uncertain times. The findings suggest that lack of experience in providing online or telephonic psychotherapeutic services from home negatively impacted professionals' physical and psychological health and wellbeing. To cope with it, they availed psychological and structural aid from colleagues, co-workers, clinical supervisors, managers, organisations, and professional bodies. The study adds to existing body of research on the impact of the pandemic on UK-based mental health professionals. Also, it provides a wider context to elucidate the role of work-related factors or psychosocial hazards at work highlighted in the second chapter of this thesis in making mental health professionals vulnerable to adverse occupational experiences like compassion fatigue.

Lastly, from an applied perspective, it highlights the need for skill-upgradation of professionals and macro-organisational changes in mental healthcare.

Introduction

The multiple national lockdowns that were declared to reduce the transmission of SARS-CoV-2 produced a negative effect on psychological wellbeing. Reviews and empirical evidence suggest that the COVID-19 pandemic and related lockdowns led to an increase in anxiety disorders, depression, sleeping difficulties, suicidal ideation, somatization disorder, symptoms of post-traumatic stress disorder, low self-esteem, and lack of self-control among others (Hossain et al., 2020; Hossain et al., 2020; Xiong et al., 2020; Chandola et al., 2020; O'Connor et al., 2021). The aversive impact of the pandemic on population mental health and wellbeing on such a mass scale is also likely to affect the work of mental health professionals. Thus, the present study aimed at exploring the work-related experiences of mental health professionals during the COVID-19 pandemic.

Investigating the experiences of mental health professionals during the pandemic is important for three reasons. First, personal loss and life disruptions caused by the pandemic have the potential to impair psychological health and wellbeing (Kokou-Kpolou et al., 2020; Ishikawa et al., 2020; Eisma et al., 2021), which is further likely to impact the workload of mental health professionals. According to recent systematic reviews discussed in preceding chapters (O'Connor et al., 2018; McCormack et al., 2018; Singh et al., 2020; Yang & Hayes, 2020), workload remains a pertinent risk factor for psychological distress among mental health professionals. Second, unacknowledged poor psychological wellbeing among mental health professionals could negatively affect the quality of services provided to clients. A recent study showed that burnout and low job satisfaction among therapists was associated with poor treatment outcomes for clients (Delgadillo et al., 2018). Thus, if mental health professionals

have been adversely affected by the pandemic, then it could impact the quality of treatment accorded to their clients. Third, comprehending how the pandemic affected or continues to affect mental health professionals could generate insights informative for the development of capacity building programmes or support packages by organisations and professional bodies to support their personnel or members. Thus, in accordance with these reasons, clinical psychologists, counsellors, and psychotherapists in the present study were interviewed about their work-related experiences during the pandemic.

Prior to discussing the methodology of the current study, it is vital to review the past literature on work-related factors that are associated with the occupational wellbeing of mental health professionals. It would aid in contextualising the findings of this study in the current scenario by providing a framework to understand how the pandemic affected or did not affect the factors associated with professional lives and occupational wellbeing of mental health professionals. Although reviewing literature before data collection and analysis is generally discouraged in some qualitative research methods (e.g., phenomenology or grounded theory; Hallberg, 2010; Chan et al., 2013), I endeavoured to limit my exposure to previous research by only reviewing studies conducted before the pandemic. I believe that it helped me in gaining a basic understanding of psychosocial hazards faced by mental health professionals and at the same time eschew an *a priori* understanding of how the pandemic affected their work and work-related wellbeing.

In the following sections, readers will find a succinct review of previous research on factors associated with occupational wellbeing of mental health professionals. It is followed by a detailed discussion on the methodology of the current study, plan for analyzing data, and interpretation of findings. The chapter is concluded by elucidating the limitations and proposed research and practical implications of this study.

Occupational Wellbeing of Mental Health Professionals

Evidence syntheses suggest that mental health professionals report high levels of poor occupational wellbeing such as burnout or compassion fatigue (O'Connor et al., 2019; McCormack et al., 2018; Singh et al., 2020). Their occupational wellbeing is pivotal for mental health organisations or professional bodies to recognise because poor work-related wellbeing is associated with compromised job performance (Lemonaki et al., 2021; Liu et al., 2020), elevated rates of sickness absenteeism (Notenbomer et al., 2018; Johnson et al., 2018) and reduced organisational revenue (Hassard et al., 2018). Data from February 2020 indicates that that poor psychological wellbeing (specifically anxiety, stress, depression, or other psychiatric illnesses) is the largest contributory factor behind sickness absence in the National Health Service (NHS), England (NHS Digital, 2020). According to one estimate, stress-related sickness absence and staff turnover cost the NHS £2.4 billion a year (Quality Watch, 2017, *as cited in* Ryan et al., 2019). Although a cross-occupational comparison of the cost of sickness absence could not be found in the literature, the fact that the mental health and learning disability unit of NHS, England reports the second highest rate of sickness absenteeism following ambulatory services (NHS Digital, 2020) explicates that it is important to acknowledge and remedy the poor mental health and wellbeing of mental health professionals at work.

Research exploring risk factors for poor occupational wellbeing in mental health professionals suggests that nature of the work and dynamics of the workplace (e.g., emotional demands, support from clinical supervisor, manager, and co-workers, remaining psychologically detached from work etc.) play an important role in influencing professionals' mental health and wellbeing (e.g., Lamb & Cogan, 2016; Hammond et al., 2018; White, 2020). A recent study on UK-based counsellors and psychotherapists suggested that dearth of career advancement opportunities, poor management of workplace bullying, perceived workload, and

lack of support from management among others were associated with heightened turnover rate and turnover intention (Ryan et al., 2019). Similar findings were obtained in a recent qualitative study on eight experienced clinical psychologists working in Sweden (Harling et al., 2020). The results of that study suggested that organisational and task-specific factors such as perceived quantitative and qualitative workload and lack of managerial support produced feelings of compassion fatigue in participants (Harling et al., 2020). Whereas support provided by co-workers and provision of professional development opportunities were helpful in mitigating the risk of compassion fatigue (Harling et al., 2020). This implies that irrespective of health and social care systems, some risk and preventive factors are generally associated with occupational wellbeing.

The findings mentioned above have been replicated in a large body of research on UK-based mental health professionals working in a diverse range of interdisciplinary teams or settings within the NHS or community at large (Linley & Joseph, 2007; Thompson, 2018; Towey-Swift & Wittington, 2019; Bell et al., 2019; Sodeke-Gregson et al., 2013; Kinman & Grant, 2020; Steel et al., 2015; Johnson et al., 2018; Johnson et al., 2016; Scevoli, 2020; Scott, 2017; Walls, 2015; Wright, 2017; Scott, 2018; Kostaki, 2018; Westwood et al., 2017). It suggests that aspects of work that are usually beyond the remit of those professionals' control (such as limited structural or psychological support at workplace or excessive workload) are likely to contribute to their levels of perceived stress. Whereas facets that provide them with a sense of assurance to manage their professional duties or responsibilities (such as, supervisor's support, managerial support, a sense of community at work, or skill development) aid in alleviating their levels of perceived stress.

A large proportion of these studies have been conducted on employees i.e., those working in government hospitals, clinics, or private organisational settings (e.g., Bell et al., 2019; Sodeke-Gregson et al., 2013; Kinman & Grant, 2020). A smaller proportion have been

conducted on heterogeneous samples of professionals from organisations, private practice, or both (e.g., Walls, 2015; White, 2020). However, in these studies, the representation of these two (or three) groups have been skewed. For instance, in the study by Walls (2015), out of 194 clinical psychologists, only 7 worked in private practice and 30 worked in both the NHS as well as private practice. Whereas, in the study by White (2020), majority of the participants (36.7%) worked in private settings. In both the studies however, the results showed that private practitioners reported relatively positive occupational wellbeing than employees but the large extent of difference in sample sizes and the determination of difference without the calculation of harmonic mean warrant generalization (Aron et al., 2006). Therefore, more concentrated studies are required to explore differences among professional groups within mental healthcare.

Research investigating the impact of work-setting (i.e., private, institutional, agency, or hybrid practice) on occupational wellbeing of psychologists suggests that private practice is generally associated with less work-related stress and higher work or job satisfaction (Boice & Myers, 1987; Rupert & Morgan, 2005; Dupree & Day, 1996; Lent & Schwartz, 2012; Vredenburg et al., 1999; Rupert & Kent, 2007; Ackerley et al., 1988; Emery et al., 2009). This in Farber's (1988) view could be attributable to differences in psychological or psychiatric problems presented by clients who come to institutions or hospitals versus those seen in private practice and structural difficulties often associated with organisational politics in institutional settings.

A study comparing psychologists in independent practice and agency settings found that not only did the former report lower levels of burnout and higher levels of job satisfaction but also higher levels of job control and support and a smaller degree of negative clientele (Rupert & Kent, 2007). Only one study was found in the literature that did not report a significant difference between burnout levels in private ($n = 87$) and non-private ($n = 80$) practitioners (Benedetto & Swadling, 2014). It could be due to the greater representation of younger

professionals in the subsample of private practitioners in that study (Benedetto & Swadling, 2014). According to a meta-analytic study by Lim et al. (2010), young age is positively associated with depersonalisation (a component of Maslach and Jackson's (1981), model of burnout that refers to the dehumanisation of recipients of one's care). This suggests that with age, a professional might gain more life experience and acquire skills to psychologically distance themselves from their clients' narratives thereby becoming less vulnerable to burnout (O'Connor et al., 2018; Yang & Hayes, 2020; McCormack et al., 2018). In the present study, to limit the impact of age, participation was restricted to professionals with a minimum age of 35 years. Although there is no specific guideline on age after which a professional becomes less or more susceptible to work-related stress (e.g., Marchand et al., 2018), this decision was based on the meta-analytic evidence provided by O'Connor et al. (2018) and Lim et al. (2010). Also, participants in this study were required to have a minimum of 3 years of work experience in mental healthcare to permit a concentrated study of lived experiences of moderately to highly experienced mental health professionals (similar to Harling et al., 2020) during the COVID-19 pandemic.

Present Study

The aim of the present qualitative study was to use interpretative phenomenological analysis (IPA) to explore occupational experiences of clinical psychologists, counsellors, and psychotherapists working in the National Health Service (NHS) and private practice in the UK during the COVID-19 pandemic.¹⁷ The research adopted a qualitative line of inquiry because in my view, a nomothetic approach to the study of unexpected experiences of mental health professionals would not have done full justice in capturing their detailed, subterranean

¹⁷ The aim of the study was not to compare experiences of employees and private practitioners. Whilst some differences and similarities have been pointed out in results and discussion sections, the main aim was to only explore occupational experiences during the pandemic.

narratives (Creswell & Poth, 2018). Since the pandemic posed unencountered challenges in personal and professional lives, an empirical approach as opposed to a rationalist one would yield novel knowledge layered with nuances and peculiarities that would aid in making a meaningful contribution to the literature. Moreover, comprehending how professionals' lived experiences were or are influenced by various social actors or institutions required that I as an investigator gain knowledge of the context in which they operate and exist (Flick, 2007; Creswell & Creswell, 2017). It was possible only by directly speaking with them about their experiences. Therefore, I deemed qualitative methodology informed by the social constructivist approach¹⁸ appropriate for studying the idiosyncratic, multiple realities of mental health professionals during the pandemic.

Method

Approach

Following a review of Creswell and Creswell's (2017) description of five qualitative designs – narrative research, phenomenological research, grounded theory, ethnography, and case study – I considered phenomenology to be appropriate for the present study. Having its roots in philosophy, phenomenology is often used in psychological research to elucidate the “common meaning” individuals attribute to their lived experiences (Creswell & Poth, 2018). Its basic purpose is “to reduce individual experiences with a phenomenon to a description of the universal essence.” (Creswell & Poth, 2018, p. 75) Since the present study was not mainly concerned with retelling of stories, developing a theory around social forces, or learning how a community of mental health professionals at an organisation (or even one professional) operated during the pandemic, other approaches mentioned above were not selected. In contrast, a phenomenological approach was adopted because the aim of the current study was

¹⁸ Social constructionism or social constructivism is a philosophical approach that suggests that there are multiple realities out there which a researcher has to describe in its complexity (Creswell & Poth, 2018).

to explore lived occupational experiences during the pandemic. Thus, the framework provided by Smith et al. (2009) in the form of interpretative phenomenological analysis (IPA) was used.

IPA is a phenomenological approach that aims to explore personal meanings and lived experiences (Smith & Osborn, 2015; Eatough & Smith, 2017; Willig, 2013). It is phenomenological in the sense that it aims to go “back to things themselves” (Husserl, 1990/2001; 168 *as cited in* Smith & Osborn, 2015) i.e., describing them the way they are or the way individuals perceive them rather than dissecting them with a reductionist lens guided by a set of a priori principles (Smith & Osborn, 2015). Also, it is interpretative in the sense that in order to gain a comprehensive understanding, a researcher engages in a two-stage process known as, double-hermeneutic i.e., “[the] participants are trying to make sense of their world; the researcher is trying to make sense of the participants trying to make sense of their world” (Smith & Osborn, 2015; p. 26). Akin to other qualitative designs, IPA too is described in terms of its ontology, epistemology, axiology, and methodology. In terms of its ontology (i.e., the nature of reality; Creswell & Poth, 2018), IPA defines reality as how participants experience it (Willig, 2013). Rooted in traditions of social constructivism and relativist ontology, it accepts the idea that individuals attribute subjective meanings to their experiences (i.e., social constructivism), which are not completely independent and are in fact affected by their interactions among or with their surrounding social actors and institutions (i.e., relativist ontology; Willig, 2013). Thus, it is not interested in the objective nature of external reality but the perceived subjective nature of external events (Willig, 2013).

In terms of its epistemology (i.e., what kind of knowledge an approach aims to produce and how to justify its claims; Willig, 2013; Creswell & Poth, 2018), IPA considers the divulgence of private thoughts, feelings, and meanings as building blocks of knowledge (Willig, 2013). Its aim is to gain a near experience understanding of individual realities but at the same time it accepts the impossibility on part of a researcher to gain a vulgar or virgin access to participants’

experiences (Willig, 2013). Regarding axiology (i.e., the influence of an investigator's values in research; Creswell & Poth, 2018), IPA acknowledges that a researcher's findings are influenced by their preconceived notions and biases which are recognized throughout the process and aid in positioning the findings of a study in context of a researcher's interpretation of participants' accounts (Smith et al., 2009). Lastly, in terms of methodology (i.e., the process of conducting research; Creswell & Poth, 2018), IPA studies usually involve semi-structured interviews with homogenous groups (Smith & Osborn, 2015). Its findings are inductive and influenced by researchers' experiences during data collection and analysis and also by their own perspectives (Creswell & Poth, 2018; Willig, 2013).

Recruitment of Participants

A database of UK-based mental health professionals produced in collaboration with three professional bodies, was used to contact potential participants for the current study. It was considered appropriate because it comprised contact details of 280 professionals recruited between 5th November 2020 and 28th February 2021, the period during which the UK witnessed the second wave of the COVID-19 pandemic (Public Health England, 2021).

To be included in the present study, potential participants had to meet two inclusion criteria: (i) be a clinical psychologist, counsellor, or psychotherapist practicing either in an NHS-affiliated institution or independently in private settings, and; (ii) be currently working i.e., providing psychotherapeutic services to clients during the pandemic. Furloughed professionals and those employed full-time in private mental health organisations were not included in the sampling frame. The latter decision was made because of the skewed representation of employees in private organisations in the original database. Only 4.7% of professionals in the database worked in private hospitals or clinics therefore, it was concluded that by not including

them in the present study, the homogeneity of participants in terms of their organisational experiences could be maintained.

Fifty professionals with a minimum age of 35 years and 3 years of work experience were selected at random and invited to take part in an interview. The email invitation comprised of a participant information sheet explaining the aims and purpose of the study and a consent form for formally registering interest in partaking in the study. No incentives were offered to take part in this study. Following the first invitation, 20 professionals expressed interest yielding a response rate of 40%. To enhance this rate, non-respondents ($n = 30$) were sent another invitation two weeks following the first one. Seven additional professionals responded resulting in a total response rate of 54%. However, out of 27 respondents, 8 could not participate due to following reasons: 2 respondents did not meet the inclusion criterion of working throughout the pandemic; 2 initially agreed to be interviewed but later withdrew because of ill-health; 3 completed the consent form but did not respond to correspondences for arranging an interview, and 1 could not participate for personal reasons. Therefore, the total sample comprised of 19 participants. It is challenging to ascertain its adequacy because there is no definitive guideline on the minimum number of participants required for an IPA study (Smith & Osborn, 2015; Smith et al., 2009). However, a comparison with previous IPA studies on mental health professionals revealed that sample sizes usually ranged from 6 to 19 participants (Reitano, 2020; Cramond et al., 2020; Lamb & Cogan, 2016; Audrey & Lesley, 2018; Kumari, 2011). Thus, the present sample size is in alignment with existing research.

Socio-Demographic Characteristics of Participants

The 19 participating professionals (17 women and 2 men) had a minimum of 4 years of work experience in mental healthcare. Three participants were clinical psychologists, 8 were counsellors, and another 8 were psychotherapists. Eleven participants worked in NHS-

affiliated hospitals or clinics and 8 worked in private practice. The majority worked in hybrid settings (i.e., a combination of employment as well as solo practice). In such cases, the focus was retained only on practice in the NHS for employees and independent settings for private practitioners. The age range was 35 - 68 years ($M = 53.1$) and the majority identified an integrative approach as their preference in psychotherapeutic practice. The percentage of traumatised clients on caseload ranged from 10% to more than 90%. Two participants reported being clinically diagnosed with COVID-19 and both reported experiencing symptoms of long COVID. Lastly, 8 participants reported experiencing a personal loss in the past six months: 5 due to COVID-19 and 3 due to other reasons. However, none experienced loss of an immediate family member (e.g., partner, parent, or children) or close friend. Further details of participants' socio-demographic characteristics can be found in Table 1.

Table 1

Socio-Demographic Characteristics of Included Participants (N = 19)

S.No.	Participant	Age	Occupation	Setting	Specification	Work Experience	Psychotherapeutic Approach
1	Amy	49	Counsellor	NHS	IAPT	6 years	Integrative
2	Nora	40	Clinical psychologist	NHS	Addiction and homeless	>20 years	Integrative
3	Ruth	54	Counsellor	NHS	Addiction	25 years	Integrative
4	Bella	35	Psychotherapist	NHS	Family therapy	6 years	Systemic
5	Claire	57	Psychotherapist	NHS	Sexual and relationship therapy	21 years	Integrative
6	Molly	39	Counsellor	Private	Mixed	6 years	Person-centred
7	Lily	52	Counsellor	Private	Unspecified	3 years	Person-centred

8	Diane	60	Psychotherapist	NHS	Complex disorders	20 years	Integrative
9	Nancy	55	Counsellor	NHS	Occupational health	11 years	Gestalt
10	Chloe	66	Psychotherapist	Private	Mixed	12 years	Integrative
11	Jasmine	67	Psychotherapist	Private	Trauma and learning disabilities	26 years	Integrative
12	Brian	45	Counsellor	Private	Mixed	4 years	Person-centred
13	Andy	56	Clinical psychologist	NHS	Secondary mental health and family therapy	25 years	Systemic
14	June	58	Psychotherapist	NHS	Secondary mental health	45 years	Integrative
15	Alice	57	Counsellor	Private	Mixed	6-7 years	Integrative
16	Neal	68	Counsellor	Private	Mixed	28 years	Integrative
17	Mark	47	Psychotherapist	NHS	Complex disorders and HIV/AIDS	>20 years	Psychodynamic
18	Ava	49	Clinical psychologist	NHS	Complex disorders	10 years	Cognitive-analytic
19	Sophia	55	Psychotherapist	Private	Mixed	22 years	Integrative

Note: Participants' real names have been substituted with pseudonyms to safeguard their anonymity.

Data Collection

Semi-structured interview schedule developed for data collection was peer-reviewed by two independent professionals; a subject-matter expert and a counsellor who was not included in the sample. Since my own area of expertise is not counselling psychology or psychotherapy, this exercise provided useful feedback to reform some questions to enhance their relevance and

reduce suggestive implication in language. The result was that the revised schedule was more open-ended and provided greater leverage for participants to respond (see Appendix C (p. 332)). It focused on three main areas: demographic details, the impact of the pandemic on personal life, and its effect on professional practice and wellbeing. Although, the main focus was on the latter aspect, it was suggested by reviewers that an exclusive focus on professional life might inhibit gaining a rich, complex understanding of experiences because personal and professional lives are inextricably linked to one another especially in context of the pandemic. Therefore, the effect on *home or family life* was explored but only with reference to its interaction with *work life*. Where required, participants were gently probed to provide further details on certain aspects mentioned by them. Following main questions, they were asked certain specific questions about what they would have liked their organisations or professional bodies to have done to support them during this time and what they would have done distinctively had they been in charge. This technique is known as funnelling (Smith & Osborn, 2015) and it was adopted to enhance practical implications of this study. Although the approach section stated that this study was rooted in the tradition of social constructivism, these questions suggest that it was also pragmatic in its orientation albeit to a minimal extent.

Prior to interviewing participants, a pilot was conducted with a trainee professional. It permitted me to reflect on my style of posing questions (more details on it are provided in the *Reflexive Account* section) and also check the recording instrument. After ascertaining verbal and technical elements, interviews with participants commenced on 5th March 2021 and ended on 26th May 2021. All interviews were conducted using audio meetings on Microsoft (MS) Teams to abide by social distancing guidelines. The average duration of an interview was 61 minutes (range: 38 - 73 minutes).

Data Analysis

The analysis process delineated by Smith and Osborn (2015) was adopted to analyse data. After transcribing an interview, its transcript was read three times to get acquainted with data. Following this, initial comments were made at relevant points and initial codes were developed to assign each comment to a relevant category. Some comments were dropped at this stage if it was felt that they were not as important as initially perceived to be. Post this, all codes were listed, and associations were formulated among them to develop themes. In this process, some codes were merged to form one theme, some were categorized under superordinate themes, and some remained independent themes. For illustration, kindly refer the following quote:

I'm surrounded by my things and it's more intrusive I guess it's again it's just about having those divides between work stuff and home stuff. So I'm sat in my living room, in the place where I'm going to eat with my mom at the weekend and listening to some child abuse story, you know, so we do have to manage the very distressing traumatic material both in case discussions but also in therapy 'cause obviously we work with people who've had horrific experiences and managing that anyway, normal life is hard enough, but managing that while you're in your home which isn't your workplace yeah, I just think it, it's just something that takes its toll I guess or you know, you gotta be even more careful with your boundaries.
(Amy, 307–314)

The comment made for the above-mentioned extract was “Remote work blurred the boundaries between personal and professional lives, which made it difficult to psychologically disengage from work whilst being at home, which further led to secondary trauma.” The code assigned to this comment was “An obfuscation of boundaries led to secondary traumatic stress”. The theme under which this code was included was “lack of psychological

detachment”¹⁹ which was included under the superordinate theme “Impact on health and wellbeing”. For a demonstration of how comments were synthesised into codes and how codes were synthesised into themes for a participant, refer appendix D (p. 334).

Throughout the analysis, constant references were made to a participant’s account to ensure that codes and themes effectively encapsulated their subjective meanings. This entire process was repeated for all transcripts. Finally, similarities and distinctions across themes were noted and those that described common, lived experiences for all or majority of participants were retained.

Ethical Considerations

The study received ethical approval from the institutional research ethics committee (reference number: 2020/271). To safeguard participants’ anonymity, real names were substituted with pseudonyms.

Findings

Three major themes were identified, including: Transition from face-to-face to online therapy, Novel changes and wellbeing, and Uncertain professional support in uncertain times (refer to table 2 for subthemes included under each theme). The following sections describe each theme and where required provide direct quotations from participants for illustration.

Transition from Face-to-Face to Online Therapy

Following the declaration of the first national lockdown, participants reported making a transition from providing psychotherapeutic services in a face-to-face setting to using an online or telephonic medium. It was a period that most suggested was challenging (e.g., “we had to shift the way we work very dramatically”; Andy, 176) but was particularly exacting for private

¹⁹ Note: The names of initial themes were changed to capture the experiences of all or majority of participants.

practitioners because of the financial cost incurred by the decline in number of clients and the shutting down of commercial centres where therapy rooms were rented. For instance, Molly stated,

when the first lockdown happened, the place where I was renting a room was closed and I had to cancel all my clients. So, from going to having a pretty full caseload to a point for about six weeks where I had no clients, it was really difficult to deal with the big lack of financial security. (183-189)

Table 2

Themes and Subthemes produced in IPA

Theme	Sub-themes
	Resistance towards technical medium
Transition from face to face to online therapy	Experiences with online therapy Accessibility of online therapy
	Unexpected changes
	Constraints on client-support
Novel changes, practice and wellbeing	Impact on health and wellbeing Feelings of professional isolation Work-home interaction
	Structural and psychological support
Uncertain professional support in uncertain times	Feelings of organisational neglect

Resistance towards technical medium

Participants' lack of familiarity with online or telephonic mediums contributed to reservations against adopting it in daily practice. Concerns ranging from banal ideas such as, "it just wouldn't work very effectively" (June, 125) to more pertinent ones related to rapport formation, observing nonverbal behaviour, client safety, and pragmatic challenges regarding online implementation of certain therapies (e.g., Eye-Movement Desensitisation and Reprocessing (EMDR)) or therapeutic techniques (e.g., body-relaxation exercises) impeded a smooth transition to online or telephonic therapy. The reasons behind such views as suggested by Molly ("I hadn't done any kind of training in online therapy"; 181) and Alice ("I had always chosen not to work online"; 172-174) were lack of training in and experience with technical modalities. Thus, the initial experience of participants was layered with stress or lack of ease (e.g., "When I first had to start seeing clients online, I was quite worried about that, felt very anxious about that"; Lily, 90-92).

The experience was further compounded by temporary technical difficulties such as, unsuitable computer applications, inefficient internet bandwidth, and unexpected termination of sessions. For instance, Andy, an NHS employee stated that the online software "Attend Anywhere" provided by her employer was not suitable for providing counselling because it was "designed really for medical consultation" (251-253). Elaborating further on the experience of using it, Claire stated, "[that initially] it was rubbish, lots of freezing of the clients or you couldn't hear them properly or couldn't connect properly or halfway through a session, it would disconnect" (280-284). However, in contrast to these interim hurdles, two of the most significant limitations of online therapy recalled by most participants were the inability to observe nonverbal behaviour of clients and conduct certain therapeutic exercises.

Experiences with online therapy

Online therapy, as suggested by participants reduced “the emotional communication that happens without words” (Andy, 249-258). It inhibited observations of clients’ body language below shoulders (e.g., “you can’t see the tapping nail or tapping foot”; Nancy, 411-412) which threatened the loss of essential clinical information (e.g., signs of self-harm such as a client cutting themselves). Also, it didn’t permit the implementation of therapeutic exercises which required the use of special tools or involved physical movement. Thus, to make up for this, participants resorted to asking more questions (“I feel like I have to ask more questions because obviously I haven’t got them in the room.”; Claire, 393-394) or developing innovative solutions in collaboration with clients. An example of the latter was shared by Bella, a family therapist who recounted that to conduct a group activity, she provided participants with instructions over a video call to place themselves in a queue or create a scale on the floor and position themselves in relation to what she was asking and then observe each-others’ positions. A similar instance was shared by Diane, where she mentioned that after demonstrating a body-related exercise over a video call, she offered to look the other way and provide verbal instructions so that her clients could feel comfortable whilst performing those exercises.

Accessibility of online therapy

In contrast to limitations highlighted above, participants noted some advantages of online or telephonic therapy as well. One of the most frequently reported merits was enhanced flexibility for clients as well as professionals. It afforded professionals more time for the core aspect of their work i.e., providing counselling or psychotherapy to clients. It didn’t require them to expend efforts on miscellaneous tasks such as renting, booking, or preparing counselling rooms which further accorded them the latitude to cater more to their clients’ needs (“we are able to do the first session within 48 hours of them contacting the service”; Nancy, 163-165). From the perspective of clients, participants reported that online or telephonic medium enhanced the accessibility of services for those who didn’t or couldn’t avail it in the

past (“those who had huge mobility problems who weren’t able to come in to the department”; June, 108-111). In addition, the privacy and comfort of seeking online therapy in personal settings facilitated self-disclosure on part of clients which further improved the pace of therapy. For instance, Brian, a counsellor shared,

With my bereavement clients...while working face to face, for the client, there is some embarrassment, awkwardness sometimes, not showing emotions within a counselling environment, within a room, a physical room whereas on the telephone I found that with the clients, they have been quicker to open up so they’ve been quicker to go to that emotional phase, they have been quicker to be okay, to cry, to express their feelings that way whereas in the room, sometimes it can take a little longer. (136-142)

Such benefits led some participants to contemplate a future inclusion of online or telephonic therapy in the wide range of services provided by them. Nancy opined that depending on the preferences of clients, their service “would like to keep all the three options [online, telephonic, and face-to-face] available” (392-399). However, it is important to recognise that clients’ experience with online or telephonic therapy was contingent upon the resources available at their disposal and their presenting clinical situation. Those whose family arrangements (e.g., young children) or home circumstances (e.g., lack of space) didn’t provide enough privacy or whose presenting issues could not be addressed effectively in remote settings, they decided to either halt their treatment or avail it under unusual conditions. In one such case, a participant shared that a client of theirs who was a victim of domestic violence couldn’t avail online therapy from home because of the presence of the perpetrator. In another case, due to the lack of adequate space at home, a participant reported that their client had to attend counselling sessions whilst being seated in their car. This suggests that there could be variabilities in the perceived benefits of online therapy from the perspective of clients depending on structural inequalities or personal situations confronting them.

Novel Changes, Practice, and Wellbeing

Unexpected changes

According to participants' accounts, the initial phase of the pandemic led to a decline in the number of clients availing mental health treatment. NHS employees reported that their organisations witnessed a significant reduction in the number of new referrals in the first few weeks following the declaration of the first national lockdown ("we did have a real drop in referrals to begin with"; Amy, 165-168). It in Andy's words, provided them "a bit of breathing space" (188-191) but after its termination, their caseloads escalated to unmanageable proportions. According to Ruth, the waiting list for counselling at their service in the past year "increased from 5-6 weeks to 3 months" (292-294). Private practitioners also reported experiencing an increase in the number of clients with anxiety, stress, depression, or addiction-related issues. Such changes affected participants' workload ("our referrals have gone through the roof so we are busier than ever"; Andy, 188-191) which further contributed to their experiences of work-related stress ("my workload was causing me stress. I felt like I was getting behind on lots of things"; Bella, 325-329).

Constraints on Client-Support

The restrictions imposed by lockdowns led to shutting down of otherwise available avenues of change or support such as recreational centres, charities, health centres etc. Participants reported that it severely affected their practice by limiting organisations to which clients could be signposted thereby contributing to the impediments faced during the pandemic. It not only affected clients' treatment but also professionals' perceived efficacy. For instance,

I have clients who come to see me and they want to be in a relationship. So, the part of the reason why they are not in a relationship would be low self-esteem, lack of confidence.

The way you would be working would be to help them gain confidence in being able to

put themselves out there, to try to meet people. Well, I am not able to do that, not able to encourage a client to go the next stage of actually meeting someone because we are following the rules so that definitely was a constraint because it's frustrating for me as a therapist and the client that we got them so far but then you stopped because you can't go any further. (Claire, 364-374)

all the work we were doing was less effective because all the things that we ask people to do, they couldn't now do so you're trying to help people out doing things, and there just isn't anything for them to do. (Ava, 225-227)

Impact on health and wellbeing

Adaptation to the novel reality of remote work and being in the same situation as clients with regards to lockdown restrictions placed two pertinent cognitive challenges before professionals. First, to harness mental faculties to deliver counselling services using an unfamiliar medium. It added to difficulties associated with transition ("I find that I close my eyes sometimes to focus more"; Amy, 216-218; "I think work is harder because I have to concentrate more"; Molly, 285-287). Second, to maintain a psychological partition from clients to prevent an obfuscation of one's own reality with that of clients. For example, "it can be harder to separate my experience as it can be easier to over-identify with them and assume that they are experiencing the same thing as I am" (Molly, 277-283). Such challenges produced an aversive impact on participants' physical and psychological health and wellbeing.

At a physical level, participants reported that working in front of a computer screen for long hours on a daily basis (e.g., "I was easily working for 10-12 hours a day especially in the beginning"; Nancy, 356-359) exhausted their physical energies. It increased their frequency of experiencing migraines, headaches, sleep disturbances, joint aches, gastrointestinal difficulties, and a general feeling of being tired or overwhelmed. Even for participants accustomed to

working from home, online work was physically strenuous. “I found spending five or six hours a day in front of a screen really tiring, whereas you know, I’ll happily see five or six clients [face-to-face] a day” (Neal, 173-176). At a psychological level, detaching from clients’ emotionally laden narratives was made difficult by the restricted environment of remote work. For instance, Ava, a clinical psychologist stated,

I’m sat in my living room and listening to some child abuse story...we work with people who’ve had horrific experiences and managing that anyway in normal life is hard but managing that while you’re in your home which isn’t your workplace, I think it’s something that takes its toll. (304-314)

The restrictions imposed by lockdowns exacerbated participants’ vulnerability to experience secondary traumatic stress (a component of compassion fatigue). For instance, Lily shared, “even in the best of times, there’s that possibility of secondary trauma and then, you add on to this layers of online counselling and not being able to go out” (365-368). It hindered their ability to distance themselves physically and psychologically from the context of their work and disallowed a space for recuperation.

You don’t have that same sort of de-compression of you know, okay I am actually leaving the office, locking the door, then walking to my car and getting in the car. All these things then take you farther and farther away from the reality of your work. (Lily, 397-383)

Thus, participants reported being confronted with an inescapable situation wherein they experienced the trauma of their clients in domestic settings where they were present even during non-working hours (“I don’t want to be traumatized in my own home, this is my safe space”; Ava, 297-301).

Feelings of professional isolation

Living up to clients' expectations whilst being present in the same situation as them contributed to feelings of perceived neglect ("I was going through it as well...I think that clients would come into the service and they would need that support but actually sometimes I needed that support as well"; Amy, 260-265). Such feelings could have been consolidated by perceived professional isolation i.e., feeling lonely and unsupported by one's co-workers or colleagues. Lockdowns inhibited the cathartic process of informal, in-person conversations to take place thereby, adding to the level of secondary traumatic stress. The incapacity to divulge one's work-related feelings with those who could understand it and perhaps even relate to it fostered rumination over clients' distress and posed a risk to psychological wellbeing.

it's a little bit harder to shake off concerns about clients uhm...possibly because I haven't been able to just have a quick chat with my supervisor or with a couple of colleagues so I think sometimes it just stays around a bit more. I've noticed for instance, from here and there at different times dreaming about clients more often than I normally would so to suggest that they are occupying my unconscious a bit more than they normally would. (Jasmine, 265-270)

Although the provision of having an online meeting was available, participants suggested that in comparison to the immediacy of workplace settings where conversations could be easily arranged, online substitutes appeared more formal and distant. For instance,

I would have to book a time to kind of speak to them. I couldn't just stick my ear around the door and see if they were free and just have a chat so like my conversations with them were a bit delayed, they were a bit more like formal because you know if you are in an office you can have a mourn about something which is maybe not so much of a big issue but you are booking to speak to somebody to mourn then that becomes a much bigger thing so you tend not to do that so much. (Bella, 446-459)

These accounts suggest that absence of co-workers' support in remote work played an essential role in contributing to participants' experiences of professional isolation which further prevented psychological detachment from clients' cases thereby leading to feelings of secondary traumatic stress.

Work-Home Interaction

Remote work blurred the distinction between personal life and professional life. Participants' experiences with working from home similar to some clients' experiences with online therapy, were contingent upon their personal circumstances (e.g., having a family or young children) and structural resources (e.g., the availability of a discrete working space). These factors being inextricably linked to one another added to pragmatic constraints regarding managing work whilst being in a limited space with others. An example of this was shared by a private practitioner who faced practical difficulties whilst finding space to attend an online training programme at home due to dearth of space:

if my husband is asleep then I can't use upstairs. If my son is home schooling, I can't use downstairs so it has been quite challenging. I did one training session in a cupboard, a big cupboard but it was confidential and it took our WiFi connection. I sat on the floor with a cushion and was wedged in there for about four hours. (Sophia, 326-337)

In contrast to this, participants with separate home offices reported better work-life balance. For instance,

we are lucky enough that we live in a house where we have separation so in moments like talking to you, I am in my home office. She is in our second bedroom upstairs which we have made an office space for her. If we didn't have that space, things would be different. (Brian, 172-175)

Working from home liberated time otherwise spent on travelling or miscellaneous tasks (such as, preparing the counselling room for in-person sessions) which allowed more time for non-work-related interests. In some cases, it also produced a positive ripple effect on psychological wellbeing as evidenced by the statement stated below:

I have not got any commute so that's really good because if I have got a full lunch hour, I will probably take that and I might take the dog for a walk or I might sit outside and read a book for a bit or I might prepare my vegetables. So actually, I feel like for the first time in a long time, I have got the balance of work and life pretty nailed. (Amy, 318-321)

However, it is important to highlight that a separate office space in itself was not solely responsible for work-life balance. A cooperative family that understood the demands of work also played an essential role in maintaining work-life balance. For instance, Alice a private practitioner with a separate home office shared,

my family have been incredible...on my busier days, they do go out and do other things or they work or they go and do their exercise or whatever. I am in the house on my own, that isn't always possible but they have been supportive in that. (241-244)

Uncertain Professional Support in Uncertain Times

Structural and Psychological Support

Although difficulties pertaining to online therapy and remote work adversely affected professional practice and wellbeing, to cope with it, participants received support from professional bodies, clinical supervisors, managers, co-workers, and organisations. Structural and psychological aid provided by professional bodies mainly related to technical and clinical facets of online therapy. Training programmes offered free of cost in some cases allowed professionals to update their skills and stay abreast with needs of time. "I have taken advantage of some free webinars on working online at the beginning and more recently on more clinical

aspects” (June, 373). Regarding relationship with clinical supervisors, whilst the majority of participants reported an unaltered stream of support, some described how supervisors offered essential psychological support when required (“she was actually the one who said ‘you need to have some therapy love’”; Amy, 446-447). It facilitated adjustment to the novel reality of remote work which further consolidated relations with them (“come to use her more often to explore different ways of working and different emotions so yeah, I have probably used her more in last 12 months”; Alice, 404-406).

With respect to support provided by individual managers, perceiving a sense of understanding and empathy for constraints faced by employees in adapting to novel changes allowed temporary respite from difficulties associated with transition to online medium and isolation of remote work. NHS managers in some cases encouraged employees to prioritise self-care and seek counselling if required (“my manager made the referral to the counsellor”; Nancy, 225-228). Also, their efforts to develop a virtual collegial environment reinforced the idea of community and collective experience (e.g., “our manager set up meetings that were like a drop in...we have all felt as a service that we were in it together”, Amy, 425-341). However, at an individual-level, there was a degree of heterogeneity in its perceived efficacy. For instance, Bella shared, “it wasn’t really like a genuine forum for someone to say I feel like I am going to have a breakdown. It was just kind of like oh hi or whatever” (560-565).

Instances of social support emanating from co-workers, albeit a few owing to experiences of professional isolation for most, were reported by some. Having a sense of mutual experience and being exposed to similar vulnerabilities deepened pre-existing relations (e.g., “saw a different side to them that I wouldn’t have seen before”; Mark, 317-318). The divulgence of insecurities and perceived challenges strengthened the bonds of collegial support (“I think we have become more [close] now”; Nancy, 496) which provided vital psychological support (“it just helped me to survive something quite difficult”; Mark, 351). Also, from a practical

standpoint, support groups allowed sharing of clinical experiences with online therapy which fostered social learning.

we kind of met together and thought of like what are we doing, what have we tried, who has done things and they have tried and worked well, whose done things and it has gone horribly wrong like to kind of learn from each other. (Bella, 239-243)

Feelings of organisational neglect

In contrast to the unambiguity of support provided by sources mentioned above, the support provided at the level of organisation was equivocal. Organisational support appeared to be context-specific and layered with hierarchies. Whilst some individual NHS organisations provided training for online therapy and structural support in the form of newsletters, bulletins, and optional counselling, largely participants' experiences with senior management were unpleasant. The lack of perceived support from higher levels of management within the NHS produced fervent feelings of discontent among NHS employees (e.g., "they are useless"; Mark, 374). Participants working in the NHS described a schism between the actual reality of the pandemic and the perceived reality of apex management in terms of acknowledging the situation and making necessary amendments to adapt to it. "The management were quite punishing, I would say. They kept saying to people it's business as usual" (Diane, 302-303). It harboured feelings of neglect ("I think there's been a real lack of attention paid to us by those above"; Ava, 384-395) and disappointment ("there's just been top down criticism or diktats and no guidance...I'm quite annoyed with some of that"; Ava, 384-295). Such experiences created professional conflicts which marred participants' experiences during a testing time. An example of this was shared by Nora who when intervened based on her previous experience with an epidemic and was eliminated from a decision-making body.

I had previous experience working in a pandemic. I supported around staff working with [an epidemic]²⁰. I had previous crisis experience, previous staff support experience. I felt like I am somebody who is very good in an emergency...[but] the system that I was working in changed to a command and control structure so I suddenly lost my seat in the leadership meeting. I was disinvited to attend leadership meetings and everything became very, very nursing-centred which it already is in the NHS but it became even more so.

(Nora, 69-78)

Discussion

The aim of the present qualitative study was to explore occupational experiences of mental health professionals during COVID-19 pandemic. In light of this, 19 clinical psychologists, counsellors, and psychotherapists – 11 employed in the NHS and 8 working in independent practice – were interviewed. Interviews analysed using interpretative phenomenological analysis (IPA) produced three main themes namely, transition from face to face to online therapy, novel changes, practice and wellbeing, and uncertain professional support in uncertain times. This section will elaborate on the associations among themes and explain with reference to previous research.

Analysis of participants' accounts suggested that the major challenge posed by the pandemic entailed the sporadic transition from face-to-face to online or telephonic therapy. Coupled with a lack of preparation at an organizational level and previous training in or experience with the medium, participants reported being confronted with a challenge not encountered before in their professional practice. The number of clients seeking treatment declined, leading to financial constraints and the requirement to efficiently adapt to the novel medium in a short span of time added to the difficulties faced. Some of the difficulties reported with the new way

²⁰Omitted to safeguard confidentiality.

of working included technical glitches or network problems, the inability to observe clients' nonverbal behaviour, and the requirement to develop innovative ways to implement therapeutic exercises involving physical movement or the use of special tools. This finding is supported by recent research on the impact of pandemic on psychologists. It suggests that the initial phase presented unexpected challenges that required mobilization of social resources to be coped with (Doorn et al., 2021, Doorn et al., 2020; Békés & Doorn, 2020; McBeath et al., 2020; Webster, 2021; Mancinelli et al., 2021; Blodrini et al., 2020; Probst et al., 2020; Probst et al., 2020; Machluf et al., 2021). In the present research as well, participants reported availing peer support from co-workers or colleagues, social support from family members and friends, and structural and psychological support from managers and professional bodies to get acquainted with demands of providing online or telephonic therapy from home.

A comparison of the two occupational groups included in the present study (NHS-employed and private practitioners) revealed that whilst the transition was exacting for both, the challenges faced by NHS employees pertained mainly to structural clarity such as how and when to transition whereas those encountered by private practitioners related to work security. The shutting down of commercial centres where therapy rooms were hired combined with a reduction in the number of clients in initial weeks presented financial burdens for private practitioners that NHS employees were inoculated against. Whilst previous research suggests that private practitioners generally experience greater autonomy, work satisfaction, and less burnout than employees (Rupert & Kent, 2007; Ackerley et al., 1988), the sudden lack of work security had the potential to threaten their psychological safety and posed a risk to their occupational wellbeing. Regarding employees, as mentioned in second and third themes, the uncertainty, ambiguity, and lack of direction from top management created additional barriers forestalling an efficient transition. Although a sense of urgency such as the one presented in this case facilitates the motion of change, heightened resistance could set in in the absence of

support and clarity from management (e.g., Kotter's model of change management (1996)). In the present study, psychological difficulties faced by participants at the outset (such as, anxiety or dislike) could be considered an offshoot of the lack of adequate provisions made by senior management such as training for providing online therapy.

However, with time participants became comfortable with the technical medium and recognized its merits, such as enhanced accessibility for and greater self-disclosure on part of clients. These findings have been replicated in previous research as well (Webster, 2021; McBeath et al., 2020; Kotera et al., 2021; Poletti et al., 2021) but it is important to recognize that its merits varied with respect to clients' situations. Those with limited private space in domestic settings or whose family circumstances didn't permit online therapy due to issues pertaining to confidentiality had to either halt their treatment or make alternative arrangements such as, receiving therapy in a car. For professionals as well, variations were observed in work from home experiences; those with discrete spaces at home and smaller or supportive families generally reported better work-life balance than those without such facilities or resources. This trend was observed even in a recent longitudinal panel study on employees working from home due to the pandemic (Allen et al., 2020). However, it is important to recognize that irrespective of structural and social resources, remote work in the present study was found to produce a negative impact on professionals' physical and psychological health and wellbeing.

The requirement to work for prolonged hours in front of a computer screen or on a mobile phone led to physical health impairments such as, headaches, migraines, muscle and joint aches, and visual fatigue. It could be, as suggested by recent research, attributable to escalated number of hours spent working due to enmeshment of boundaries between personal and professional lives (Maurer, 2020). It had the potential to produce pertinent consequences for physical health and wellbeing. Large-scale, international research suggests that home confinement during lockdowns led to an increase in daily sitting time, food consumption and

tendency to consume more alcohol (Ammar et al., 2020). In the present study as well, participants reported that working for more hours than usual especially during the initial phase of the pandemic took a toll on their physical health and wellbeing.

Moreover, the requirement to listen to clients' concerns in professional isolation whilst being in the same situation as them and the restriction of not being able to direct them to otherwise available avenues of support fostered contemplation over their issues leading to secondary traumatic stress and hampered professional efficacy. In some instances, psychosomatic symptoms of stress such as, gastrointestinal issues or sleeping difficulties due to stress caused by lack of psychological detachment from clients' concerns were also observed. This finding is in alignment with the challenge of countertransference in online therapy anticipated by Geller (2020). According to Geller (2020), a sense of shared experience with clients could give rise to countertransference issues and deter professionals from being fully attuned to clients' concerns in sessions. It is also similar to the findings of a longitudinal study by Doorn et al. (2021) that suggested that reduced professional efficacy or heightened professional self-doubt regarding providing therapeutic services during the pandemic was related to vicarious trauma. However, it contradicted the finding of a large-scale study on psychological hotline counsellors in China ($N = 712$) that suggested that working with clients during the initial phase of the pandemic did not have a major impact on psychological wellbeing of professionals as majority of them did not report experiencing compassion fatigue (Zhang et al., 2021). Nevertheless, participants in the present study reported experiencing the trauma of their clients in their domestic settings and to prevent a cross-over, they exercised a degree of in vivo mental vigilance which further contributed to cognitive and emotional demands of work. A similar experience was described in grave detail by the founding father of Logotherapy, Viktor Frankl in his classic memoir, *Man's Search for Meaning* (Frankl, 2004). Frankl (2004) whilst elucidating his experience of treating prisoners with psychiatric illnesses

in a concentration camp in Auschwitz stated: “To attempt a methodical presentation of the subject is very difficult, as psychology requires a certain psychological detachment. But does a man who makes his observations while he himself is a prisoner possess the necessary detachment?” (Frankl 2004, p. 20).

Extrapolating this conundrum in context of COVID-19 pandemic implied a two-pronged source of stress for mental health professionals: being expected to maintain an empathetic and objective stance whilst helping others cope with trauma that they are subjected to themselves. Although academic literature on “*wounded healer*” discusses the curative power of being in the same situation as clients (e.g., Banton, 2020; May et al., 1985 *as cited in* Gladding, 2014), in the present study, majority of participants reported feeling neglected because of a perceived lack of addressal of their feelings produced by shared experience. Thus, to mitigate its impact and continue providing beneficial services to clients, they sought support from varied professional sources.

Structural and psychological aid provided by clinical supervisors, co-workers, colleagues, managers, organisations, and professional bodies were generally appraised as beneficial in coping with demands of online therapy and remote work. The support provided by professional bodies and individual organisations in the form of online training programmes, webinars, bulletins, and newsletters helped participants to update their professional skills and adjust to the novel reality of remote work. Regarding other sources, participants reported that although they were physically distant from their co-workers, colleagues, managers, or supervisors, being in the same situation as them enhanced their interpersonal communication which further strengthened professional relationships. The latter finding can be interpreted using theories of group behaviour in social psychology. Based on the theory of social comparison (Festinger, 1954), participants’ interactions with their professional networks might have provided essential cues to help them discern their relative positions and gain a sense of emotional and cognitive

clarity (Baron & Branscombe, 2014). Additionally, it might have helped them effectively adapt to their situation by creating a sense of community and a feeling that *we are in this together*. Similar findings were obtained in a recent qualitative study on NHS-based health and social care professionals that suggested that a sense of team unity was created during the pandemic while working for a common cause (Aughterson et al., 2021). According to the social identity approach to health (Haslam et al., 2018), perceiving a sense of collegial support in the midst of a crisis has the potential to positively influence individuals' health and wellbeing (e.g., Bove et al., 2021). Thus, in the present research, participants who reported a sense of community at work generally coped better than those without it.

However, it is important to recognise that the benevolent role played by professional relations during the pandemic could have been influenced by their depth prior to the pandemic. According to a recent UK-based longitudinal study, degree of community identification and perceived community support prior to the pandemic predicted giving and receiving emotional support during the first wave of the pandemic (Stevenson et al., 2021). Thus, social relations that were perceived to be strong before the pandemic were likely to become stronger during the pandemic. Although in the current study, participants were not explicitly asked about their professional relations before the pandemic, some participants indicated that a sense of community existed at their workplaces even before the pandemic and collective experiences during the pandemic consolidated that sense.

Lastly, a finding specific to NHS employees that merits a brief discussion was the lack of perceived support from top management. Participants reported that unanticipated changes and lack of preparation led to the establishment of a structure wherein their voices were not heard and they felt neglected and disappointed. Some participants even suggested the formation of a command-and-control structure that didn't permit alternate or opposing views to exist. This finding is similar to qualitative studies by Webster (2021) and Aughterson et al. (2021).

Although it is important to contrast it with views of management in mental healthcare, such studies do not yet exist in academic literature.

Limitations

The limitations of this study must be taken into consideration in the interpretation of its findings. Following Yardley's (2015) criteria for appraising the validity of qualitative research, five pertinent limitations of this study include: (i) heterogeneity of sample; (ii) lack of representation of professionals working in private sector; (iii) online data collection; (iv) subjectivity in interpretation of data, and; (v) familiarity with pre-pandemic literature. This section will discuss each limitation and succinctly explain how it might have affected the findings of this study.

(i) Heterogeneity of sample: Qualitative research generally requires a homogeneous sample to comprehend the experiences of participants in a given context. In the present study, whilst all the participants worked in mental healthcare, there were variations in their therapeutic clientele (e.g., working with individuals with psychosis versus those with anxiety-related issues) and therapeutic preferences (e.g., psychoanalysis, cognitive-behaviour therapy (CBT), or integrative approach). It might have contributed to variations in professionals' experiences related to transition to online medium or remote work. For instance, in an online survey with 306 psychotherapists, Blodrini et al. (2020) found that CBT psychotherapists reported fewer interruptions in therapeutic treatment due to the pandemic than psychodynamic therapists. This suggests that in the present research as well there could be potential variations in participants' experiences with respect to their therapeutic preferences. In addition, variations in therapeutic clientele could also contribute to idiosyncrasies in mental health professionals' experiences during the pandemic. For instance, marriage and family therapists who usually work with couples or groups, their experiences with online therapy might have differed from those

working with individual clients. Therefore, by not limiting the recruitment of participants to those with a certain, specific clientele and a particular therapeutic approach, the findings of this study have limited relevance for highly specialized professionals such as, psychoanalysts working exclusively with children in independent settings.

(ii) Lack of representation of professionals working in private sector: According to the 2015 report of Clinical Psychology Workforce Project, around 15-20% of clinical psychologists in the UK are employed in private, independent, or voluntary sector (Longwill, 2015). In the present study, whilst professionals working in independent settings were included, those employed in private healthcare organisations were excluded due to their skewed representation in the original database. Their experiences might have differed from their counterparts in the NHS thus by not including them in the present study, the applicability of findings is limited.

(iii) Online data collection: To abide by social distancing guidelines, online audio interviews were conducted to collect data. Whilst considered similar to face-to-face modality, online interviews are criticized for their limited scope to build rapport and acquire in-depth information from interviewees (Davies et al., 2020; Krouwel et al., 2019). Similar to the findings of this study, online interviews inhibited the observation of behavioural cues and nonverbal communication such as, eye movements or facial expressions. Although, these expressions would not have been transcribed had the interviews been conducted face to face, their absence might have affected the rapport with participants and understanding of their subterranean narratives which might have further affected the analysis and findings of this research.

(iv) Subjectivity in interpretation of data: Unlike previous research (e.g., Harling et al., 2020; Aughterson et al., 2021), interviews, transcription, and data analysis in the present study were all carried out independently by a single researcher. This might have introduced potential

sources of bias that could have been prevented had at least two researchers been involved in the process of data collection and analysis. Although, attempts were made to reduce subjectivity prior to conducting interviews, conscious or unconscious biases or conduct of the researcher might have affected the information gathered in interviews and its interpretation. Further details on it are provided in the section *Reflexive Account*.

(v) Familiarity with pre-pandemic literature: To prevent an a priori understanding, research exploring the impact of COVID-19 pandemic on mental health professionals was not reviewed until the completion of data analysis. It allowed original findings to emerge however, some of them were similar to other pandemic-related research studies. It could have been due to familiarity of the researcher with pre-pandemic research on the wellbeing of mental health professionals. Although, it provided a framework to develop a semi-structured interview-schedule, its awareness could have resulted in confirmation bias affecting the interpretation of data and findings. A cross-examination of data analysis by an independent researcher could have prevented this.

Future research should take above-mentioned limitations into cognizance while designing further studies on mental health professionals.

Reflexive Account

The present study was conducted as a part of my doctoral research project on compassion fatigue in mental health professionals. Prior to conducting this study, I was contemplating how mental health professionals are able to maintain their mental health and wellbeing while working with clients with acute or chronic psychological ailments. It piqued my curiosity into exploring how the pandemic might have affected their work and work-related wellbeing. Thus, I decided to conduct a qualitative study on this topic. However, being an international, doctoral candidate with specialization in occupational psychology, I was neither conversant with

organizational structure of mental healthcare in the UK nor had sufficient pre-requisite knowledge of terminology used in clinical or counselling psychology literature. Thus, I relied on past literature to get acquainted with constructs related to psychological wellbeing of mental health professionals such as countertransference, compassion fatigue, secondary trauma, and vicarious trauma. It provided me the required theoretical base to plan a research study in terms of its rationale, epistemological orientation, and methodology. I decided to conduct an exploratory study because challenges presented by the pandemic were unforeseen and academic literature at that time (i.e., around May 2020) didn't address the impact of the pandemic on occupational wellbeing of mental health professionals. There were only commentaries and personal blogs of psychologists but no qualitative or quantitative evidence existed. Therefore, I deemed a phenomenological study appropriate for exploring the experiences of mental health professionals. However, being an early-career researcher with limited experience with qualitative methods, I encountered some challenges while planning this study.

Developing a semi-structured interview schedule with relevant questions was a challenging experience mainly because I did not have any practical experience of working with clients in clinical context. Although I had prior experience of conducting interviews as part of academic assessment, developing an interview schedule for a population whose work I had little familiarity with was difficult. Therefore, I sought guidance from a subject matter expert and a counsellor. They advised me to include questions on personal life and attenuate the leading direction of some questions. For instance, substituting the question, "What in your opinion, is the impact of remote work on your work-life balance?" with "How do you balance your personal and professional lives while working from home?" It in my opinion, enhanced the potential latitude for participants to respond and allowed me to include questions related to work-home interaction. To determine whether the questions were understandable and the

recording instrument was working properly, a pilot interview with a trainee professional was conducted. The feedback provided by them stated that questions were clear but I was advised to avoid interrupting the participants because it takes time to reflect and formulate adequate responses. Also, it was inferred that a video interview might affect the quality of audio recording because of poor internet bandwidth. Therefore, I decided to conduct audio interviews.

Whilst conducting interviews, asking participants about their experiences during the pandemic often got emotionally strenuous, especially when participants were talking about how their psychological health was affected and how they felt neglected by their organisations. Some of their instances were so verbose and detailed that it stayed with me for a long time. Their details were so immaculate and verbal recollections so deep that I often felt emotionally exhausted after an interview. It could be a possibility that I unconsciously became an instrument for some participants to share their feelings and thoughts that nobody before me had talked to them about. It made me understand the emotional demands of their work and to an extent, I even empathized with some of them. However, after multiple interviews, I realized that it was important for me to stay detached to avoid potential digressions.

Following the completion of data collection, interviews were transcribed. The transcription process was time and effort consuming. Listening carefully to participants' voices and then typing it was a cognitively and emotionally demanding experience. Sometimes, while transcribing an interview and especially if it was about an emotional episode, I felt like I was actually having a second conversation with a participant. In some cases, I was even able to preempt their responses even though I had interviewed them some time ago. It was a particularly challenging experience however, with time and aid of cathartic conversations with supervisors and peers, I learnt to not get emotionally attached with participants' accounts. Another challenge encountered at this stage was understanding the nuances of different accents

in the UK. Being an international candidate, my acquaintance with diverse British accents is limited. Therefore, in some cases, I had to carefully concentrate on participants' voices to decipher what exactly they said.

Post transcription, the data analysis phase commenced. It was preceded by a gap of two weeks to avoid undue influence of any psychological attachment. Analysis of data to recognize novel themes and associations among them could have been influenced by my training in occupational psychology. Although, a conscious attempt was made to avoid the imposition of an existing theoretical model from the field onto the findings, the use of certain terms such as "co-workers' support", "managerial support", and "workload" among others could have stemmed from my disciplinary specialization. Another source of influence could have been my lack of experience with qualitative research methods and techniques particularly interpretative phenomenological analysis. At times, conundrums were encountered between allowing the findings to emerge from the data and imposing a structure on the data, and between describing shared experiences of all or most participants and elucidating the idiographic account of one or few. With careful consideration, a balance between the two was reached.

Implications

Scientific Implications

The findings of this study contribute to the extant literature on the impact of COVID-19 pandemic on professional practice and occupational wellbeing of mental health professionals (e.g., Aafjes-van et al., 2021, Aafjes-van et al., 2020; Békés & Aafjes-van, 2020; McBeath et al., 2020; Webster, 2021; Mancinelli et al., 2021; Boldrini et al., 2020; Probst et al., 2020; Probst et al., 2020; Machluf et al., 2021). It provides qualitative evidence that explains the context of professionals' experiences and well-being and facilitates the interpretation of quantitative findings by providing an interpretative framework (Békés & Aafjes-van, 2020).

Unlike previous research that distinctly addressed specific components of the impact of the pandemic such as teletherapy (e.g., Pierce et al., 2021) or physical and psychological impact (e.g., Kotera et al., 2021; Probst et al., 2020; Mancinelli et al., 2021), the present research presents a comprehensive perspective. For instance, it explains how remote work and shared experiences with clients fostered work-life imbalance and secondary traumatic stress for which social support was sought from family members, colleagues, and clinical supervisors. In addition, it investigated the role played by managers and professional bodies in shaping employees' experiences. Limited research till date (e.g., Geller, 2020; Langdon et al., 2021; Aughterson et al., 2021) has explored this perspective. The findings of the present study endeavored to fill this gap in the literature. Moreover, it is one of the few studies that have explored the experiences of UK-based mental health professionals during the COVID-19 pandemic (e.g., Webster, 2021; McBeath et al., 2020; Kotera et al., 2021; Aughterson et al., 2021). Majority of the studies to date originate from the US (Aafjes-van et al., 2021; Aafjes-van, 2020; Pierce et al., 2021; McKee et al., 2021; Lin et al., 2021). Therefore, this study contributes to that limited body of research.

Also, the study highlights the systemic antecedents of occupational wellbeing of employees in the public healthcare-sector as well as those who work in private practice. As mentioned in the previous chapter, research till date has focused more on the experiences of employees and relatively little attention has been paid to the psychosocial hazards faced by independent practitioners (e.g., Jurcik et al., 2021). By simultaneously exploring the experiences of employees as well as private practitioners, this study attempts, albeit to a limited extent, to contrast the experiences of both the occupational groups.

Lastly, several extracts mentioned in the superordinate theme, *Novel changes, practice and wellbeing* and its associated subordinate themes highlight the aversive impact of the challenges imposed by the pandemic on the occupational well-being of mental health

professionals. Several of those extracts are similar to the symptoms of burnout and secondary traumatic stress assessed by the Professional Quality of Life Scale Version 5 (ProQOL 5; Stamm, 2010). For example, a participant mentioned experiencing the symptoms of secondary traumatic stress (such as, intrusive thoughts) due to difficulties in psychologically detaching from the experiences of their clients whilst providing online therapeutic services remotely. This experience is similar to item 9 of ProQOL 5 (“I think that I might have been affected by the traumatic stress of those I [help].”) that measures secondary traumatic stress. Another example includes instances of heightened workload due to the imposition of national lockdowns leading to experiences of work-related stress detailed in the subordinate theme, *Unexpected changes*. The extracts included in that subordinate theme are similar to item 21 (“I feel overwhelmed because my case [work] load seems endless.”) which measures burnout. Thus, to understand the relations among these symptoms, it would be beneficial to conduct a psychometric study on the internal structure of ProQOL 5. It would enhance our understanding of how symptoms are related to each-other in a chain sequence i.e., which symptom plays a central role and could trigger other symptoms. For example, intrusive thoughts about clients’ issues (item 9) due to high perceived workload (item 21) could impact the quality of sleep (item 8: “I am not as productive at work because I am losing sleep over traumatic experiences of a person I [help].”) and personal life of a mental health professional (item 7: “I find it difficult to separate my personal life from my life as a [helper].”). Thus, to explore these associations, the fourth chapter of this thesis discusses the findings of a psychometric evaluation of ProQOL 5. The study employs a novel technique called, Exploratory Graph Analysis that generates graphs to depict relations among various clusters of nodes (in this case, scale items) among variables in a dataset. It would not only enhance our understanding of relations among the symptoms of burnout and secondary traumatic

stress but, could also shed light on the conceptual clarity of compassion fatigue, which as stated in the first chapter of this thesis, remains ambiguous to this day.

Practical Implications

Similar to previous research (Aafjes-van et al., 2021; Aafjes-van et al., 2020; Békés & Aafjes-van, 2020; McBeath et al., 2020; Machluf et al., 2021; Pierce et al., 2021), participants in the present study also reported lack of experience with and training in delivering counselling or psychotherapeutic services using an online or telephonic medium. It highlights the need for training programmes in online or telephonic counselling. Professionals need to be trained not only in the relational aspects of online or telephonic therapy but also in the technical aspects such as, using encrypted videoconferencing services or setting a webcam at an adequate angle to facilitate eye contact and interaction (Aafjes-van et al., 2021; Aafjes-van et al., 2020; Benoit & Kramer, 2021; Jurcik et al., 2021; Grondin et al., 2021). It might be prudent to include training in online or telephonic therapy in the educational programmes for trainee mental health professionals (Aafjes-van et al., 2021; Rowen et al., 2021; Connolly et al., 2020).

In addition, the benevolent role played by co-workers' support highlights the need for interventions to bolster team relations. One intervention that mental health organisations could implement is to organise Balint Groups. A traditional Balint group facilitated by one or two trained Balint leaders involves 60–90-minute discussions with 5-10 healthcare professionals over a 2–3-year period (O'Neill et al., 2016). It provides a supportive, non-evaluative environment for an honest discussion about the emotional impact of a client's ailment on a healthcare professional (O'Neill et al., 2016). Due to its in-depth, collective reflection component, Balint groups have been found to be successful in safeguarding

healthcare professionals against burnout (Stojanovic-Tasic et al., 2018; Rabinowitz et al., 1996) and, consequently, enhancing the quality of patient care (Yazdankhahfard et al., 2019).

Lastly, the findings of this study highlight the need for the NHS to make substantial changes in mental healthcare services. Employees working in the NHS appeared to be disappointed in and neglected by the system which could result in turnover if not attended to in time. Pre-pandemic research also points out the role of structural problems in the NHS in contributing to turnover rate and intention among employees (Ryan et al., 2019). The present study suggests that the unexpected nature of COVID-19 pandemic could have exacerbated those problems. Therefore, it is vital for healthcare authorities to make necessary amendments to prevent undesirable consequences such as, a fatigued workforce or heightened turnover rate. Finally, the experiences of professionals detailed in this study could be used for developing contingency plans in case of a public health emergency in future.

Conclusion

The study explored the impact of COVID-19 pandemic on professional practice and occupational wellbeing of clinical psychologists, counsellors, and psychotherapists working in the NHS and independent settings in the UK. The findings of this study suggest that the pandemic posed several unforeseen challenges that affected the practice and wellbeing of mental health professionals. Two of the most pertinent challenges included transition from face to face to online or telephonic therapy and adjusting to the peculiarities of remote work. The lack of familiarity with and experience in providing online or telephonic psychotherapeutic services from home negatively impacted professionals' psychological health and wellbeing. Therefore, to cope with it, they availed support from their professional networks which provided psychological support to cope with perceived difficulties and structural aid to adjust to novel ways of working. In alignment with findings of systematic review, job resources such

as co-workers' support, supervisor's support, managerial support, and organizational support were found to help employees cope with challenges imposed by lockdowns. Moreover, the requirement to offer psychotherapeutic support whilst working from home seemed to exacerbate the general consequences of mental healthcare including secondary traumatic stress, which is also a component of compassion fatigue. This study has pertinent scientific implications and from an applied perspective, it highlights the need for training programmes in online or telephonic therapy and macro-organizational changes in mental healthcare services.

CHAPTER FOUR

A PSYCHOMETRIC EVALUATION OF PROFESSIONAL QUALITY OF LIFE SCALE VERSION 5 (ProQOL 5) IN A UK-BASED SAMPLE OF ALLIED MENTAL HEALTH PROFESSIONALS

Abstract

The Professional Quality of Life Scale Version 5 (ProQOL 5; Stamm, 2010) is often used to assess burnout, secondary traumatic stress, and compassion satisfaction in allied mental health professionals in the UK. However, vital empirical evidence assessing psychometric properties of this instrument for this occupational group or in this national context does not exist in extant literature. Therefore, the aim of the present study was to conduct a confirmatory factor analysis to validate ProQOL 5 in a sample of 366 UK-based clinical psychologists, counsellors, and psychotherapists recruited via online purposive sampling. The findings indicated that in alignment with existing research, the widely examined three first-order factors structure with ten items each demonstrated poor fit to data. Thus, the structure was investigated further with a novel technique in network psychometrics called bootstrapped exploratory graph analysis (bootEGA). The results of bootstrapped EGA indicated that 21 items from the original ProQOL 5 (10 items from compassion satisfaction subscale, 7 items from secondary traumatic stress subscale, and 4 items from burnout subscale) demonstrated satisfactory levels of item stability i.e., all items were replicated in more than 80% of bootstrapped samples. The findings of this study are discussed in light of latest psychometrics literature and the study has pertinent scientific implications. To my best knowledge, it is the first empirical study to analyse psychometric properties of ProQOL 5 in a sample of mental health professionals based in the UK. The limitations of the study are highlighted and directions for future research are discussed.

Introduction

The Professional Quality of Life Scale Version 5 (ProQOL 5; Stamm, 2010) is one of the most widely used instruments to assess compassion fatigue (CF; an amalgam of burnout (BO) and secondary traumatic stress (STS); Stamm, 2010) and compassion satisfaction (CS) in health and social care professionals (Singh et al., 2020; Cieslak et al., 2014; Robertson, 2015). It is often used in studies on doctors (e.g., Buselli et al., 2021; Cantu & Thomas, 2020), nurses (e.g., Algamdi, 2021; Xie et al., 2021), palliative care workers (e.g., Galiana et al., 2022; Baqas et al., 2021), foster carers (e.g., Bridger et al., 2020; Verheyden et al., 2021), and mental health professionals like psychiatrists, clinical psychologists, counsellors, psychotherapists, and mental health social workers (e.g., Singh et al., 2020; Singh & Hassard, 2021; Turgoose & Maddox, 2017; Zhang et al., 2021; Saleem & Hawamdeh, 2022).

Thirteen studies have examined the psychometric properties of ProQOL 5 on international samples of nurses, palliative care workers, and direct support workers. No study to date has investigated its psychometric properties in mental health professionals specifically or generally in health and social care professionals in the UK. This is contentious for two reasons.

First, the lack of evidence for cross-occupational measurement invariance²¹ (Spurk et al., 2014) assumes that the scale would perform uniformly when administered on professionals other than nurses or palliative care workers. Whereas evidence from measurement invariance literature albeit limited suggests that variations in occupational contexts could contribute to non-invariance of items of scales developed to measure psychological constructs for example, career satisfaction (Spurk et al., 2014). In addition, as argued in first and second chapters of

²¹ Measurement invariance refers to “the situation in which a scale or construct provides the same results across several different samples or populations.” (APA Dictionary of Psychology, n.d.) It involves complex statistical analyses to be tested (Byrne, 2016) and cannot be claimed only on the basis of a narrative comparison of studies using the same scale in different contexts. In the present chapter, due to complete absence of research examining measurement invariance of ProQOL 5, I infer by comparing findings of different psychometric studies that ProQOL 5 might be noninvariant across different occupational groups and cultures or countries.

this thesis, the experience of secondary traumatic stress might differ between professionals not working exclusively with individuals with trauma (such as counsellors with a minimal percentage of traumatised clients on their caseloads) and those working with individuals with intense physical and psychological trauma (such as nurses working in accidents and emergency units or clinical psychologists working with war veterans). It could contribute to non-invariance of STS subscale of ProQOL 5 and highlights the need for investigating its factorial structure in a sample of mental health professionals not working exclusively with traumatised clients. Since ProQOL 5 is often used in studies on mental health professionals working with heterogeneous populations (e.g., Singh & Hassard, 2021; White, 2021) or non-traumatised populations (e.g., Yang, 2021; Clark et al., 2021), it is important to examine its factorial structure in these occupational groups.

Second, the frequent use of ProQOL 5 in UK-based research (e.g., Singh & Hassard, 2021; Bridger et al., 2020; Sodeke-Gregson et al., 2013; Dasan et al., 2015), despite a total absence of psychometric evidence from the country, risks inaccurate assessment and flawed inferences (Coaley et al., 2014). Also, it indicates a lack of recognition for the role of variations in healthcare systems and national, political, or cultural distinctions in contributing to professionals' occupational experiences. A measurement invariance study of the Counsellor Burnout Inventory (CBI; Lee et al., 2007) suggested that three of the five subscales of CBI were not invariant between US-based and Korean counsellors (Carrola et al., 2012)²². Moreover, a meta-analytic study on burnout in mental health professionals found evidence for geographic variations in burnout levels reported by studies conducted in North America as opposed to those conducted in Europe (O'Connor et al., 2018). Five studies that have examined the reliability and validity of the English version ProQOL 5 emerge from the US (Kessler &

²² Note: Since ProQOL 5 also has a BO subscale, it could be that similar to Carrola et al.'s study (2012), it might also be non-invariant for mental health professionals based in different countries.

Fukui, 2020; Hagan, 2019), Canada (Hemsworth et al., 2018), Australia (Heritage et al., 2018), and Singapore (Ang et al., 2020) and their findings (discussed in the following section) demonstrate variations in the scale's factorial structure. This suggests non-invariance of ProQOL 5 across countries or cultures and highlights the need for validating it on UK-based professionals. Therefore, the aim of the present study is to conduct a confirmatory factor analysis (CFA) to validate ProQOL 5 in a sample of clinical psychologists, counsellors, and psychotherapists based in the UK. It would aid in generating psychometric evidence for assessing CF and CS in professionals working in health and social care sector or with heterogeneous populations in the country. Also, it would contribute to the limited body of research examining the external validity of the tenets of Professional Quality of Life Framework (Stamm, 2010). Since empirical research so far on nurses, palliative care workers, and direct support workers has produced mixed findings regarding the structure of ProQOL 5, it is important to examine it further with varied occupational groups for reasons mentioned above.

Review of the Literature

The examination of psychometric properties of ProQOL 5 constitutes a small, burgeoning body of research that has been gaining momentum since 2016 when in a study on 377 physicians, nurses, and social workers based in Israel, Samson and colleagues (2016) administered the Hebrew version of ProQOL 5 to assess its psychometric properties. The results from that study showed that a simple, first order three-factor structure of the scale (distinct from the framework proposed by scale developers) was not supported by empirical evidence (Samson et al., 2016). Indices of model fit showed that except for the Root Mean Square Error of Approximation (RMSEA), which was 0.08, no other goodness-of-fit indices such as the Comparative Fit Index (CFI), Goodness of Fit Index (GFI), Tucker-Lewis Index (TLI), or Standardized Root Mean Square Residual (SRMR), demonstrated adequate levels of

model fit (Samson et al., 2016; Parry, 2020; Browne & Cudeck, 1993; MacCallum et al., 1996). Since then, other studies have also investigated the psychometric properties of different linguistic versions of ProQOL 5 to ensure that the scale adequately measures what it purports to measure (i.e., validity) and that it can be used reliably in developing and testing empirical research models (e.g., Galiana et al., 2017; Duarte, 2017; Misouridou et al., 2021; Geoffrion et al., 2019). This section will review and critically analyse those studies and their findings.²³

Validity of ProQOL 5

According to the American Educational Research Association (AERA), American Psychological Association (APA), and the National Council on Measurement in Education (NCME; 2014), validity refers to “the degree to which evidence and theory support the interpretation of test scores for proposed uses of tests” (p. 11). Validating a test, scale, or measure to ensure that inferences drawn from it are accurate (Urbina, 2014) is the joint responsibility of a scale developer as well as its user (AERA, APA, & NCME, 2014). However, in case of ProQOL 5 whilst evidence pertaining to its distinct types of validity has been accumulated by researchers over the years, the scale developer (Stamm, 2010) provides no empirical information about its validity. In the Concise ProQOL Manual (Stamm, 2010), under the section “*Validity*”, Stamm (2010) states the following:

There is good construct validity with over 200 published papers. There are also more than 100,000 articles on the internet. Of the 100 published research papers on compassion fatigue, secondary traumatic stress and vicarious traumatization, nearly half have utilized the ProQOL or one of its earlier versions. The three scales measure separate constructs. The Compassion Fatigue scale is distinct. The inter-scale correlations show 2% shared variance

²³ Due to dearth of studies on the English version of ProQOL 5 (Stamm, 2010), the review of literature section discusses research on different linguistic versions of the scale, acknowledging that they should not be assumed to be invariant.

($r = -.23$; $\text{co-}\sigma = 5\%$; $n = 1187$) with Secondary Traumatic Stress and 5% shared variance ($r = -.14$; $\text{co-}\sigma = 2\%$; $n = 1187$) with Burnout. While there is shared variance between Burnout and Secondary Traumatic Stress the two scales measure different constructs with the shared variance likely reflecting the distress that is common to both conditions. The shared variance between these two scales is 34% ($r = .58$; $\text{co-}\sigma = 34\%$; $n = 1187$). The scales both measure negative affect but are clearly different; the BO scale does not address fear while the STS scale does. (p. 14)

As explicit in the verbatim stated above, Stamm (2010) conflates the popularity of ProQOL 5 with evidence for construct validity and low correlation among subscales and narrative differences among subscale items with evidence for discriminant validity²⁴. Whilst popularity is in no way a measure of construct validity, face validity of items is usually not considered affirmative evidence for a scale's content validity²⁵. It is a preliminary step in scale development (Kyraizos & Stalikas, 2018). In contrast, low correlations among subscales could be interpreted as rudimentary evidence for its discriminant validity (Rönkkö & Cho, 2020), but more sophisticated indices used in exiting research such as, heterotrait–monotrait ratio of correlations²⁶ (HTMT; Henseler et al., 2015) or average variance extracted (AVE) greater than shared variance²⁷ (Voorhees et al., 2016) suggest otherwise (Lazăr et al., 2022; Hemsworth et

²⁴ Construct validity refers to the extent to which a measure relates to an array of other measures to support the existence of a separate construct (Urbina, 2014; Coulacoglou & Saklofske, 2018). It can be split into convergent validity (i.e., the degree to which a measure is associated with another measure of a theoretically related construct) and discriminant validity (i.e., the degree to which a measure is minimally related or unrelated to a theoretically disparate construct; Coulacoglou & Saklofske, 2018).

²⁵ Content validity refers to the degree to which a scale adequately measures all aspects of the construct of interest (Stuart-Hamilton, 2007).

²⁶ The heterotrait–monotrait (HTMT) ratio of correlations is an index of discriminant validity based on correlations among indicators in measures (Henseler et al., 2015). It was originally used in partial-least squares structural equation modelling (PLS-SEM) but is now commonly used in CFA SEM as well (Voorhees et al., 2016). To suggest that two measures or sub-measures of a measure are unrelated or minimally related, the value of HTMT ratio is *advised* to be less than 0.85 (Henseler et al., 2015).

²⁷ Average variance extracted (AVE) is an estimate of the average amount of variance in observed variables (or items) that can be accounted for or explained by a latent construct (Farrell, 2010). Shared variance on the other hand is an estimate of the amount of variance that variable A can explain in variable B (Farrell, 2010). Evidence for discriminant validity is found when AVE for each construct is greater than its shared variance with other constructs (Fornell & Larcker, 1981; Voorhees et al., 2016).

al., 2018). For instance, a recent study on 533 social workers found that the BO subscale of the Romanian version of ProQOL 5 ($AVE = .26 < \text{Maximum Shared Variance}^{28} (MSV) = .76$) was indistinguishable from STS ($AVE = .40 < MSV = .57; HTMT = .80$) and CS ($HTMT = .88$) subscales whilst CS ($AVE = .36 < MSV = .57$) and STS subscales showed moderate discrimination ($HTMT = .26$; Lazăr et al., 2022). However, study investigators did not report confidence intervals for HTMT ratio which are recommended to compute to ensure that correlation between or among constructs is statistically distinct from 1 (Henseler et al., 2015). Also, their data did not meet HTMT's assumption of tau-equivalence (Henseler et al., 2015) which requires all items in a measure to have nearly identical standardized factor loadings (Daniel, 2018). By violating the assumption of tau equivalence, Lazăr and colleagues' (2022) estimates of discriminant validity are likely to be biased (Roemer et al., 2021). In contrast, empirical evidence for their discriminant validity has been found in a small number of studies that have correlated BO and STS subscales with theoretically unrelated constructs (Fukumori et al., 2016; Ang et al., 2020). For instance, in a psychometric study on 618 Japanese nurses, STS was found to be minimally or weakly correlated with post-traumatic growth ($r = .240, p < .01$) and personal accomplishment ($r = -.008, NS$; Fukumori et al., 2016). In addition, BO was weakly correlated with post-traumatic growth ($r = -.196, p < .01$) and CS was weakly correlated with primary trauma ($r = -.063, NS$; Fukumori et al., 2016).

Regarding convergent validity, studies in existing research have adopted either of the two methods: (i) correlate the subscales of ProQOL 5 with scales assessing other theoretically related constructs or (ii) compute AVE values and evaluate if they are greater than or equal to 0.50 (Hair et al., 2017). The latter like HTMT ratio was originally used in PLS-SEM modelling but is now commonly reported in CFA-SEM studies as well. According to Hair et al. (2017):

²⁸ Maximum Shared Variance is the square of the highest correlation among three or more constructs. It should be less than AVE of a construct to claim discriminant validity (Henseler et al., 2015).

an AVE value of 0.50 or higher indicates that on average, the construct explains more than half of the variance of its indicators. Conversely, an AVE of less than 0.50 indicates that, on average, more variance remains in the error of the items than in the variance explained by the construct. (p. 114)

Studies reporting AVE values for subscales of ProQOL 5 indicate that only the CS subscale demonstrates acceptable levels of convergent validity. In two studies (Hemsworth et al., 2018; Ang et al., 2020), AVE values for CS subscale were above the required cut-off of 0.50, but in one study it was 0.36 (Lazăr et al., 2022). For BO and STS subscales in contrast, all three studies found that AVE values were less than 0.50 (Hemsworth et al., 2018; Ang et al., 2020; Lazăr et al., 2022). This suggest that except for 10 items of CS subscale, variance in majority of items of ProQOL 5 cannot be adequately explained by their respective constructs.

In contrast, for studies that have adopted the correlational approach, empirical evidence clearly shows that BO and STS subscales demonstrate adequate levels of convergent validity. They correlate moderately with negative affect ($r = .465, p < .01; r = -.181, p < .01$; Ang et al., 2020), primary trauma ($r = .350, p < .01; r = .615, p < .01$; Fukumori et al., 2016), emotional exhaustion ($r = .650, p < .01; r = .443, p < .01$; Fukumori et al., 2016), depersonalisation ($r = .528, p < .01; r = .433, p < .01$; Fukumori et al., 2016), personal accomplishment²⁹ ($r = -.443, p < .01$; Fukumori et al., 2016), stress ($\bar{r} = 0.595^{30}; \bar{r} = 0.495$; Hemsworth et al., 2018), anxiety ($\bar{r} = 0.475; \bar{r} = 0.47$; Hemsworth et al., 2018), and depression ($\bar{r} = 0.555; \bar{r} = 0.41$; Hemsworth et al., 2018). In one study (Misouridou et al., 2021), BO and STS subscales were correlated with Secondary Traumatic Stress Scale (Bride et al., 2004), another commonly used measure in compassion fatigue and secondary traumatic stress research

²⁹ The correlation between STS and personal accomplishment has been intentionally not stated because it was opined that they are theoretically unrelated constructs.

³⁰ In the multi-sample study by Hemsworth et al. (2018), correlation coefficients for two samples were averaged.

literature (Bride et al., 2007). The results showed that as expected, STSS was positively related to BO ($r = .57, p < .001$) and STS ($r = .69, p < .001$) subscales (Misouridou et al., 2021). Regarding the CS subscale, evidence shows that it correlates positively with measures of work engagement ($r = .72, p < .01$; Samson et al., 2016), positive affect ($r = .627, p < .01$; Ang et al., 2020), personal accomplishment ($r = .676, p < .01$; Fukumori et al., 2016), and post-traumatic growth ($r = .4, p < .01$; Fukumori et al., 2016).

The discrepancy in findings (especially for BO and STS subscales) produced by both the methods could be attributed to distinctions in their methodological and analytical roots. In PLS-SEM literature, AVE is considered an estimate of communality³¹ of a construct because it understands convergent validity as the degree to which indicators developed to measure a construct converge or the proportion of variance they share (Hair et al., 2017). Whereas in the mainstream psychometrics literature, convergent validity relates to convergence or correlation between scales measuring theoretically related constructs (e.g., anxiety and depression; Coulacoglou & Saklofske, 2018). Both the approaches clearly conceptualize convergent validity differently but due to reasons not discussed in methodological literature, they are both considered indices of convergent validity. This potential confusion needs to be rectified in statistical literature as it could create confusion for researchers and scale users especially those who are not well versed with psychometrics theory.

Internal Structure of ProQOL 5.

The internal structure of a measure refers to its dimensionality or the way its indicators are related to each other (Coulacoglou & Saklofske, 2018). For a measure to be considered valid, its internal structure should be in alignment with its theoretical structure (Furr & Bacharach,

³¹ In PLS-SEM literature, communality refers to the degree of variation in items that can be explained by a latent construct (Hair et al., 2017). Whereas in factor analysis literature, communality refers to the “proportion of common variance present in a variable” (Field, 2018, p. 788). Common variance is the proportion of variance in a variable that is shared with other variables (Field, 2018).

2008). In the case of ProQOL 5, Stamm (2010) proposed a complex theoretical structure or model wherein Compassion Fatigue and Compassion Satisfaction are nested under a third-order variable called Professional Quality of Life, while Burnout and Secondary Traumatic Stress are nested under Compassion Fatigue. In empirical research, this model has only been partially examined by one study. In a study on 310 child protection workers in Canada, Geoffrion et al. (2019) found that for the French version of ProQOL 5, a second-order CFA model (in which BO and STS were nested under CF, and CS and CF co-varied), displayed poor fit to data, $\chi^2(403, 310) = 2,063$, $\chi^2/df = 5.12$, $CFI = .825$, $TLI = .811$, $RMSEA = .116$ 90% $CI [.111, .121]$. They also examined a bi-factorial model wherein CF and CS were orthogonal first-order variables and ProQOL was a bifactor variable. The results showed that the model demonstrated adequate fit to data, $\chi^2(375, 310) = 790$, $\chi^2/df = 2.11$, $CFI = .954$, $TLI = .946$, $RMSEA = .060$ 90% $CI [.054, .066]$ (Geoffrion et al., 2019). However, these findings should be accepted with caution because recent methodological research suggests that goodness of fit indices in CFA are often biased in favour of bifactor models even if they do not in actuality explain a substantial amount of variance in data (Rodriguez et al., 2016; Bonifay et al., 2017; Bornovalova et al., 2020).

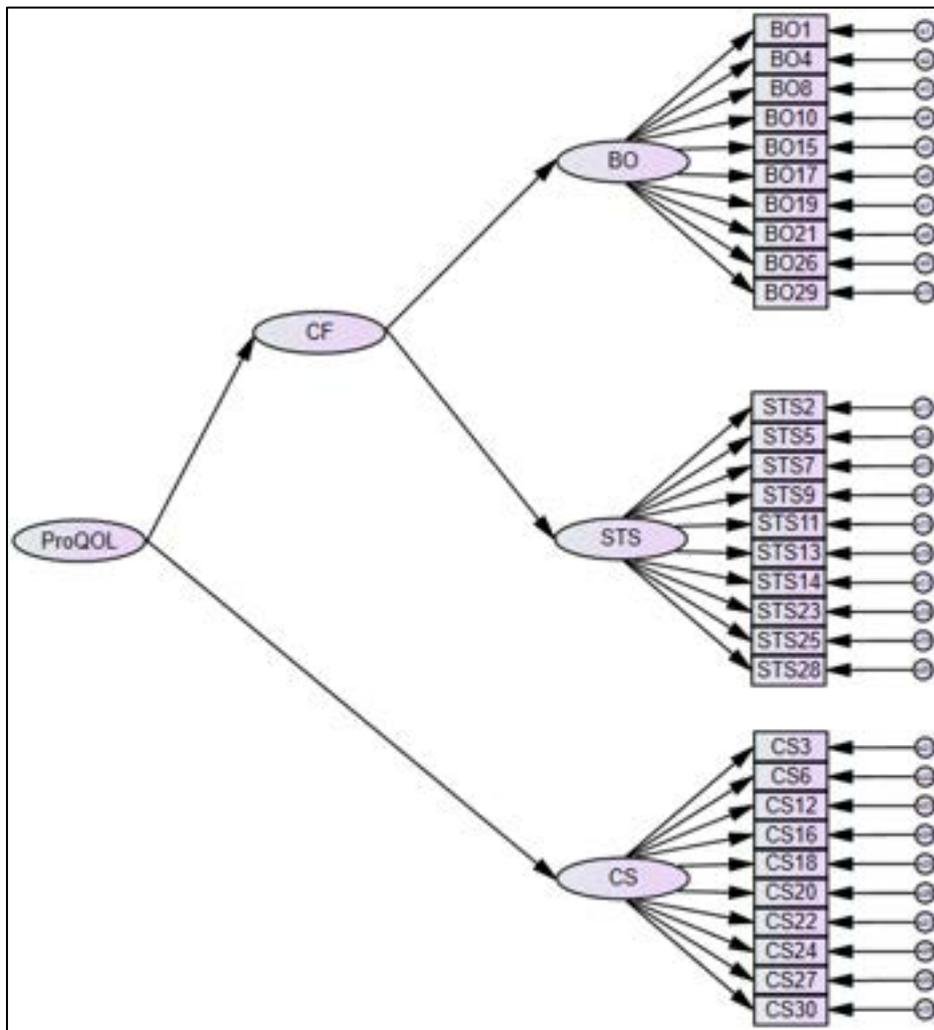
No study to date has examined the original, higher-order theoretical model (see Figure 1) proposed by Stamm (2010). Most empirical studies in existing literature have only examined a first-order CFA model with covariances among BO, STS, and CS³² but have not found adequate support for its fit (Galiana et al., 2017; Samson et al., 2016; Geoffrion et al., 2019; Kessler & Fukui, 2020; Duarte, 2017; Misouridou et al., 2021; Hagan, 2019; Cilar et al., 2021; Fukumori et al., 2016; Lazăr et al., 2022). In one multi-sample study, model fit was evaluated

³² In the present study as well, only a first-order CFA model was examined. This was because according to existing research (Anagnostopoulos et al., 2005; Rossen et al., 2008; Mills & Thomas, 2008), hierarchical CFA models (such as, a second- or third-order model) are analysed only when their preceding, simpler models (i.e., a first- or second-order model) demonstrate acceptable levels of model fit. In the present study, since a first-order CFA model (with covariances) was not supported, hierarchical models were not examined.

separately for each subscale of ProQOL 5 (Hemsworth et al., 2018). The results showed that except for BO, adequate model fit was achieved for CS and STS subscales (Hemsworth et al., 2018). In majority of studies, the main reason behind lack of fit was low factor loadings of items. Items in CS subscale that were generally found to have low factor loadings included items 6, 16, 18, and 27 (Duarte, 2017; Hagan, 2019). In the STS subscale, items with low factor loadings included items 2, 5, 7, 28, and 14 (Hemsworth et al., 2018; Kessler & Fukui, 2020; Duarte, 2017; Fukumori et al., 2016). In the BO subscale, many items were found to have low factor loadings. All 5 reverse scored items (*viz.*, items 1, 4, 15, 17, & 29) were found to have low factor loadings (Hemsworth et al., 2018; Kessler & Fukui, 2020; Duarte, 2017; Hagan, 2019). In addition, items 8, 10, 19, and 21 were also found to have low factor loadings in two studies (Fukumori et al., 2016; Hagan, 2019). This suggests that some items of ProQOL 5 - e.g., reverse scored items in BO subscale - consistently demonstrate low factor loadings across occupational groups (e.g., nurses or direct support professionals) and countries or cultures (e.g., the US or Portugal). But for other items, low factor loadings were observed only in one context but not others. For instance, in a study on nurses in Japan, low factor loadings ($< .3$) were obtained for items 8, 21, and 26 (Fukumori et al., 2016), but in a study on direct support workers in the US, these items were found to have factor loadings higher than 0.4 (Kessler & Fukui, 2020). However, it is important to acknowledge that these distinctions could be attributable to sampling variations and different linguistic versions of the scale. Furthermore, it is important to highlight heterogeneity in the criterion selected by researchers for evaluating factor loadings. It ranged from 0.3 (Fukumori et al., 2016) to 0.5 (Duarte, 2017; Cilar et al., 2021), with majority of studies using 0.4 as a threshold for deleting items (Kessler & Fukui, 2020; Hemsworth et al., 2018; Lazăr et al., 2022). This suggests that in lieu of an objective criterion, researchers used subjective judgements or interpretations in evaluating factor loadings. Along with convergent validity, this reflects an important methodological issue that needs to be addressed.

Figure 1

Measurement model based on the theoretical structure of ProQOL 5 (Stamm, 2010)



Note. Means, variances, and intercepts are not displayed for presentational purposes

To enhance the fit of measurement model to observed data, studies deleted items with low factor loadings (e.g., Cilar et al., 2021; Duarte, 2017; Kessler & Fukui, 2020). This substantially improved model fit in most cases except in case of Cilar et al. (2021). In their study, even after omitting 19 items with low factor loadings (< 0.5), fit indices continued to show poor fit to data, $\chi^2(41, 343) = 201.427$, $TLI = .886$, $CFI = .915$, $RMSEA = .107$. However, it is interesting to note that despite clear evidence for poor fit, researchers claimed that their final model demonstrated acceptable levels of fit which is, at best, misleading (Parry,

2020). Nevertheless, other studies that examined alternative models found that after deleting items with low factor loadings, overall model fit improved (e.g., Duarte, 2017; Kessler & Fukui, 2020).

It is also interesting to note that in no study alternative models were compared using goodness of fit indices based on log-likelihood such as Akaike Information Criterion (AIC) or Bayesian Information Criterion (BIC). AIC and BIC are recommended when comparing alternative models because unlike other goodness of fit indices they impose a penalty if a model becomes too complex or if number of parameters to be estimated in a model increase (Lin et al., 2017). Thus, in comparison of alternative models, one with the lowest AIC and BIC values is generally considered to demonstrate better levels of model fit (Lin et al., 2017; Vrieze et al., 2012). By not reporting AIC and BIC values in examination of alternative models, psychometric studies on ProQOL 5 could be argued not to provide adequate information about which model displays the best fit to data.

Reliability of ProQOL 5

In contrast to mixed evidence for validity, subscales of ProQOL 5 generally demonstrate satisfactory levels of reliability. Internal consistency³³ estimates from 12 studies (Ang et al., 2020; Cilar et al., 2021; Duarte, 2017; Fukumori et al., 2016; Galiana et al., 2017; Hagan, 2019; Hemsworth et al., 2018; Heritage et al., 2018; Kessler & Fukui, 2020; Lazăr et al., 2022; Misouridou et al., 2021; Samson et al., 2016) indicate that the average coefficient alpha for BO subscale is .73 ($SD = .083$), for STS subscale it is .802 ($SD = .042$), and for CS subscale it is .866 ($SD = .055$). Two studies (Samson et al., 2016; Misouridou et al., 2021) also reported estimates of ‘alpha if item deleted’³⁴. Their results showed that for BO subscale, alpha

³³ Internal consistency refers to the extent to which items on a test are related to one another in the sense that they all measure the same construct (APA Dictionary of Psychology, n.d.).

³⁴ ‘Alpha if item deleted’ is a statistical procedure wherein a software recalculates coefficient alpha and determines improvements in its values after successively eliminating individual items (Goodboy & Martin, 2020).

estimates ranged from 0.48 to 0.79, for STS subscale, they ranged from 0.79 to 0.84, and for CS subscale, they ranged from 0.81 to 0.87 (Samson et al., 2016; Misouridou et al., 2021).

These findings suggest that STS and CS but not BO subscales of ProQOL 5 demonstrate high levels of internal consistency. However, recent methodological research cautions against generalizing the findings of ‘alpha if item deleted’ because the analysis is based on sample-specific variation in data i.e., it may not be applicable at the population level or may not replicate in other studies (Dunn et al., 2014; Raykov, 2007; Goodboy & Martin, 2020). In Samson et al. (2016) and Misouridou et al. (2021) as well, substantial variations were observed in findings. For example, for BO subscale, alpha ranged from 0.48 to 0.68 in the former, whilst in the latter it ranged from 0.71 to 0.79.

Interestingly, since coefficient alpha assumes tau equivalence of items which is rarely met in psychological research (Dunn et al., 2014; Daniel, 2018), two studies (Hemsworth et al., 2018; Lazăr et al., 2022) reported estimates of composite reliability (CR) as well. CR is a measure of internal consistency which does not assume identical factor loadings (Hair et al., 2017). For all three subscales of ProQOL 5, CR values were above 0.70 in both Hemsworth et al. (2018) and Lazăr et al. (2022) indicating satisfactory levels of internal consistency. Lastly, regarding temporal stability aspect of reliability, only one study examined test-retest reliability of subscales of ProQOL 5. Albeit with a small sample ($N = 30$) and a gap of only three weeks between the two administrations, Misouridou et al. (2021) found evidence for high levels of test-retest reliability for all three subscales of the Greek version of ProQOL 5: BO ($r = 0.968$, $p < 0.001$), STS ($r = 0.935$, $p < 0.001$), and CS ($r = 0.968$, $p < 0.001$).

Present Study

In light of the evidence discussed above, it is imperative that further research is conducted to clarify psychometric properties of ProQOL 5. The scale is frequently used in studies on

mental health professionals in the UK (e.g., Singh & Hassard, 2021; Sodeke-Gregson et al., 2013) yet no study has examined its psychometric properties in this context or occupational group. The present study aims to fill this gap in research by conducting a confirmatory factor analysis (CFA) to investigate the factorial structure of ProQOL 5 in a sample of UK-based clinical psychologists, counsellors, and psychotherapists. It will aid in generating required evidence to ensure that the scale reliably measures compassion fatigue and compassion satisfaction in allied mental health professionals in the UK. Also, it will contribute to the limited body of research that has investigated the psychometric properties of the English version of ProQOL 5.

Methods

Recruitment of Participants

The target population for the present study comprised of clinical psychologists, counsellors, and psychotherapists practising in either public or private organisational, community, or independent settings in the UK.³⁵ To be included in this study, a potential participant had to be currently working, i.e., providing counselling or psychotherapeutic services to clients. Furloughed professionals or those involved exclusively in research or higher education (e.g., full-time university lecturers or professors) were not included in the sampling frame. To recruit participants in the backdrop of the second wave of COVID-19 pandemic, establishing research collaborations with professional bodies of mental health professionals was deemed more appropriate and pragmatic than applying for National Health Service's (NHS) Health Research Authority's (HRA) ethical approval. Feedback shared by colleagues who applied for HRA's ethical approval before March 2020 (i.e., the first wave of COVID-19 pandemic) suggested

³⁵ An *a priori* power analysis to determine the sample size required exclusively for this study was not conducted. Due to the unprecedented impact of COVID-19 pandemic, the original idea for an empirical study could not be executed, therefore this study is an unanticipated offshoot of uncontrollable circumstances. For further details, refer Appendix F (p. 383) of this thesis.

prolonged delays in processing of applications due to disruptions caused by the pandemic. Therefore, to circumvent unanticipated delays in commencement of data collection and its subsequent impact on timely completion of doctoral project, the decision to not apply for HRA's ethical approval was made. Instead, research collaborations were established with three large professional bodies of allied mental health professionals in the UK namely, Division of Clinical Psychology (DCP) of the British Psychological Society (BPS), the UK Council for Psychotherapy (UKCP), and the National Counselling Society (NCS)³⁶. These bodies were selected for collaboration following consultations with a clinical psychologist and a counsellor. After a series of meetings and email correspondences, the terms and conditions of collaboration were agreed and online data collection using Jisc Online Surveys (Jisc, n.d.) started on 5th November 2020. Two professional bodies (UKCP and NCS) shared link to the survey via email three times with their members (separated by a gap of two months each). DCP shared link to the survey only once in the November Issue of COVID-19 Bulletin (Division of Clinical Psychology, 2020). Online data collection lasted for six months, ending on 30th May 2021.

Ethical Approval

The present study received ethical approval from Nottingham Trent University's Business, Law, and Social Sciences Research Ethics Committee (reference number: 2020/271).

Measures

In addition to ProQOL 5 (Stamm, 2010), surveyed participants provided information about the following sociodemographic factors: age, gender, ethnicity, educational qualification, marital status, number of dependents (if any), occupational sector, work experience (in years),

³⁶ Invitations for research collaborations with a detailed research proposal (attached in appendix B (p. 319)) were sent on 21st July 2020 to five professional bodies – DCP, UKCP, NCS, the British Association for Counselling and Psychotherapy (BACP), and British Association of Social Workers (BASW). Except for BACP and BASW, the remaining three bodies expressed an interest to collaborate.

work schedule (full-time or part-time), average weekly caseload, and percentage of traumatized clients on caseload. Also, participants were asked if they were diagnosed with COVID-19 or experienced any personal loss (demise of a family member or close friend) owing to the pandemic.

Socio-Demographic Characteristics of Participants

The sample comprised of 366 participants: 13 clinical psychologists, 153 psychotherapists, and 200 counsellors. Majority of participants were female (82.79%), White (90.98%), between 51 to 60 years of age (39.34%) and worked part-time in mental healthcare (68.85%). One hundred-fifty-three (41.8%) reported to have at least one dependent (an elderly parent or a young child). Only a small proportion of participants (12.84%) reported being diagnosed with COVID-19 and experienced a personal loss owing to the pandemic (13.66%) at the time of this study. For further details on participants’ socio-demographic characteristics, refer table 1.

Table 1

Socio-Demographic Characteristics of Participants (N = 366)

Characteristic	Percentage (%)
<i>Age</i>	
<=30	1.91
31-40	11.20
41-50	21.04
51-60	39.34
61-70	23.22
>70	3.28

Missing	0
<i>Gender</i>	
Male	15.57
Female	82.79
Other	1.09
Prefer not to say	0.55
Missing	0
<i>Ethnicity</i>	
White	90.98
Black Caribbean	0.82
Black African	0.55
Indian	1.64
Pakistani	0.55
Middle Eastern	0.27
Mixed	2.19
Other	2.73
Missing	0.27
<i>Marital Status</i>	
Married	60.66
Partnered	18.03
Single	10.38
Separated	1.91
Divorced	5.19
Prefer not to say	3.28
Missing	0.55

Dependents

Yes	41.80
No	57.65

Profession

Clinical psychologist	3.55
Psychotherapist	41.80
Counsellor	54.64

Sector

Government hospital/clinic	12.30
Private hospital/clinic	4.64
Private practice	81.15
Missing	1.91

Work Experience

<1 year	0.55
1-5 years	28.96
6-10 years	27.87
11-15 years	16.39
16-20 years	9.02
>20 years	17.21

Work Schedule

Full-time	30.60
Part-time	68.85
Missing	0.55

Average Weekly Caseload

<=10 clients	43.99
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11-20 clients	41.53
21-30 clients	11.20
31-40 clients	3.01
>40 clients	0.27

Work with Traumatized Clients

Yes	81.69
No	18.03

Percentage of Traumatized Clients

<=10%	35.79
11-20%	15.57
21-30%	13.39
31-40%	6.56
41-50%	10.38
>50%	15.85
Missing	2.46

COVID-19 Diagnosis

Yes	12.84
No	86.34
Missing	0.82

Personal Loss due to COVID-19

Yes	13.66
No	85.25
Missing	1.09

Data Analysis

Missing Data Analysis

Excel Microsoft 365 (Microsoft, 2011) and Statistical Package for Social Sciences (SPSS) Version 28 (IBM Corporation, 2021) were used for data cleaning and preliminary analysis. Little's Missing Completely at Random (MCAR) test (1988) with expectation-maximization (EM) algorithm was used to determine the percentage of missing data for each item and check if data were missing completely at random or not. The results showed that across 30 items of ProQOL 5, the percentage of missing data ranged from 0 – 1.1%. Only for two items (*viz.* items 15 and 16), 1.1% of data were missing. The non-significant findings of Little's MCAR test suggested that data were missing completely at random, $\chi^2(423) = 424.817, p = .466$. The "Save completed data" option in Missing Value Analysis was used to impute expected values for missing data points.

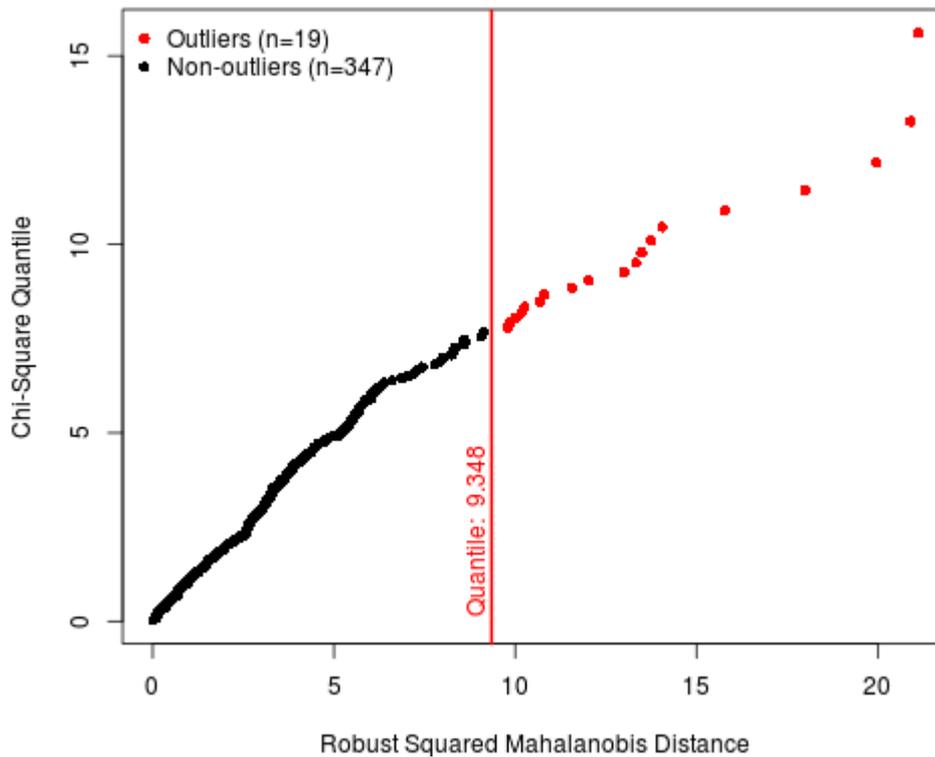
Assessment of Univariate and Multivariate Normality

To examine univariate normality, standardized residuals (*i.e.*, *z-scores*) were computed. Skewness and kurtosis values divided by their respective standard errors of mean showed that except for the BO subscale, values were above or below ± 1.96 for STS and CS subscales indicating non-normality of residuals (Field, 2018). Significant findings of Kolmogorov-Smirnov test and Shapiro-Wilk test indicated that residuals for all three subscales were not normally distributed (Field, 2018). For multivariate normality, an online application based on the MVN package in R (Korkmaz et al., 2014) was used. Statistically significant results of three multivariate normality tests – Mardia's, Henze-Zirkler's, and Royston's – showed that data were not normally distributed. A chi-square Q-Q plot (see figure 2) based on Robust Squared Mahalanobis Distance identified 19 multivariate outliers or extreme scores. To ensure

sufficient power and a substantial sample size for CFA, outliers were included in the main analysis.

Figure 2

Chi-square Q-Q Plot depicting multivariate outliers in the data



Confirmatory Factor Analysis

A confirmatory factor analysis (CFA) was performed using the *lavaan* package (Version 0.6-9; Rosseel et al., 2021) in RStudio Version 9.1.372 (RStudio Team, 2021)³⁷. Simulation studies suggest that for small samples (e.g., 200 participants), non-normal data, and a number of response categories less than 6, Diagonally Weighted Least Squares (DWLS) estimators like Weighted Least Squares with Means and Variances (WLSMV) Adjusted yield relatively unbiased factor loadings and indices of model fit than commonly used methods such as,

³⁷ Note: As per the scale's manual, five items in BO subscale were reverse scored for CFA.

Maximum-Likelihood (ML), Robust Maximum-Likelihood (ML-R), Weighted Least Squares (WLS), or Maximum-Likelihood using Polychoric Correlation (ML-PC; Li, 2016; DiStefano & Morgan, 2014; Finney et al., 2016). In the present study, since data collected were ordinal in nature, multivariate normality did not hold, the sample size was small, and the number of response categories was 5, WLSMV was deemed an appropriate estimation method. Regarding evaluation of model fit, four goodness of fit indices (Parry, 2020) were referred: CFI ($> .9$), TLI ($> .95$), RMSEA ($< .08$), and SRMR ($< .08$).³⁸

Results

A three-factor measurement model evaluated using WLSMV estimation method demonstrated poor fit to data, $\chi^2(435) = 3124.825$, $\chi^2/df = 7.184$, $CFI = .764$, $TLI = .745$, $RMSEA = .066$ 90% CI [.061, .071], $SRMR = .077$. Standardized factor loadings for two items in the BO subscale – items 15 ($\beta = .276$) and 29 ($\beta = .24$) – and one item in the STS subscale – item 5 ($\beta = .341$) – were less than 0.4 i.e., the cutoff criterion often used in other studies. Deletion of these items however did not improve the model fit, $\chi^2(351) = 2778.672$, $\chi^2/df = 7.916$, $CFI = .783$, $TLI = .764$, $RMSEA = .067$ 90% CI [.062, .073], $SRMR = .075$. A review of modification indices suggested that items 8 and 17, originally placed in the BO subscale cross-loaded onto STS and CS factors respectively. After reviewing item content and definitions of latent constructs onto which they were loading, item 17 (“I am the person I always wanted to be.”) was not loaded or cross-loaded onto CS because it was a reverse-scored item which appeared theoretically related to the cynicism or lack of personal accomplishment element of BO. In contrast, item 8 was made to load onto STS because its content (“I am not as productive at work because I am losing sleep over traumatic experiences of a person I

³⁸ The present study utilised cut-off values generally used in evaluating CFA models instead of Dynamic Fit Index (DFI) cut-off values (McNeish & Wolf, 2021). This is because the web-application developed by McNeish and Wolf (2021) to compute DFI values uses ML estimator instead of WLSMV and since data in the present study were ordinal instead of continuous in nature and the sample size was not large, ML was deemed inappropriate to compute DFI values.

[help].”) appeared theoretically related to STS. It was clearly referring to loss of sleep due to intrusion of secondary traumatic thoughts. However, this too did not yield a satisfactory model fit, $\chi^2(351) = 2778.672$, $\chi^2/df = 7.916$, $CFI = .819$, $TLI = .802$, $RMSEA = .061$ 90% CI [.056, .067], $SRMR = .069$.³⁹

Regarding reliability, all three subscales demonstrated acceptable levels of internal consistency calculated using coefficient omega: BO: .813 95% CI [.777, .844]; STS: .837 95% CI [.809, 845]; and CS: .877 95% CI [.854, 892]. Lastly, correlations among BO, STS, and CS subscales ranged from moderate to moderately high (See Table 3).

Table 2

Reliability estimates and correlation among subscales

	Omega	BO	STS
BO	.813		
STS	.837	.664	
CS	.877	-.688	-.452

*All correlations were statistically significant ($p < .001$).

Further Analysis of Factor Structure

Since the measurement model demonstrated inadequate levels of model fit, an exploratory factor analysis (EFA) was conducted to explore the factor structure underlying data. The EFA

³⁹ Whilst RMSEA and SRMR indicated acceptable levels of model fit, CFI and TLI were not even close to their required cut-off. Therefore, it was concluded that the measurement model demonstrated inadequate fit to data. Also, AIC and BIC have not been reported because lavaan does not compute them for WLSMV estimation method.

technique used in the present study was exploratory graph analysis (EGA)⁴⁰. EGA is a relatively novel addition to the growing family of techniques in network analysis⁴¹ (for further details refer The PsychoSystems Project, 2021 and Epskamp, n.d.) that aids the identification of latent factors in a measurement instrument (Golino & Epskamp, 2017). EGA involves three steps: in the first step, partial correlations among observed variables (i.e., scale items in this case) are computed (Golino & Demetriou, 2017; Golino & Epskamp, 2017). Partial correlation refers to correlation between two variables whilst controlling for the effect of a third variable (Field, 2018). In network analysis, the direction of partial correlation is colour-coded: a green or blue edge (i.e., the connector between two variables known as ‘nodes’) depicts a positive correlation and a red edge indicates a negative correlation (Hevey, 2018). The degree or strength of correlation is indicated by the thickness of an edge, with bold, thick edges suggesting a strong correlation and light, slim edges suggesting a weak correlation (Hevey, 2018). The second step involves using a parameter estimation regularization technique called the Least Absolute Shrinkage and Selection Operator (LASSO) to estimate the sparse inverse covariance matrix (Golino & Demetriou, 2017; Golino & Epskamp, 2017). Since partial correlation, owing to small sample size, poses a risk for overfitting a model by relating variables that are conditionally independent, LASSO attenuates small correlations to zero to prevent overfitting (Golino & Epskamp, 2017). In the third and final step, a community

⁴⁰ It is important to highlight that EGA is not a subset or type of EFA. Both the techniques belong to distinct families of statistical analyses; whilst the latter is based on network analysis, the former is a classical factor analytic technique.

⁴¹ According to network analysis, a theoretical construct is a cluster of interrelated observables or measured variables (Schmittmann et al., 2013). Instead of identifying a latent construct that explains shared variance in a set of observables, network analysis examines direct relations among observables and presents it graphically (Schmittmann et al., 2013). For instance, instead of claiming that a latent construct such as ‘depression’ causes symptoms like insomnia, loss of interest in pleasurable activities, or loss of appetite, network analysis advocates that the symptoms are connected with one another (like in a chain) and mutually influence each-other (Nuijten et al., 2016). Thus, instead of the latent factor approach in social sciences which assumes the condition of local independence (i.e., the observed variables are independent when a latent factor is held constant; Bollen, 2002), network analysis assumes the principle of mereology which suggests that the observed variables do not measure a construct but are a part of it (Schmittmann et al., 2013; Cramer et al., 2010).

Network psychometrics, in contrast, combines the network analysis approach with the latent variable approach. If a true latent variable indeed explains the variance shared by a set of observed variables, then those observed variables would appear closely connected to each-other in a graphical network model (Golino & Epskamp, 2017).

detection algorithm called ‘*walktrap*’ is used to detect clusters of nodes (Golino & Epskamp, 2017; Golino & Demetriou, 2017). Nodes that form a dense cluster together are considered to represent a latent factor or variable (Golino & Epskamp, 2017).

EGA graphically depicts interrelationships among observed variables and under certain simulation conditions, it has been found to either outperform or perform similar to commonly used factor analytic techniques or methods such as, very simple structure (VSS), multiple average partial procedure (MAP), Bayesian Information Criterion (BIC), Extended Bayesian Information Criterion (EBIC), Parallel Analysis – Principal Components Analysis (PApca), Parallel Analysis – Principal Axis Factoring (PApaf), Optimal Coordinate (OC), Acceleration Factor (AF), and the Kaiser-Guttman eigenvalue greater than one rule (Golino & Epskamp, 2017; Golino et al., 2020). In one simulation study with continuous data (Golino & Epskamp, 2017), for conditions similar to that of the present study viz. a two-factor structure with moderate correlation ($r = .5$) between factors, 10 items per factor and a sample size of 500, and a four-factor structure with moderate correlation among factors, 10 items per factor, and a sample size of 500, the level of mean accuracy for EGA were higher than, and the levels of mean bias error (MBE) and mean absolute error (MAE)⁴² were lower than VSS and MAP, and were comparable with BIC, EBIC, Kaiser-Guttman eigenvalue greater than one rule, and PA⁴³ (for further details, refer Golino and Epskamp, 2017). Therefore, for the present study, EGA was deemed appropriate to explore the factor structure underlying ProQOL 5 data.

⁴² Mean accuracy refers to the extent to which an EFA technique correctly recovers factors in a measurement instrument (Golino & Epskamp, 2017). Bias error refers to the difference between estimated number of factors and actual number of factors and absolute error is the absolute value of bias error (Golino & Epskamp, 2017).

⁴³ Note: Although found to be comparable in Golino and Epskamp’s (2017) simulation study, the present study did not use Kaiser-Guttman eigenvalue greater than one rule or PA to explore factorial structure. This was because the former does not take sampling error into account (Ruscio & Rocher, 2012) and the latter has been found to underfactor under conditions applicable to this study such as, small sample size and low factor loadings (Garrido et al., 2013).

EGA for ProQOL 5 Data

EGA was performed using the EGAnet package version 1.0.0 (Golino & Christensen, 2021). To estimate the number of dimensions or factors underlying data, the Triangulated Maximally Filtered Graph (TMFG; Massara et al., 2016) method was used instead of the graphical LASSO (GLASSO) method. TMFG computes zero-order correlations to construct a network instead of partial correlations (Golino et al., 2020; Christensen & Golino, 2021). Although it has been found to be slightly less accurate and slightly more biased than GLASSO for estimating dimensions in case of 8 items per factor, average factor loadings (0.4), and high inter-factor correlations (0.7), it was still used in the present study because data were not multivariate normally distributed (Golino et al., 2020).

The findings of EGA (see Figure 3) suggest a four-factor structure: 9 items from the STS subscale and one item from the BO subscale (i.e., item 8) formed a cluster together depicted in red nodes; 9 items from the CS subscale and one reverse-scored item from the BO subscale (i.e., item 29; “I am a very caring person.”) formed another cluster together depicted in blue nodes. Based on their item content and strength of edges, these two clusters can be termed “Secondary Traumatic Stress” and “Compassion Satisfaction”. In the former, item 11 (“Because of my [helping], I have felt "on edge" about various things.”) appeared to be the central node connected with all other nodes in the cluster⁴⁴. In the latter, no central node was observed. In addition, two small clusters mainly comprising of items from the BO subscale depicted in green and orange nodes and negatively associated with Compassion Satisfaction cluster were identified. Four reverse-scored items from the BO subscale and one item from the CS subscale (i.e., item 16: “I am pleased with how I am able to keep up with [helping]

⁴⁴ Note: Centrality measures such as strength, betweenness, and closeness are computed only in Gaussian Graphical models (Hevey, 2018). They cannot be computed using EGAnet package (version 1.0.0; Golino & Christensen, 2021), therefore in the present study, central nodes were identified based on observation only.

techniques and protocols.”) formed a cluster together depicted in orange nodes. It was negatively associated via the Compassion Satisfaction cluster with a community of green nodes comprising of four items from the BO subscale and one item from the STS subscale (i.e., item 28: “I can't recall important parts of my work with trauma victims.”). The latter was an unexpected finding because item 28 clearly refers to secondary trauma therefore, by definition it should be a part of the Secondary Traumatic Stress cluster, but from an alternate perspective, it could be perceived as a sign of fatigue or stress. Thus, it was moderately associated with its own cluster as well as with both Secondary Traumatic Stress and Compassion Satisfaction clusters.

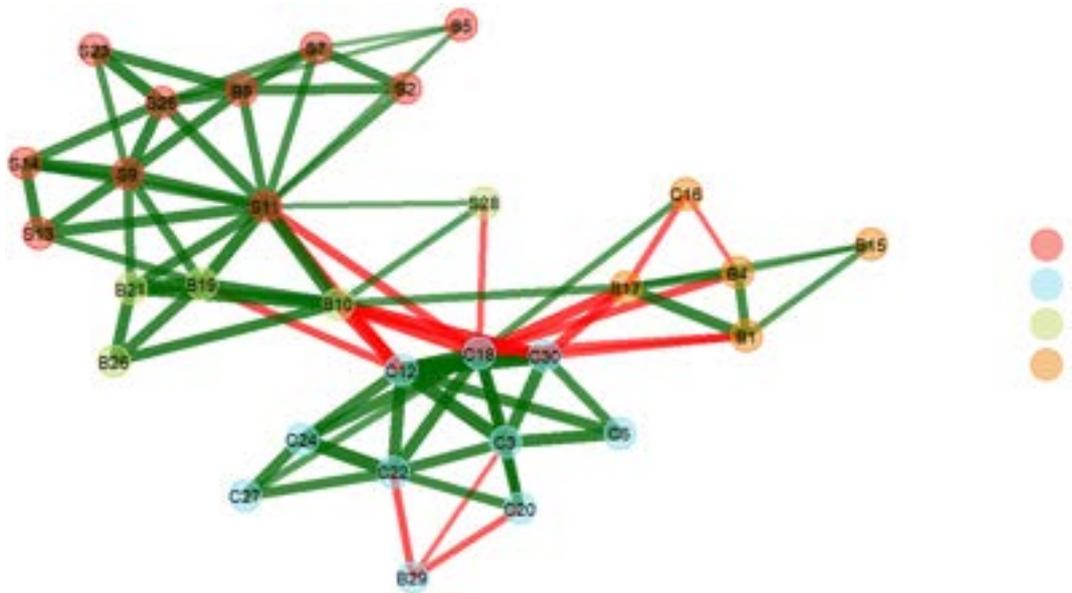
To further explore the above structure and determine the stability or replicability of items, a bootstrapped EGA with 1000 iterations and resampling approach was performed using the bootEGA function in EGAnet package (version 1.0.0; Golino & Christensen, 2021). With recent studies expressing concerns about the external validity of psychometric network analyses, a bootstrapped EGA is recommended to be performed to ascertain the consistency or inconsistency of items across dimensions in bootstrapped samples (Golino & Christensen, 2021). For the above structure, the findings indicated that the four-factor structure was replicated in 68.9% of bootstrapped samples. The results of item stability analysis showed that proportions of replicability for five items (viz. items 5, 11, 28, 4, and 16) were less than 0.7 (Golino & Christensen, 2021) thus, those items were omitted, and the analysis was performed again. In the second attempt, the four-factor structure was replicated in only 51% of bootstrapped samples and proportions of replicability for four additional items (viz. items 13, 1, 17, and 15) were found to be less than 0.7 in their respective dimensions. Therefore, those items were deleted as well, and the analysis was performed again. In the final attempt, a three-factor structure (refer Figure 4) was found to be replicable in 76.7% of bootstrapped samples

and proportions of stability for all 21 items across their respective dimensions were above 0.8 (refer Figure 6).

Figure 4 clearly shows that Compassion Satisfaction formed a dense cluster with nine items from the CS subscale and one reverse-scored item from the BO subscale. Item 22 (“I believe I can make a difference through my work”) appeared to be the central node in this cluster as it was weakly to moderately correlated with all items except for items 6 and 12. Item 29 (“I am

Figure 3

Network model depicting the internal structure of ProQOL 5



a very caring person.”) which was originally placed in the BO subscale and was reverse scored as per the scale manual (Stamm, 2010) was negatively correlated with other items in the Compassion Satisfaction cluster. It was an unexpected finding because based on the item content and results of EGA (Figure 4), this item appeared more theoretically related to the CS subscale than the BO subscale. Therefore, scores for this item were changed to their original values and the analysis was performed again. The findings are depicted in Figure 5.⁴⁵ The

⁴⁵ for zero-order correlations depicted among nodes in figure 5, refer table 2

results were same except that item 29 was now positively correlated with other items in the Compassion Satisfaction cluster. Three items from this cluster – items 12, 18, and 30 – were very strongly negatively associated with item 10 from the BO subscale which further formed a small but strongly connected cluster with items 19, 21, and 26 from the same subscale. This cluster based on the content of its items can be termed “Burnout”. All items in this cluster were strongly connected with each-other. Lastly, in the Secondary Traumatic Stress cluster, item 8 from the BO subscale emerged as the central node which connected all nodes in the cluster with each-other. This cluster was weakly associated with the Burnout cluster via several items and was weakly associated with the Compassion Satisfaction cluster via item 23 (“I avoid certain activities or situations because they remind me of frightening experiences of the people I [help].”).

Regarding stability of dimensions and items (refer figure 6), all the three dimensions and their respective items were found to be stable or consistent across bootstrapped samples. Compassion Satisfaction and Secondary Traumatic Stress emerged as highly stable dimensions with all items included in it being replicated in at least 90% of bootstrapped samples. For the Burnout cluster, all four items included in it were replicated in over 80% of bootstrapped samples.

Figure 4

Bootstrapped EGA model (n = 1000) depicting three latent dimensions

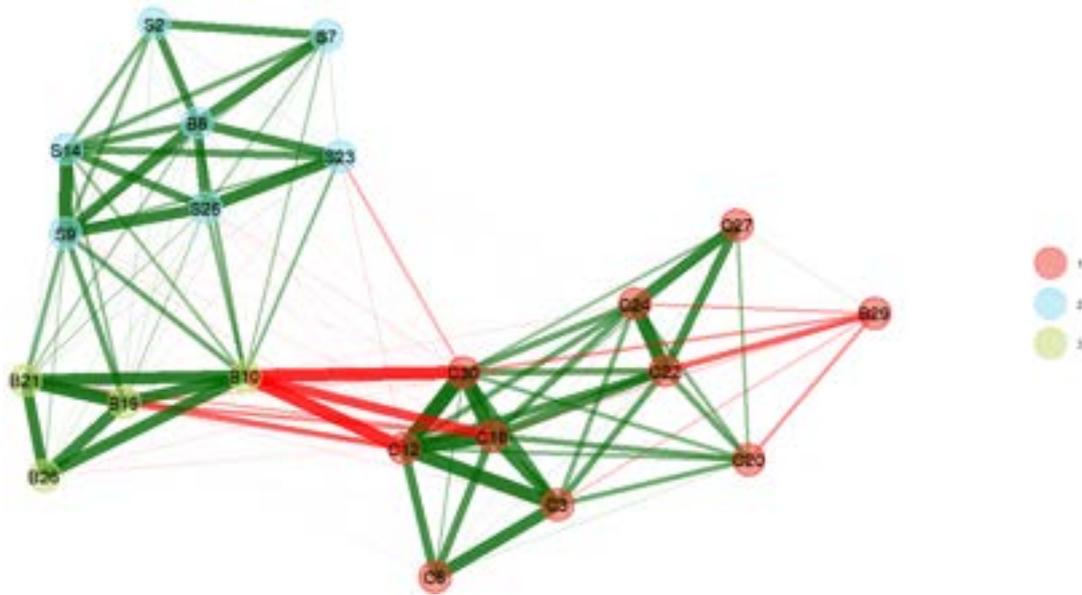


Figure 5

Bootstrapped EGA model (n = 1000) with original scores on item 29

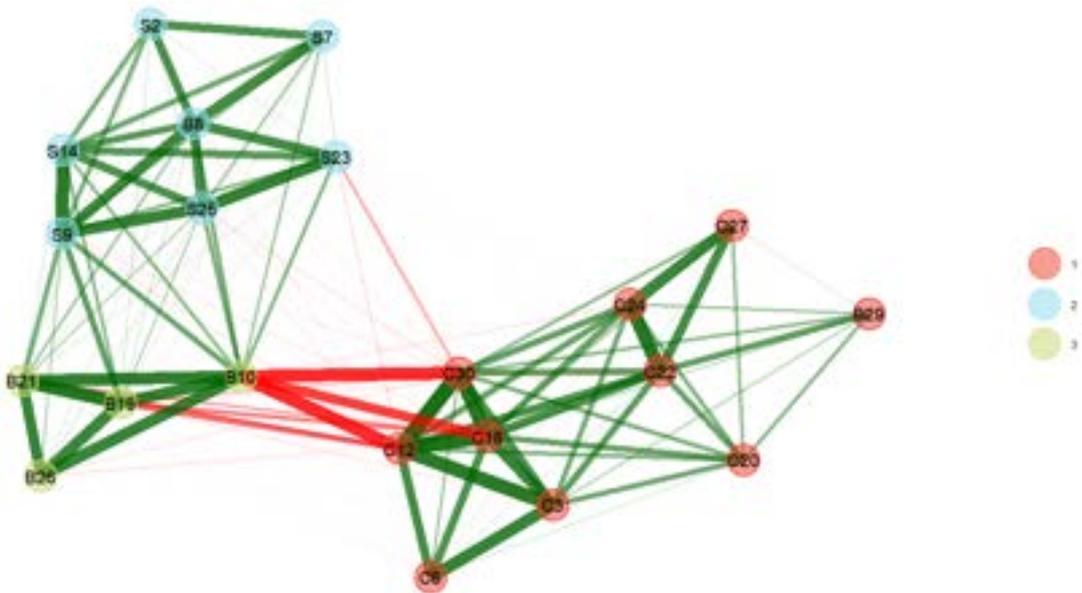


Figure 6

Stability of items across dimensions for a three-factor structure

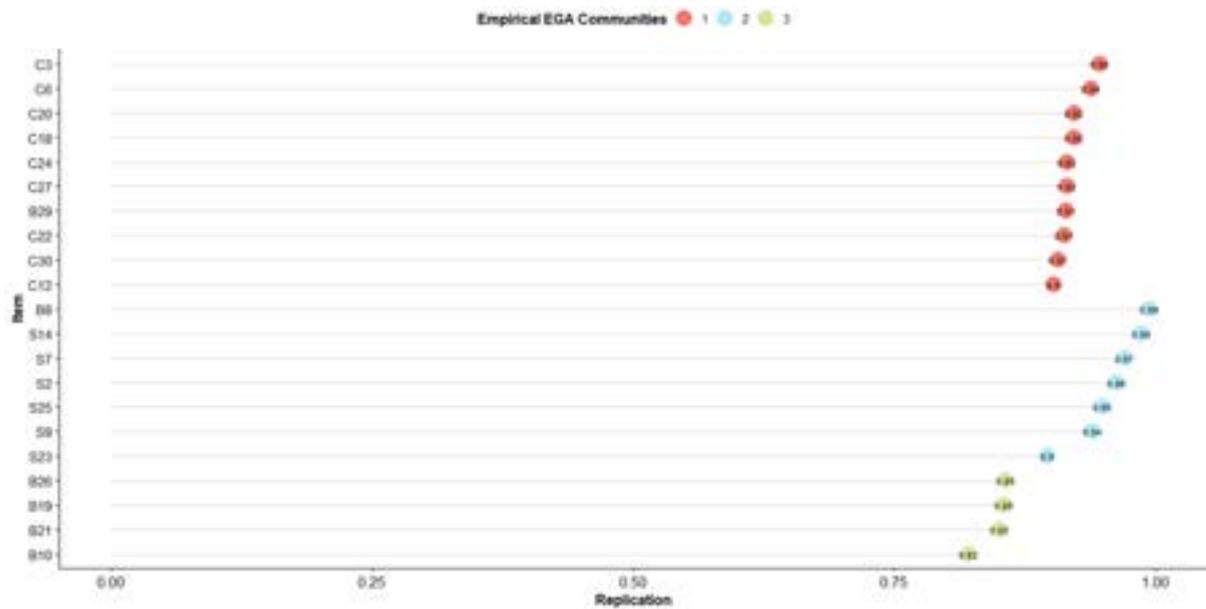


Table 3

Zero-order correlations among nodes in Figure 5

	2	14	9	8	25	23	7	21	26	19
14	0.4	-								
9	0.42	0.59	-							
8	0.46	0.44	0.49	-						
25	0.3	0.41	0.47	0.43	-					
23	0.25	0.4	0.32	0.42	0.51	-				
7	0.49	0.4	0.38	0.47	0.34	0.3	-			
21	0.41	0.33	0.44	0.41	0.34	0.32	0.36	-		
26	0.27	0.26	0.36	0.34	0.33	0.24	0.33	0.57	-	
19	0.42	0.38	0.49	0.36	0.34	0.27	0.38	0.67	0.55	-
10	0.24	0.36	0.41	0.4	0.35	0.37	0.38	0.58	0.52	0.53
6	-0.3	-0.16	-0.16	-0.16	-0.19	-0.11	-0.26	0.33	-0.3	-0.36
12	-0.22	-0.26	-0.32	-0.25	-0.26	-0.3	-0.18	-0.36	-0.32	-0.41
18	-0.26	-0.26	-0.32	-0.28	-0.3	-0.29	-0.23	-0.38	-0.36	-0.4
30	-0.15	-0.24	-0.28	-0.29	-0.31	-0.36	-0.19	-0.34	-0.37	-0.32
3	-0.17	-0.09	-0.21	-0.07	-0.2	-0.14	-0.12	-0.3	-0.3	-0.34
24	-0.18	-0.21	-0.22	-0.18	-0.22	-0.23	-0.22	-0.24	-0.27	-0.3
22	-0.17	-0.17	-0.23	-0.14	-0.16	-0.2	-0.15	-0.27	-0.26	-0.32
20	-0.17	-0.16	-0.23	-0.13	-0.17	-0.2	-0.13	-0.27	-0.23	-0.35
27	-0.17	-0.07	-0.11	-0.09	-0.13	-0.11	-0.15	-0.18	-0.3	-0.24
29	0.09	-0.07	-0.08	0.01	-0.02	-0.07	0.02	-0.08	-0.11	-0.04

(continued below)

	10	6	12	18	30	3	24	22	20	27
6	-0.35	-								
12	-0.56	0.47	-							
18	-0.49	0.5	0.62	-						
30	-0.55	0.43	0.68	0.59	-					
3	-0.37	0.5	0.57	0.52	0.49	-				
24	-0.35	0.43	0.47	0.5	0.49	0.45	-			
22	-34	0.41	0.49	0.52	0.47	0.45	0.62	-		
20	-0.29	0.43	0.42	0.47	0.43	0.44	0.45	0.46	-	
27	-0.26	0.35	0.27	0.37	0.36	0.29	0.5	0.47	0.44	-
29	-0.14	0.17	0.19	0.26	0.3	0.25	0.3	0.36	0.33	0.25

Note. Values depicted in bold are not statistically significant ($p > .05$).

Discussion

The aim of the present study was to conduct a confirmatory factor analysis (CFA) to examine the internal structure of ProQOL 5 (Stamm, 2010) in a sample of UK-based clinical psychologists, counsellors, and psychotherapists. Using the WLSMV estimation method, the analysis showed that the three-factor structure of the scale was not supported by the data. In spite of deleting items with low standardized factor loadings and loading one item (i.e., item 8) onto a distinct factor, the measurement model did not demonstrate adequate levels of model fit. These findings are consistent with existing psychometric research on varied occupational groups and linguistic versions of ProQOL 5 (Lakatamitou et al., 2021; Köverová et al., 2018; Lazăr et al., 2022; Geoffrion et al., 2019). This suggests that items of the scale do not necessarily conform to the hypothesized structure on which interpretations of scores are based (AERA, APA, & NCME, 1999). Therefore, to further explore the structure of this scale, a bootstrapped Exploratory Graph Analysis (EGA; Golino & Christensen, 2021) with 1000 iterations was performed. The results of bootstrapped EGA (Golino & Christensen, 2021) suggested that after eliminating unstable items, evidence for a three-factor structure was obtained. Four of the five reverse-scored items in the burnout (BO) subscale - deleted in several previous validation studies due to low factor loadings (Lakatamitou et al., 2021; Hemsworth et al., 2018; Kessler & Fukui, 2020; Duarte, 2017; Hagan, 2019) – were found to be unstable in

the present study as well i.e., they were not replicated in their respective dimensions in majority of iterations. The resulting three-factor structure comprised of a Compassion Satisfaction dimension with ten items, a Secondary Traumatic Stress dimension with seven items, and a Burnout dimension with four items.

These findings are similar to a large validation study on 1,615 nurses from Australia in which Rasch analysis (Wrights, 1982) found support for a revised 21-item ProQOL 5 structure (Heritage et al., 2018). In the present study as well, evidence for a 21-item structure was obtained but there are two pertinent distinctions between this study and Heritage et al.'s (2018). First, unlike Heritage et al.'s study (2018) that found evidence for a two-factor structure with Compassion Satisfaction as the first factor, and Burnout and Secondary Traumatic Stress combined to form "Compassion Fatigue" as the second factor, the present study found support for a revised three-factor structure. Second, whilst items 11 ("Because of my [helping], I have felt "on edge" about various things.") and 13 ("I feel depressed because of the traumatic experiences of the people I [help].") were excluded in the current study due to poor stability or consistency across bootstrapped samples, they were included in Heritage et al.'s (2018) study in the Compassion Fatigue factor. This could be due to sampling variations in both the studies: whilst Heritage et al.'s (2018) study was conducted on a much larger sample of nurses recruited from public, private, and elderly care sector in Australia, the sample for the present study was much smaller and comprised of allied mental health professionals working predominantly in independent settings (refer table 1 for more details).

However, three findings of this study are similar to a relatively large number of studies in the extant literature. They include: (i) affirmative support for the factorial structure of the Compassion Satisfaction (CS) subscale, (ii) mixed support for the internal structure of the Secondary Traumatic Stress (STS) subscale, and (iii) consistent lack of support for the original structure of the Burnout (BO) subscale (Heritage et al., 2019; Lakatamitou et al., 2021;

Hemsworth et al., 2018; Duarte, 2017; Hagan, 2019; Cilar et al., 2021; Kessler & Fukui, 2020; Fukumori et al., 2016; Lazăr et al., 2022; Ghorji et al., 2018). Regarding the first similarity, in the present study, factor loadings for all CS items in CFA ranged from moderate to high and in EGA, except for one item (i.e., item 16), all nine items demonstrated high levels of consistency or stability across samples. Other validation studies have also obtained similar results. This suggests that the internal structure of CS subscale is psychometrically sound and might be invariant across countries, cultures, occupational groups, or linguistic versions. However, from a critical point of view, it could be argued that the perceived invariance of this subscale (especially with mixed evidence for its co-subcales) could be explained by the positive wording of its items which might result in a social desirability response bias thereby leading to consistent results across studies. A review of items in the CS subscale revealed that all items in this subscale are positively worded and directly or indirectly allude to participants' professional competence. For example, "I believe I can make a difference through my work." (Item 22); "I get satisfaction from being able to [help] people." (Item 3); or "I have happy thoughts and feelings about those I [help] and how I could help them." (Item 20). Such items by the virtue of their wording might propel participants to respond in a socially desirable way because the desire to be perceived as professionally competent is ubiquitous. For example, in a review of 31 studies, four out of six studies on healthcare professionals (including three studies on mental health professionals) found evidence for a positive relationship between professionals' tendency to give socially desirable responses and measures of professional competence or practices (Mortel, 2008). Thus, it could be that in the present study as well, participants' responses to CS items were influenced by their social desirability response bias. Moreover, since social desirability response bias has not been found to have an aversive impact on factorial structures of well-established personality scales (e.g., Ellingson et al., 2001; Sisco & Reilly, 2010; Fan et al., 2008), there exists the possibility that consistent support for the

factorial structure of CS subscale could be attributable to its lack of ability to discriminate between genuine and socially desirable responses. Future research could examine this by bifurcating participants' CS scores into high, medium, and low categories and then correlating each with a measure of social desirability (e.g., Benson et al., 2009; Smith et al., 2011).

Regarding the second similarity (i.e., mixed support for the factorial structure of STS subscale), evidence for the factorial structure of STS subscale in the present study was complex. Unlike previous research which clearly indicated that items 2, 5, 7, 28, and 14 demonstrate low factor loadings (Hemsworth et al., 2018; Kessler & Fukui, 2020; Duarte, 2017; Fukumori et al., 2016), CFA findings in the present study showed that except for item 5, factor loadings for all other items were acceptable. However, in EGA, the results suggested that items 5 and 28 were unstable or inconsistent and items 2, 7, and 14 were not just consistent, but also moderately associated with the central node in their cluster. A reason behind these similarities and discrepancies could be sampling variations in terms of the level of secondary trauma endured by professionals included in samples of different studies. In contrast to burnout which is considered to be a profession-independent by-product of interactions among psychosocial hazards at workplace (Stamm, 2010), secondary traumatic stress appears to be a context-specific experience contingent upon the extent of secondary trauma experienced at work. Some professionals by the nature of their occupation such as, forensic mental health nurses or social workers working in deprived communities are more likely to work with a higher percentage of traumatized clients than others such as, counsellors or psychotherapists in community settings. An examination of the STS subscale's measurement invariance or non-invariance across occupational groups could help clarify this.

Regarding the third and final point of similarity (i.e., lack of support for the original structure of BO subscale), like other studies (e.g., Kessler & Fukui, 2020; Duarte, 2017; Lakatamitou et al., 2021), both CFA and EGA in the present study as well indicated that BO items were either

unstable, demonstrated low factor loadings, or loaded onto other factors (refer figures 5 and 6). A reason behind this could be the presence of five impertinent reverse-scored items in the BO subscale. Items 1, 4, 15, 17, and 29 are positively worded statements that are not polar opposite to the operational definition of the construct on which they are designed to load. For example, item 17, “I am the person I always wanted to be” or item 1, “I am happy” are clearly not antitheses of burnout because they are not at all referring to work or any aspect of workplace. This is contentious because burnout according to Stamm’s (2010) conceptualization, refers to “feelings of hopelessness and difficulties in dealing with work or in doing your job effectively...They can reflect the feeling that your efforts make no difference, or they can be associated with a very high workload or a non-supportive work environment.” (p. 13) The five reverse-scored items that are touted to measure burnout, in actuality make no reference to either workload or an unsupportive work environment which could probably be the reason why they consistently demonstrate low factor loadings across empirical studies. This a potential design flaw in the scale especially because positively or negatively worded reverse-scored items that are polar opposite to constructs they claim to measure actually aid in reducing acquiescence⁴⁶ bias in responding and are associated with improved factorial structure of scales (e.g., Zhang et al., 2016; Gu et al., 2015).

Last, two findings specific to central nodes in Secondary Traumatic Stress and Compassion Satisfaction clusters merit a brief discussion. In the Secondary Traumatic Stress cluster, item 8 (“I am not as productive at work because I am losing sleep over traumatic experiences of a person I [help]”) appeared to be the central node of the cluster. It referred to a lack of psychological detachment from a client’s traumatic experiences resulting in insomnia and its subsequent negative impact on one’s job performance. This symptom of STS was related to all other symptoms in the cluster such as, intrusion of frightening thoughts (item 25), avoidance

⁴⁶ Acquiescence refers to participants’ tendency to agree or say ‘yes’ to all scale items irrespective of their content.

of events or activities that could trigger unwanted thoughts about clients' traumatic experiences (item 23), and lack of separation between personal and professional domains (item 7) among others. This suggests that healthcare organisations and professional bodies should encourage their employees or members to prioritise sleep hygiene as it could foster a plethora of other symptoms associated with secondary trauma. Future research should also explore the impact of counselling or psychotherapy on mental health professionals' sleep quality and its subsequent impact on mental and social health and wellbeing.

Regarding the central node in the Compassion Satisfaction cluster, item 22 ("I believe I can make a difference through my work") was found to share a weak to moderate association with other aspects of compassion satisfaction such as, work satisfaction (items 3 and 18), sense of professional accomplishment (item 24 and 27), and sense of vigour experienced through work with clients (connected with item 6 via item 18). This suggests that professionals' self-efficacy and perceived usefulness of vocation in making a meaningful difference to clients' lives could reinforce a sense of engagement in work. However, it is important to highlight that some items in this cluster appeared similar to items in the Utrecht Work Engagement Scale (UWES; Schaufeli et al., 2006). For example, items such as, "I am proud of the work I do" or "At my job, I feel strong and vigorous" in Dedication and Vigor subscales of UWES (Schaufeli et al., 2006) are similar to item 24, "I am proud of what I can do to [help]" and 6, "I feel invigorated after working with those I [help]" in the CS subscale. Future research should correlate these two measures to ascertain that they measure distinct constructs.

Implications, Limitations, and Directions for Future Research

The present study is the first to have examined in detail the factorial validity of ProQOL 5 in a sample of UK-based allied mental health professionals. In spite of the scale being used frequently in UK-based research and in this occupational group (e.g., Singh & Hassard, 2021;

Bridger et al., 2020; Sodeke-Gregson et al., 2013; Dasan et al., 2015), no previous study has examined its psychometric properties in this context or occupational group. Therefore, the present study endeavoured to fill this pertinent gap in existing research. The study found support for the distinct structures of burnout and secondary traumatic stress dimensions, which affords some clarity to compassion fatigue research regarding the relations between its components. As discussed in the first chapter of this thesis, there exist debates among researchers regarding whether compassion fatigue is a unitary construct, an amalgamation of burnout and secondary traumatic stress, or just has burnout and secondary traumatic stress as its two distinct (but inter-related) components. By finding evidence for the existence of two separate dimensions, the present study has contributed towards providing conceptual clarity to compassion fatigue.

In addition, the clusters of symptoms identified in this study depict central nodes in each, which have the potential to trigger other nodes or symptoms in a chain reaction. As stated in chapter 3, it enhances our understanding of relations among symptoms assessed by ProQOL 5 (Stamm, 2010). For example, in the STS cluster, losing sleep over the traumatic experiences of a person one helps was the central node that was strongly connected to other nodes such as, avoiding certain activities or situations that could remind a professional of the traumatic experiences of their clients, experiencing difficulties in maintaining a balance between personal and professional life etc. This suggests that poor sleep quality is a core symptom of secondary traumatic stress that has the potential to impact other symptoms. This finding is related to previous research that found that sleep quality is a negative predictor of burnout and secondary traumatic stress (Jialin et al., 2020; Miller & Pehlke, 2022). One way to improve the sleep quality of healthcare professionals is to enhance their job control. In a large Swedish study on 1,534 doctors, Tucker et al. (2013) found that influence over working hours was positively associated with quality and quantity of sleep and negatively associated with burnout, stress,

and fatigue after work. Thus, mental health organisations are advised to explore ways to enhance employees' job control to improve their occupational well-being.

For a more detailed discussion on the scientific and practical implications of findings of this study, refer the sections, *A Psychometric Evaluation of ProQOL 5* (p. 224), *Integrated Theoretical and Policy Implications of Findings* (p. 228), and *Integrated Practical Implications of Findings* (p. 231) in Chapter 5.

However, the findings of this study must be interpreted in the context of its limitations. First, the sample of this study could be perceived as relatively small in size for a psychometric validation study. Simulation studies and subject-matter experts clearly suggest that accuracy of factor analytic techniques including CFA and EGA improve with large samples comprising of at least 500 or 1000 participants (Golino & Epskamp, 2017; Golino et al., 2020; Christensen & Golino, 2021; Keith et al., 2016; Velicer et al., 2000). Since the sample of this study included fewer than 500 participants, its findings must be interpreted with caution. In addition, the lack of representativeness of the sample inhibits the generalisation of findings to other occupational groups. The majority of participants in this study worked in private practice or independent settings and since they are known to enjoy greater autonomy and better psychological wellbeing than their counterparts in organisational settings (Boice & Myers, 1987; Rupert & Morgan, 2005; Dupree & Day, 1996; Lent & Schwartz, 2012; Vredenburgh et al., 1999; Rupert & Kent, 2007; Ackerley et al., 1988; Emery et al., 2009), the findings of the present study may not be applicable to employees. Therefore, future research would benefit from a large-scale study with a sample that could examine the invariance of ProQOL 5 between employees and self-employed professionals.

Second, the volume of traumatised clients on caseloads was unevenly distributed across participants in this study. This could, as stated before, have pertinent consequences for the

factorial structure of STS subscale because some items might not be applicable to participants. Only 26% of participants in the current study reported having more than 41% of traumatised clients on their caseload, therefore it would not be surprising if majority of them found STS items to be of limited applicability to their professional practice. Future research would benefit from recruiting more mental health professionals who work with traumatised populations. Also, it would be beneficial if participants are asked about their traumatic experiences as well as the nature of their clients' traumatic experiences (e.g., history of physical or sexual abuse, accidents, experience with war etc.). This would aid in determining if congruence or incongruence between professionals' and clients' experiences influence endorsement of certain items and levels of secondary traumatic stress thereby affecting the observed structure of the subscale.

Third, the sampling technique used in this study did not accord the researcher sufficient control over contacting potential participants to invite them to take part in this study. Delays in email correspondences and general life disruptions caused by the second wave of COVID-19 pandemic resulted in uncontrollable gaps in invitations sent to potential participants. For instance, one of the professional bodies sent the first invitation to its members on an agreed date, but one of them delayed this process (not known by how many days) because the person in contact was unwell due to COVID-19. This deterred the determination of respondent/nonrespondent bias (Creswell & Creswell, 2018) as the invitation (e.g., first, second, or third) following which a participant obliged to take part in this study could not be known. It could have affected the representativeness of sample. Further details on the impact of the pandemic on this project can be found in Appendix F (p. 383) of this thesis. For future research, researchers would benefit greatly from not just collaboration amongst themselves but also with practising mental health professionals and a larger number of professional bodies or mental health organisations.

Last, a rigorous psychometric study using a confluence of distinct approaches such as, the multitrait-multimethod (MTMT) approach to examine the construct validity of ProQOL 5 would not only be a highly valuable but a timely contribution to the limited body of existing research on psychometric properties of this scale. Since the onset of COVID-19 pandemic, the body of research utilising this scale to assess mental health and wellbeing of health and social care professionals has grown exponentially (e.g., Buselli et al., 2020; Van Overmeire et al., 2021; Inocian et al., 2021; Cuartero-Castañer et al., 2021) and with a psychometrically unsound scale, the internal and external validity of these research studies could be rendered questionable (Coaley et al., 2014). Therefore, it would be highly desirable that a large-scale study on psychometric properties of ProQOL 5 is conducted.

Conclusion

The aim of the present study was to examine the factorial validity of ProQOL 5 in a sample of 366 UK-based clinical psychologists, counsellors, and psychotherapists. The findings of CFA indicated that the original 30-item, three-factor structure of the scale was not supported by empirical data thus, an exploratory analysis using bootstrapped EGA was performed which suggested that a revised 21-item, three-factor structure demonstrates better stability or consistency of items with this occupational group. Owing to sampling limitations of the present study, the structure of the scale needs to be explored further and validated with a larger, more representative sample to ascertain that it is a psychometrically sound instrument that can be used to assess burnout, secondary traumatic stress, and compassion satisfaction in applied research.

CHAPTER FIVE

GENERAL DISCUSSION

The final chapter of this thesis discusses key findings and scientific and practical implications of preceding chapters. It will achieve this with a discussion on: (i) the conceptual clarity, associated risk and preventive factors, and measurement of compassion fatigue; (ii) scientific and practical implications of the findings of systematic review of existing research on the association between occupational risk and preventative factors and compassion fatigue in mental health professionals; (iii) the role of psychosocial hazards in contributing to professionals' experiences of compassion fatigue during the COVID-19 pandemic; (iv) the implications of psychometric evaluation of the instrument used to assess compassion fatigue (i.e., Professional Quality of Life Scale Version 5 (ProQOL 5; Stamm, 2010)), and; (v) an integrated discussion of scientific, policy-related, and practical implications of findings of all the three studies.

A Critical Analysis of the Conceptual Clarity, Associated Risk and Preventive Factors, and Measurement of Compassion Fatigue

Ever since the introduction of the term, “compassion fatigue” in the research literature (Figley, 1995) and the development of freely available scales to assess it (Bride et al., 2007), the popularity of the construct has grown exponentially. A search of the term, “compassion fatigue” on Web of Science yields more than 3,000 articles, reviews, and conference publications and according to Google Scholar, Figley’s seminal work on the construct, “Compassion fatigue: Toward a New Understanding of the Costs of Caring” has been cited 1,476 times. However, despite its growing popularity, the construct still remains poorly defined in the research literature. A comprehensive review of the historical development and conceptual clarity of compassion fatigue elaborated in the first chapter of this thesis revealed a

schism between researchers with respect to conceptualising compassion fatigue either as a novel, orthogonal construct or an exemplar of construct proliferation; a notorious practice of developing constructs similar to existing constructs or renaming existing constructs which have the potential to impede general theoretical advancement around a topic area (e.g., Shaffer et al., 2015). Whilst research in nursing considers compassion fatigue a distinct theoretical construct that entails the exhaustion of physical, psychological, emotional, and spiritual resources and has the potential to impair the quality of services offered to the recipients of one's care (Coetzee & Klopper, 2010; Coetzee & Laschinger, 2018), researchers in psychoanalytic counselling and psychotherapy consider it as countertransference refashioned as a novel idea thus, the metaphor, "old wine in new bottles" (Kanter, 2007, as cited in Berzoff & Kita, 2010, p. 341). Agreeing partly with the latter view, compassion fatigue could be considered an instance of construct proliferation because Figley (1995) in his conceptualisation distinguished it from countertransference by only referring to the Freudian or classical notion of countertransference. He did not acknowledge the works of Neo-Freudians like Heimann (1950), Little (1951), Racker (1968), and Kernberg (1965) who alluded to the transfer of symptoms from a client to a clinician several years before him.

Also, from an alternate perspective, the schism between researchers mentioned above exposes the consequences of a lack of interdisciplinary research or interactions among researchers from distinct research domains. For instance, both Figley's (1995) and Stamm's (2010) conceptualisations of compassion fatigue allude to exposure to secondary trauma as a precursor to experiencing the aversive symptoms of compassion fatigue. However, Coetzee and Klopper's (2010) definition of the construct makes no explicit reference to secondary trauma. This lack of conceptual clarity also has consequences for measurement. For instance, a recent scale of compassion fatigue developed by Eng et al. (2021) made no reference to the experience of primary trauma or secondary trauma. It begets the question that *has compassion*

fatigue research obliterated the concept of secondary traumatic stress in its conceptualisation to accord it the status of a distinct construct?

If future research answers the above question in the affirmative, then it raises another question from the perspective of occupational health psychology that *how does the recent conceptualisation of compassion fatigue distinguish it from burnout?* Burnout also refers to the exhaustion of personal resources as a result of prolonged exposure to psychosocial hazards (Maslach et al., 2001) and is a very well researched construct in occupational health psychology literature. *What will make compassion fatigue different to burnout if researchers eliminate the component of secondary traumatic stress?* This is a pertinent question for future research.

Moreover, another important question that future research needs to address is: *is secondary traumatic stress a component of compassion fatigue or is compassion fatigue a confluence of burnout and secondary traumatic stress?* In other words, will future assessment of compassion fatigue yield two sub-scale scores like the existing practice (Stamm, 2010) or will it provide a unitary score like Heritage et al. (2018)? The psychometric study conducted as a part of this doctoral project found evidence for two distinct components however, whether they can be explained by one higher-order construct remains to be explored in future research.

In addition, chapter 1 included a brief discussion on the measurement of compassion fatigue. It detailed how over the years, several scales with distinct conceptualisations have been developed to assess compassion fatigue but, the psychometric properties of all of them except for ProQOL 5 (Stamm, 2010) remain relatively unexamined in the research literature. Another pertinent issue remains is the lack of transparency in reporting results of claimed psychometric investigations. For example, Stamm (2005) mentioned in the manual for ProQOL that the structure of the scale was developed on the basis of a factor analysis ($N = 463$) but, no information was provided about the analysis or its findings. It was also reported that the scale

demonstrated multigroup factorial invariance but, like the claim about factor analysis, no information was provided in the scale manual about the analysis or its findings (Stamm, 2005). Similar concerns exist for the validity of ProQOL 5 (Stamm, 2010) as well. For more details, refer the section *Validity of ProQOL 5* (p. 177) in chapter 4. This is an important concern because the scale is often used to assess compassion fatigue and compassion satisfaction in health and social care professionals (e.g., Singh et al., 2020). Thus, to ensure that the measurement of constructs is accurate, and the inferences drawn from research are internally and externally valid, the scale was subjected to a rigorous psychometric evaluation in chapter 4.

Lastly, chapter 1 included a brief discussion of risk and preventive factors associated with compassion fatigue in mental health professionals. It was found that a large proportion of previous research focused on individual-level factors such as, personal history of trauma, mindfulness, spirituality, and coping strategies among others (Turgoose & Maddox, 2017). It is, however, important to address the contribution of work-related factors in leading to experiences of compassion fatigue because work-related factors are more alterable in nature than individual-level factors. Also, recent research on the effectiveness of individual-level mental health interventions has yielded unimpressive results about their efficacy (Fleming, 2024). Thus, the second chapter of this thesis focused on synthesising evidence regarding work-related factors associated with compassion fatigue in mental health professionals.

Work-Related Factors Associated with Compassion Fatigue in Mental Health Professionals

The aim of the systematic review described in the second chapter of this thesis was to synthesise and critically analyse existing studies on the association between occupational risk and preventive factors and compassion fatigue in mental health professionals. Following the

guidelines of Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA; Moher et al., 2009), 44 quantitative studies were included in this review. Inductive content analysis (Thomas, 2006) conducted to synthesise findings of included studies resulted in seven themes associated with compassion fatigue in the target occupational group. Identified themes included workload, empathy, use of evidence-based practices, supervisor's support, co-workers' support, organisational resources and support, and perceived sense of autonomy. For a detailed review of the complexity involved in the associations between these variables and compassion fatigue, readers are directed to the section, *Qualitative Synthesis of Themes* (p. 85) in the second chapter of this thesis.

The findings of the systematic review provide a framework to mental health organisations for developing interventions to address work-related factors having the potential to impair employees' psychological health (Gaboury & Kimber, 2022; Vang et al., 2020), hamper services provided to clients (Delgadillo et al., 2018; Koutra et al., 2022), and foster undesirable consequences like turnover (Andrews, 2021). By highlighting factors that could attenuate the aversive impact of providing mental health services on professionals' psychological health and wellbeing, the review provides a reckoner for the development of stress-management programmes. For instance, co-workers' support was found to be negatively associated with compassion fatigue in the present study. Thus, mental health organisations could develop interventions to bolster employees' relations with each other in order to mitigate psychological strain and facilitate the process of coping with challenges presented by the job (Sutton et al., 2022).

In addition, the review contributes to the existing body of research that has so far largely focused more on the relatively stable individual-level characteristics such as, professionals' history of trauma, age, gender, religiosity, and mindfulness among others (Turgoose & Maddox, 2017). By highlighting the role of occupational risk and preventive factors, the review

suggests that in addition to the relatively stable individual-level characteristics, the potentially alterable occupational characteristics could also contribute to professionals' experience of compassion fatigue. Also, since a longitudinal study found that work-related factors (instead of individual-level characteristics) are significantly associated with secondary traumatic stress (Penix et al., 2020), the findings of this review are topical because it addresses factors which tend to be more potently associated with mental health professionals' occupational wellbeing.

Lastly, the study also highlights three pertinent limitations of existing research on compassion fatigue in mental health professionals: an over-reliance on cross-sectional studies, use of heterogeneous samples, and lack of theory-driven research. First, all included studies in the systematic review were cross-sectional studies which impede the determination of temporal relations among variables (Taris & Kompier, 2014; Neuman, 2014) and clarification of associations by not studying them across time periods (e.g., in contrast to Vang et al., 2020). Although they permit studying a large sample of participants at the same time and tend to be time- and cost-effective (Taris & Kompier, 2014; Neuman, 2014), they could also foster the popularity of spurious relations in research. For instance, professionals' history of trauma is often associated with secondary traumatic stress in cross-sectional research (Turgoose & Maddox, 2017) but a recent longitudinal study with three waves of data collection and a large sample size showed that it was not significantly associated with secondary traumatic stress in psychotherapists (Vang et al., 2022). Thus, it is vital that relations discovered in cross-sectional research are examined longitudinally to be certain of their association.

Second, majority of studies in the systematic review included heterogenous samples of professionals (for more details refer table 2 in second chapter). Although practical considerations might have influenced the sampling strategy, the inclusion of professionals from diverse training and professional backgrounds underestimates the role of variations in approaches and methods of treatment in contributing to experiences of compassion fatigue

(Velasco et al., 2022). Recently, Velasco et al. (2022) whilst referring to psychotherapists argued that it is pivotal to study the experiences of psychotherapists exclusively because in contrast to field-based professionals such as social workers or mental health nurses, psychotherapists are required to be at one place to establish a rapport with their clients and engage with their vivid traumatic recollections. Thus, their experiences could differ from their counterparts in other professional fields.

Third, only a small minority of studies included in the present review adopted a theoretical framework to guide the development of research questions or hypotheses. This finding whilst unwelcomed from a research point of view is unfortunately in alignment with a growing trend in general psychological research. A recent study that reviewed articles published in the prestigious journal *Psychological Science* in the last ten years (2009 - 2019) found that only 33.58% of reviewed articles mentioned the words “theory” or “theories” (McPhetres et al., 2021). In the present review as well, only 38.64% of studies adopted a clear theoretical framework to guide their investigations. This is a concerning finding because theory-driven research aids in understanding *why* a phenomenon takes place (Aguinis & Cronin, 2022). It reinforces intellectual reasoning to ascribe a deeper meaning to interactions among forces influencing an individual’s behaviour, cognition, or experiences rather than only a superficial, surface-level understanding. For instance, the concept of vicarious trauma is based on the constructivist self-development theory (McCann & Pearlman, 1990; McCann & Pearlman, 1992; Pearlman & Saakvitne, 1995), it explains how and why engagement with survivors of trauma could mould one’s cognitive schemas. In contrast, research examining compassion fatigue in mental health professionals rarely adopts a theoretical framework to explain how and why certain factors are likely to make a professional vulnerable to compassion fatigue. In lieu of sound theory-driven research, there is a risk for compassion fatigue research to fall prey to an arbitrary examination of variables with limited generalizability or potential to advance

understanding. For instance, Cetrano et al. (2017) identified a positive association between ergonomic difficulties and secondary traumatic stress, but how these two variables could be realistically related to each-other (and not just in statistical terms) remains unexplored. Therefore, it is extremely important that future research uses sound theoretical frameworks to guide research and make meaningful contributions to literature.

In addition to the methodological limitations of previous research, the review also highlighted a dearth of evidence on compassion fatigue in mental health professionals originating from the UK, and a total absence of research on the experiences of independent practitioners. Considering that mental health professionals in the UK report high levels of sickness absenteeism and annual staff turnover rate due to poor psychological well-being (House of Commons, 2023), it is important that more research is conducted to discern the factors associated with compassion fatigue in this occupational group. Also, it is pivotal to study the experiences of private practitioners because they are a vital workforce to address the growing mental health demands of the population (McManus et al., 2016; World Health Organization, 2019). In light of these reasons, a phenomenological study was conducted to gain an in-depth, context-specific understanding of employees' and independent practitioners' professional experiences and well-being during the COVID-19 pandemic.

Compassion Fatigue in the Context of COVID-19 Pandemic

This section discusses mental health professionals' experiences of compassion fatigue in context of COVID-19 pandemic. For qualitative research described in the third chapter of this thesis, 19 mental health professionals – 11 employed in the National Health Service (NHS) and 8 working in private practice – were interviewed using a semi-structured interview schedule. Data were analysed using Smith and Osborn's (2015) framework of interpretative phenomenological analysis (IPA). Three main themes which emerged from the analysis

included transition from face to face to online therapy, novel changes, practice and wellbeing, and uncertain professional support in uncertain times. Although the overarching aim of this doctoral project was to explore mental health professionals' experiences of compassion fatigue, due to unforeseen challenges posed by the COVID-19 pandemic, it was opined that a narrow, decontextualised focus on psychological wellbeing could jeopardise the prospects of gaining a rich, complex understanding of professionals' experiences in the context of COVID-19 pandemic (e.g., Jones et al., 2022; Cramond et al., 2020). Thus, readers would find that the third chapter of this thesis addressed several factors in addition to participants' experiences of compassion fatigue. It facilitated understanding how unprecedented challenges (such as a sporadic transition to remote work, constraints imposed on therapeutic interventions, or feelings of professional isolation) deterred physical and psychological detachment from work thereby fostering symptoms of secondary traumatic stress like intrusion of clients' traumatic narratives.

Also, whilst the pandemic presented a large number of unforeseen challenges that negatively affected professionals' psychological wellbeing, the structural and psychological support provided by managers, supervisors, co-workers, organisations, and professional bodies aided adjustment to the novel reality of remote work. For instance, free training programmes in online therapy allowed professionals to update their technical skills and learn the nuances of online therapy. Similarly, manager's referral to counsellor for employees experiencing mental health difficulties or developing an online forum to share professional experiences and personal struggles with others provided professionals with the required psychological support and fostered a sense of community as reported by some employees. These findings are consistent with the findings of systematic review (chapter 2). Job resources like supervisors' support, co-workers' support, and organisational support helped employees cope with challenges faced and to an extent might have abated the risk of chronic stress or burnout.

The findings of this study have pertinent practical implications for mental healthcare organisations, educational institutions, and professional bodies. Since the popularity of online or telephonic therapy is growing rapidly (Tibbs et al., 2022; Java et al., 2021), it is vital that the required support base is created, or adequate personal resources are developed to prevent undesirable consequences like compassion fatigue. This is particularly required if online or telephonic therapy is delivered while working remotely. Remote work according to participants' accounts could foster a sense of professional isolation which could further make professionals vulnerable to compassion fatigue. Therefore, it is important that employees and trainee professionals are not just provided training on managing peculiarities of online therapy (Aafjes-van et al., 2021; Rowen et al., 2021; Connolly et al., 2020) but also on self-care to attend to own psychological wellbeing while working remotely (e.g., Posluns & Gall, 2020).

Lastly, participants' lived experiences of secondary traumatic stress, occupational fatigue, feelings of helplessness, and professional isolation discussed under the superordinate theme, *Novel changes, practice and wellbeing* provide insights for comprehending the structural configuration of compassion fatigue. As several extracts mentioned in this theme are related to the symptoms assessed by ProQOL 5 (Stamm, 2010), it was opined that a psychometric study to examine the internal structure of the scale would help in understanding the relations among symptoms, which might clarify the conceptual issues about compassion fatigue discussed in the first chapter. Thus, the qualitative study was followed by a psychometric study to first examine the proposed scale structure and then explore a novel structure.

A Psychometric Evaluation of ProQOL 5

For a psychometric instrument to be used for determining the prevalence of a psychological phenomenon in a population or a target group or for ascertaining the need for training or an intervention programme or for policy-level decision-making, it is vital that the instrument

demonstrates adequate psychometric properties. In lieu of sound psychometric properties, the inferences drawn from that instrument might be flawed (Coaley et al., 2014), which could threaten the validity of scientific research and misguide the consumers of that research (e.g., Elwood et al., 2011). Thus, it is vital that rigorous psychometric research is conducted to validate a scale before it is used in applied research to advance a theory or guide stakeholders. In case of ProQOL 5 (Stamm, 2010), psychometric research has consistently found lack of support for its internal structure (e.g., Duarte, 2017; Lazăr et al., 2022; Geoffrion et al., 2019). (For further details, refer the section *Validity of ProQOL 5* (p. 177) in the fourth chapter of this thesis.) Nevertheless, the scale is still being popularly used to assess compassion fatigue and compassion satisfaction in professionals working in diverse health and social care fields and national or cultural contexts (e.g., Singh & Hassard, 2021; Zhang et al., 2021; Whitt-Woosley et al., 2022; Koutra et al., 2022). Although some efforts have been made to rectify the poor psychometric properties of the scale (e.g., Samson et al., 2016; Heritage et al., 2018; Lazăr et al., 2022), they remain limited to certain occupations (e.g., nursing) and national contexts (e.g., Australia).

The study described in the fourth chapter of this thesis was the first study, to the best of my knowledge, that assessed the internal structure of ProQOL 5 (Stamm, 2010) in a sample of UK-based mental health professionals. In alignment with previous studies (Lakatamitou et al., 2021; Köverová et al., 2018; Lazăr et al., 2022; Geoffrion et al., 2019; Duarte, 2017), the psychometric study conducted for this project did not find support for the scale's internal structure. Thus, a novel technique in network psychometrics called bootstrapped Exploratory Graph Analysis (EGA; Golino & Christensen, 2021) was used to further explore its factorial structure. The analysis found support for a revised 21-item scale for mental health professionals practising in the UK. The findings of this study have three pertinent scientific and practical implications discussed below.

First, the study provided preliminary evidence in support of a revised structure that needs to be explored further in empirical research. Although 21 items which were finally retained in EGA demonstrated high levels of item stability across bootstrapped samples, their external validity remains limited due to sampling restrictions. A multi-sample study with a large sample of mental health professionals in which the first sample is used to explore the structure of the scale and the other is utilised for validating that structure might provide the required evidence to fill this gap in the literature. In contrast to Lazăr et al. (2022) in which a confirmatory factor analysis was applied on the same dataset on which a parallel analysis was performed to first explore the structure, the present study did not engage in similar practices because they are generally discouraged in research (Knekta et al., 2019).

Second, the findings of this study supported the original three-dimensional structure of the Professional Quality of Life Framework developed by Stamm (2010). In recent times, the operationalisation of compassion fatigue as an amalgamation (as opposed to a combination) of burnout and secondary traumatic stress (Coetzee & Klopper, 2010) has led some researchers to combine distinct items developed to measure burnout and secondary traumatic stress to assess compassion fatigue as a unitary construct (Heritage et al., 2018; Lazăr et al., 2022). Whilst it is supported by psychometric evidence, it lacks theoretical support because burnout and secondary traumatic stress although related are distinct constructs (Stamm, 2010). The former is an offshoot of an uneven balance of job demands and job resources at workplace (Demerouti et al., 2001) and the latter results from an empathetic engagement with survivors of trauma (Stamm, 2010). They might share elements of general distress (Vang et al., 2020) but theoretically differ in their aetiology or causal dynamics (Stamm, 2010). Studies which adopt Coetzee and Klopper's (2010) conceptualisation of compassion fatigue (e.g., Heritage et al., 2018; Eng et al., 2021) often do not recognise the exclusion of secondary traumatic stress in their operationalisation. This is unhistorical because secondary traumatic stress was

considered an element of compassion fatigue in previous versions of ProQOL 5 (Stamm, 2010) as well. For more details, refer the section, *Measurement of Compassion Fatigue* (p. 39) in chapter 1. (Bride et al. (2007) also presented a comprehensive historical review of the operationalisation and measurement of compassion fatigue.) The psychometric study conducted as a part of this doctoral project although does not resolve the question of whether burnout and secondary traumatic stress factors in ProQOL 5 (Stamm, 2010) can be explained by a higher-order construct called compassion fatigue, it does however provide support in favour of their distinction.

Third, from a combined scientific and applied perspective, the findings of psychometric study have implications for the assessment of burnout, secondary traumatic stress, and compassion satisfaction in varied occupational groups. The lack of support for the internal structure of ProQOL 5 (Stamm, 2010) questions the external validity of studies that have used the scale to determine the prevalence of compassion fatigue and compassion satisfaction in an occupational group (e.g., Sodeke-Gregson et al., 2013) or to examine the effectiveness of an intervention programme (e.g., Cocker & Joss, 2016). Therefore, to prevent future unwarranted expenditure of resources to mitigate the seemingly high prevalence of undesirable work-related experiences attributable to an instrument with unsound psychometric properties, it is vital that further research is conducted to first establish the validity of the scale.

In addition, regarding the assessment of constructs, while Stamm (2010) advocates a raw-score or a *T-score* approach, with deletion of six items from the burnout subscale, three items from the secondary traumatic stress subscale, and one item from the compassion satisfaction subscale, and inclusion of one reverse-scored item to the compassion satisfaction subscale, the approach to determine prevalence needs to be reconsidered. With an uneven number of items in each subscale, ProQOL 5 (Stamm, 2010) could adopt a scoring system similar to Maslach Burnout Inventory (MBI; Maslach & Jackson, 1981) wherein totalled scores on each respective

dimension or subscale are compared against standardised normative benchmarks to determine the prevalence of high, medium, or low levels of emotional exhaustion, depersonalisation, and lack of personal accomplishment.

Integrated Theoretical and Policy Implications of Findings

Theoretical Implications of Findings

The two major theoretical implications of studies conducted in this doctoral project are: (i) providing support for the association between work environment and compassion fatigue and compassion satisfaction, and (ii) providing preliminary support for the orthogonality of secondary traumatic stress and burnout as two inter-related theoretical components of compassion fatigue.

Regarding the first major theoretical implication, the Professional Quality of Life Framework proposed by Stamm (2010) stated that work environment could impact a professional's level of compassion fatigue and compassion satisfaction but, there was no clarification regarding which aspects of the work environment could exert an influence or any differentiation between positive and negative aspects of work environment that could have a differential impact on a professional's experience of compassion fatigue and compassion satisfaction. Thus, by discussing at length in the second chapter of this thesis the work-related characteristics that are positively and negatively associated with compassion fatigue and compassion satisfaction for mental health professionals, and by classifying them as job demands and job resources, the systematic review has made a meaningful contribution to the research literature. It has not only provided support for one of the central tenets of Professional Quality of Life Framework (Stamm, 2010) but, it has also built on it by partitioning work-related characteristics into job demands and job resources. Future empirical research could benefit from a further classification of identified job demands into challenge and hindrance

demands (Podsakoff et al., 2007; Cavanaugh et al., 2000) and job resources into social and structural job resources (Tims et al., 2012).

It is also important to acknowledge that the context within which a professional operates could influence the interactions among various job demands and job resources, which could further influence a professional's experience of compassion fatigue. The third chapter of this thesis elucidates how the sudden transition from face-to-face to online/telephonic therapy due to national lockdowns had a variable effect on psychological wellbeing with respect to a professional's work employment status – private practice or an employee of the NHS – and personal (infrastructural) resources – having a separate home office and support from family. Thus, it would be prudent for future researchers to take into cognise the role of wider employment and personal context and how it could shape an individual's perception of job demands and resources.

Regarding the second major theoretical implication of this project – support for the orthogonality of secondary traumatic stress and burnout – the first chapter discusses an important debate in compassion fatigue literature regarding the conceptual clarity of the construct and how it is ambiguous regarding whether compassion fatigue is a confluence of burnout and secondary traumatic stress or if these are two independent constructs. These propositions were examined in the fourth chapter of this thesis which details the findings of a psychometric evaluation of the internal structure of ProQOL 5 scale (Stamm, 2010). The findings of the study supported the independence of secondary traumatic stress and burnout as two theoretical constructs. This contradicts a tenet of Professional Quality of Life Framework (Stamm, 2010) that considers compassion fatigue as a second-order construct that has burnout and secondary traumatic stress nested under it. But it answers one of the questions raised in the first chapter of this thesis that how it is possible to integrate a construct that discusses the transfer of symptoms from a client to a professional due to poor psychological detachment (i.e.,

secondary traumatic stress) with one that entails the exhaustion of emotional resources (i.e., burnout). By depicting them as two independent constructs with low intercorrelations, the study suggests that it is best to consider them separately. However, this raises an important question about the latent existence of compassion fatigue. *If compassion fatigue is not a confluence of burnout and secondary traumatic stress as the study found that they are independent constructs then, what is compassion fatigue?* This is a question for future research, which could benefit from a psychometric evaluation with a larger sample that allows the examination of a bi-factor model to examine the existence of compassion fatigue as a latent construct that could explain the shared variance between burnout and secondary traumatic stress.

Policy Implications of Findings

The findings of this project, in particular the qualitative study (chapter 3) could have important policy implications. NHS employees who were interviewed for the study reported a sense of deep disappointment in the senior management of the organisation with regards to their handling of the pandemic and felt neglected and bereft of any guidance to cope with the influx of unprecedented challenges. One participant even mentioned the focus becoming “very, very nursing-centred” (Nora, 78). This suggests that employees of NHS mental health services perceive being at the receiving end of a differential treatment relative to their counterparts in physical health services. Although in 2011, the UK government aimed to establish a “parity of esteem” between mental and physical health services (Committee of Public Accounts, 2023), it appeared that mental health employees continued to feel neglected by the senior management.

Perceiving a sense of neglect could have negative consequences for employees’ mental health (Haslam et al., 2018), which could lead to increased sickness absenteeism and turnover rate. NHS mental health employees report elevated rates of sickness absence leaves due to

anxiety, stress, depression, and psychiatric illness (NHS England, 2024) and high turnover rate (Committee of Public Accounts, 2023). Both sickness absenteeism and employee turnover could hamper the quality of care delivered to patients such as, prolonged waiting period (e.g., Royal College of Psychiatrists, 2021; Larsson et al., 2022) and increase the workload of the existing workforce which is already small in size relative to the accelerating demands placed on them (Committee of Public Accounts, 2023). This is likely to fuel a vicious cycle leading to further sickness absenteeism and employee turnover. This highlights the need for concerted measures to encourage staff retention in mental health services. In a recent realist synthesis, Long et al. (2023) highlighted the role of national policy and government investment in influencing organisational leadership and culture impacting the retention of staff in adult mental health services in the UK. Although the NHS Long Term Workforce Plan (NHS England, 2023) acknowledges the role of staff shortage and highlights the need to create additional training positions to fill the gaps in existing services, it is also important for the NHS to take additional measures specifically for mental health services to assuage the feelings of perceived neglect in its workforce.

Integrated Practical Implications of Findings

The findings of the systematic review and phenomenological study suggest that the support provided by supervisors and co-workers play a pivotal role in helping mental health professionals cope with psychosocial hazards at work. This highlights the need for mental health organisations to provide training to supervisors to develop their supervision characteristics and practices, and to organise interventions to bolster interpersonal relations among co-workers to foster a sense of collegiality. The NHS Long Term Workforce Plan (NHS England, 2023) also underlines the benefits of providing restorative supervision to support the psychological well-being of staff members. For mental health professionals, supervision characteristics and practices that are positively associated with restoration of professionals'

personal resources include the perceived quality of supervisor – professional relationship, and display of empathy and praise (Bradley & Becker, 2021). One supervision model that incorporates these characteristics that organisations could adopt to structure the supervision provided by clinical supervisors is the Regenerative Model (Neswald-McCalip et al., 2003; Neswald-Potter, 2005). It is:

concerned with supervisee awareness, empowerment, meaning-making, and the authentic expression of intersession dynamics. This model is characterized by a humanistic foundation, application of expressive arts, and supervision outcomes that include dynamics of cultural and spiritual awareness and expression. (Neswald-Potter & Simmons, 2016, p. 79)

The model has been adapted to structure the supervision provided to trauma counsellors experiencing the symptoms of vicarious trauma – a construct similar to compassion fatigue. The model focuses on self-disclosure on part of the supervisor to develop an authentic working alliance between the supervisor and the supervisee(s) to encourage the latter to undertake an in-depth exploration of their intersession dynamics with clients (Neswald-Potter & Simmons, 2016). Once a level of comfort has been achieved between the supervisor and the supervisee(s), expressive arts techniques are used to reinforce a deeper, nonverbal processing of intersession dynamics with clients and the impact it has on the supervisee(s). This allows the supervisee(s) or the counsellor(s) who is/are experiencing the symptoms of vicarious trauma to gain a renewed understanding of their work that is embedded in their cultural context and spiritual awareness (Neswald-Potter & Simmons, 2016).

Supervision sessions structured using the Regenerative Model have been found to be effective in helping mental health professionals cope with symptoms of vicarious trauma by encouraging them to develop a culturally and spiritually contextualised understanding of their

experience (Neswald-Potter & Simmons, 2016). Mental health organisations could adopt this approach to design clinical supervision sessions for their employees because it can be delivered at an individual or group level and it acknowledges the diverse cultural practices and spiritual beliefs of employees, which might be helpful for a diverse organisation like the NHS that employs staff from different cultural and ethnic backgrounds (NHS England, 2023).

Regarding strengthening co-workers' relations, an organisation could implement Schwartz Rounds or Balint Groups. The former focuses more on the emotional impact on healthcare professionals of providing services to patients, and the latter concentrates more on the dynamics of the relationship between healthcare professionals and patients to enhance professionals' understanding of the needs of their patients. Both, however, have been found to improve the psychological wellbeing of healthcare professionals and the quality of care delivered to patients (Maben et al., 2021; Van Roy et al., 2015; Sivam & Joseph, 2020; General Medical Council, 2019; Stojanovic-Tasic et al., 2018). In a recent national evaluation of Schwartz Rounds carried out in 47 healthcare organisations in the UK, Flanagan et al. (2020) found that staff members perceived gaining insights from Schwartz Rounds in terms of caring for patients, and the majority of staff attendees reported planning to attend a Schwartz Round again in the future. These findings suggest that to consolidate relations among co-workers, a mental health organisation could implement Schwartz Rounds or Balint Groups at their organisation. This would aid in improving employees' professional skills and well-being, which might also facilitate in attenuating staff turnover intention. According to an inquiry undertaken by the House of Commons (Committee of Public Accounts; 2023), 17,000 staff members left the NHS mental health services in 2021-22 and one of the most highly adduced reasons for it was impaired work-life balance. Thus, by strengthening staff members' relations with each-other via Schwartz Rounds or Balint Groups, mental health organisations could

enhance their perceived social resources, which might reduce the negative impact of work-related stress on personal life and its subsequent impact on turnover intention and turnover rate.

Lastly, a finding from the psychometric study that merits a brief discussion in this chapter is the central role played by poor sleep quality in the secondary traumatic stress cluster. Participants in the qualitative study also reported experiencing a negative impact of providing online therapy for prolonged hours remotely on their physical health including quality of sleep (dreaming more about clients' issues). Although previous research on compassion fatigue has revealed significant relations among quality and quantity of sleep, burnout, and secondary traumatic stress (Smart et al., 2014; Okoli et al., 2020), intervention research on compassion fatigue (e.g., Cocker & Joss, 2016) has not necessarily focused on the benevolent role of sleep or factors positively associated with it in fostering a sense of compassion satisfaction in healthcare professionals. A recent synthesis of 10 case studies on stress-management interventions delivered at various NHS trusts in the UK suggested that organisational-level interventions focusing on flexible working schedule improved employees' psychological well-being and attenuated the impact of job demands (Teoh et al., 2023). The provision of flexible working schedule was found to be positively associated with sleep quality in a large-scale Swedish study on doctors (N = 1,534; Tucker et al., 2013) and the NHS Long Term Workforce Plan (NHS England, 2023) also emphasises the importance of flexible working to attenuate the high sickness absenteeism and turnover rates among staff. Thus, to promote employees' occupational well-being, mental health organisations should explore options related to flexible working.

Concluding Remarks

The present thesis examined the concept of compassion fatigue in mental health professionals from multiple perspectives. The first chapter elaborated the role of empathy in

making mental health professionals vulnerable to compassion fatigue or related constructs. It elucidated the historical development of the construct, highlighted conceptual issues in its operationalisation, and discussed its current theoretical models. It can be concluded that lack of conceptual clarity on structure of compassion fatigue merits attention from researchers to prevent the rise of atheoretical research with limited potential of advancing understanding.

The second chapter reviewed empirical literature on the association between occupational risk and preventive factors and compassion fatigue in mental health professionals. It showed that consistent with the tenants of the job demands-resources (JD-R) model (Demerouti et al., 2001), job demands such as, quantitative workload, burden of empathy, and therapeutic work with survivors of trauma were positively associated with compassion fatigue (burnout and secondary traumatic stress). Job resources such as, empathic alliance with clients, supervisor's support, co-workers' support, use of evidence-based practice, and perceived sense of autonomy had the potential to attenuate the impact of job demands and foster a sense of compassion satisfaction. The findings of the systematic review provide mental healthcare organisations a framework for the development of stress-management intervention programmes and provide directions for future research by highlighting methodological limitations of previous research.

The third chapter detailed a phenomenological study conducted to explore occupational experiences and wellbeing of mental health professionals in the context of COVID-19 pandemic. The findings of this study discussed in detail the challenges presented by the COVID-19 pandemic such as, sporadic transition from face-to-face therapy to online or telephonic therapy, difficulties encountered in remote working especially when faced with dearth of infrastructural resources like a separate home office, and the endeavour to maintain psychological wellbeing in social isolation. The study also elaborated the conducive role played by job resources such as, supervisor's support, co-workers' support, and organisational resources and support in assisting mental health professionals to cope with the demands placed

on them during the COVID-19 pandemic. The study suggests a need for training in online or telephonic therapy for professionals and provides insights for England's National Health Service (NHS) to take initiatives to safeguard mental health personnel's psychological wellbeing.

Finally, two broader conclusions can be drawn from this doctoral project. First, the burgeoning body of research on compassion fatigue in mental health professionals needs to be scrutinised in terms of its methodological rigor to ensure the advancement of sound knowledge and to prevent expenditure of resources on a problem that is not properly operationalised. Second, future research would benefit from adopting an interdisciplinary perspective (e.g., psychological, human resource management, health economics, leadership, and management) to examine the influence of factors at various levels in shaping employees' experiences of personnel in mental healthcare.

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Appendices

Appendix A: Data Extraction Form Used in Systematic Review (Chapter 2)

1	Title of the Article	
2	Author(s)	
3	Year of Publication	
4	Aim(s) of the Study	
5	Theoretical Framework	
6	Hypotheses/Research Question(s)	
7	Variables associated with Compassion Fatigue	
8	Methodology	
9	Study Design	
10	Country (from where participants were recruited)	
11	Total Sample Size and subgroups	
12	Response Rate	
13	Mean Age of Participants	
14	Percentage of Male Participants	
15	Percentage of Female Participants	
16	Professional Specialization of Participants	
17	Scale used	

18	Prevalence (%) of Compassion Fatigue or its Dimensions with relevant demographic details	
19	Findings of the study	
20	Limitations	

**Appendix B: Research Proposal Shared with Five Professional Bodies of Mental Health
Professionals**

**THE IMPACT OF PSYCHOSOCIAL HAZARDS DURING THE COVID-19
PANDEMIC ON MENTAL HEALTH OF COUNSELLORS AND
PSYCHOTHERAPISTS IN THE UK: A LONGITUDINAL STUDY**

The expectation that we can be immersed in suffering and daily loss and not be touched by it is as unrealistic as expecting to be able to walk through water without getting wet

-Rachel Ramen

A RESEARCH PROPOSAL

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Brief Introduction and Aims

The COVID-19 pandemic poses a deluge of challenges for counsellors and psychotherapists in the UK. It has unfortunately led to the demise of thousands of individuals which could lead to a spurt in the number of bereaved clients on the caseloads of counsellors and psychotherapists. In addition, recent research and expert-commentaries point towards the socio-economic impact of the pandemic reflected in terms of rising levels of unemployment (Gathergood, 2020), reported number of cases of domestic violence (Leslie & Wilson, 2020), and stress levels in medical personnel (Hu et al., 2020) among others. Preliminary findings of ongoing research at the Institute of Mental Health at the University of Nottingham, UK indicate that the experience of being furloughed or working in the midst of the pandemic could lead to an increase in anxiety and/or vulnerability to depression (Institute of Mental Health, 2020). A recent systematic review and meta-analytic study published in LANCET Psychiatry also highlighted that coronavirus outbreaks in the past led to a 15% spike in the prevalence of depression and anxiety disorders and a 30% increase in the prevalence of post-traumatic stress disorder (PTSD; Rogers et al., 2020). This is likely to lead to an increase in the workload of counsellors and psychotherapists which might have an aversive impact on their mental health.

Compromised mental health and wellbeing could affect the interaction of counsellors and psychotherapists with their clients which could further impair clients' treatment and recovery. Various job demands and job resources such as, workload, workplace trauma, co-workers' support and supervisor's support among others have been associated with compassion fatigue and compassion satisfaction in mental health professionals (Rossi et al., 2012; Cetrano et al., 2017; Mangoulia, Koukia, Alevizopoulos, Fildissis, & Katostaras, 2015; Bell, Hopkin, & Forrester, 2019). However, the severe consequences of the pandemic impose a greater challenge for counsellors and psychotherapists in coping with this situation. They are required to attend to the needs of their clients whilst safeguarding their own mental health and wellbeing.

Therefore, the aim of the proposed research is to conduct a mixed-methods study (a quantitative longitudinal study along with a qualitative, interview-based study) to explore the impact of psychosocial hazards at workplace, during a pandemic, on the mental health and wellbeing of counsellors and psychotherapists. In sync with the study by Boscarino and colleagues (2004) that examined the impact of September 11, 2001 attacks on the mental health of New-York based mental health professionals, the proposed research aims to examine the impact of job demands and job resources, in times of COVID-19 pandemic, on the levels of compassion fatigue (burnout and secondary traumatic stress) and compassion satisfaction in counsellors and psychotherapists in the UK (*kindly refer to Figure 1 for a diagrammatic representation of the proposed research model*).

The proposed research aims to adopt a mixed-methods approach; a three-wave cross-lagged panel study involving three phases of data collection separated by a period of three months each (*kindly refer to Figure 2 for the timeline*). In addition to the quantitative study, interviews will be conducted following the third wave of data collection for the longitudinal, quantitative study.

Based on the job demands-resources (JD-R) model (Bakker & Demerouti 2007, 2014) and a systematic review of literature undertaken by the research team, the proposed study is having the following research questions:

Q1. Do job demands measured at time 1 (T1), time 2 (T2), and time 3 (T3) predict burnout, secondary traumatic stress, and compassion satisfaction at T1, T2, and T3?

Q2. Does ‘the impact of COVID-19 pandemic on work’ measured at T1, T2, and T3 predict burnout, secondary traumatic stress, and compassion satisfaction at T1, T2, and T3.

Q3. Does ‘the impact of COVID-19 pandemic on work’ measured at T1, T2, and T3 moderate the relationship between job demands, and burnout, secondary traumatic stress and compassion satisfaction, measured at three different time intervals?

Q4. Do job resources measured at T1, T2, and T3 predict burnout, secondary traumatic stress, and compassion satisfaction at T1, T2, and T3?

Q5. Do job resources measured at T1, T2, and T3 moderate the relationship between job demands, and burnout, secondary traumatic stress and compassion satisfaction, measured at three different time intervals?

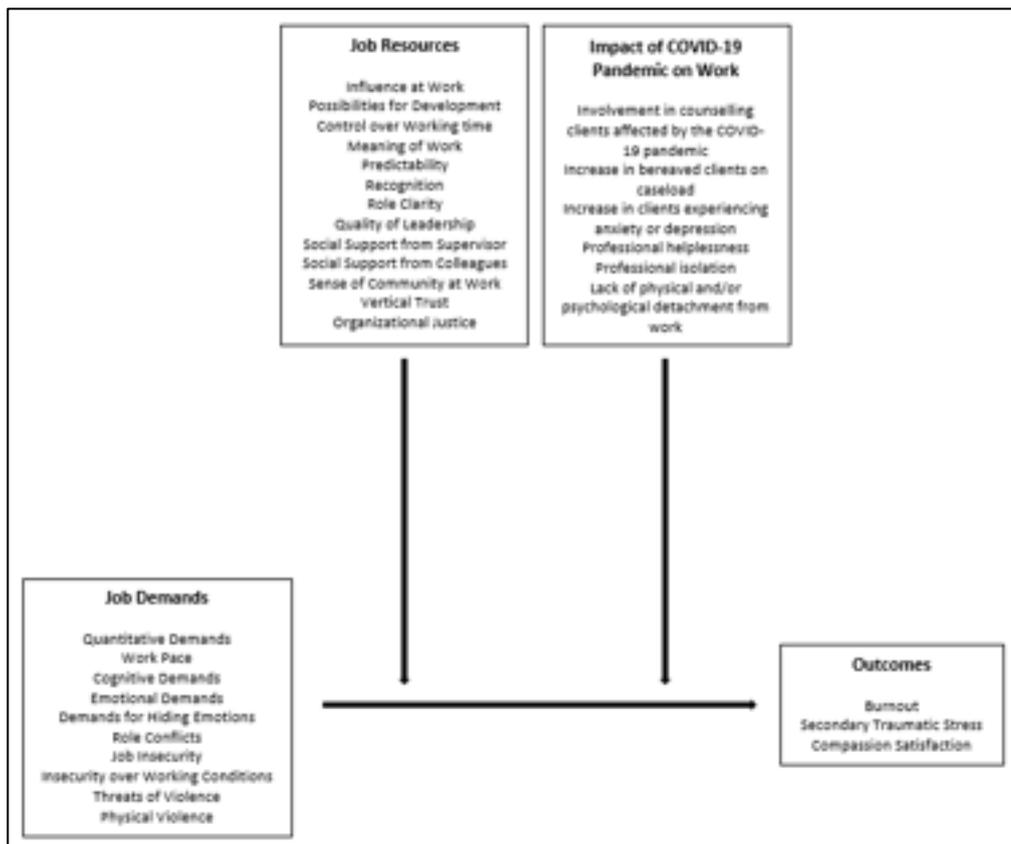


Figure 1. Proposed research model

Methodology

Participants

To determine the target sample size for the study, an a priori power analysis was conducted using G*Power (Faul, Erdfelder, Buchner, & Lang, 2009). Based on Cohen's (1988) suggestion, the results indicated a sample size of 1250 participants for a small effect ($f^2 = 0.02$), 192 participants for a medium effect ($f^2 = 0.15$), and 105 participants for a large effect ($f^2 = 0.35$), with an alpha criterion of .05 and power of .80 (Field, 2013). To achieve maximum power keeping with the time constraints and potential for attrition in a longitudinal study, the target sample size is 1000 participants ($N = 1000$) for the first wave of data collection. To be included in the study, a potential participant should be a UK-based counsellor or psychotherapist⁴⁷. Professionals who are involved exclusively in research (i.e. full-time researchers) and professionals who are furloughed at the time of data collection would not be included in the sampling frame.

Procedure

Data for the longitudinal study would be collected using online surveys. The proposed research would include three waves of data collection, separated by a period of three months each. The decision to separate each wave of data collection by three months was taken after consultation with subject-matter experts. The first wave of data collection would begin in November 2020; the second wave would commence in February 2021; and the third and final wave would start in May 2021. Participants would be sent an email outlining the aims and purpose of the study and a link to the online survey. Two weeks following the first email, two reminder emails would be sent, separated by a period of one week, to enhance the response rate⁴⁸. Only those participants who consent to participate in the first wave of data collection would be sent an invite to participate in the second and third waves of data collection.

Figure 2. Gantt chart outlining the timeline of the project

Task	Month											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Data Collection Phase 1												
Data Collection Phase 2												
Data Collection Phase 3												
Qualitative Data Collection												

For the purpose of identification of participants for the second and third waves of data collection, participants would be asked to provide their publically-available (or work-based) email addresses as a part of demographic information. The email addresses would be pseudonymised to match the responses obtained in the first wave with those in the succeeding waves. Following the completion

⁴⁷ Kindly note that the proposed research would distinguish between counsellors and psychotherapists who are working as employees and those who are private practitioners since some work-related factors might not be applicable to the latter.

⁴⁸ Participants who would have consented to participate in the study after receiving the first email would be requested to ignore the second and third emails. They are mainly targeted for non-respondents.

of the third wave of data collection, data would be completely anonymized. Apart from the email addresses, the participants would not be required to provide any other identifiable information.

Upon the completion of the longitudinal study, counsellors and psychotherapists who participated in at least one wave of data collection would be invited to participate in a qualitative interview study⁴⁹.

Measures

Participants would be requested to provide the following demographic information: age, gender, work experience, average weekly caseload, percentage of traumatized clients on the caseload, therapeutic orientation (in practice), therapeutic training, specialization, educational qualification, licensure (yes/no), designation, occupational sector (hospital, private practice etc.), increase in the workload owing to the pandemic, extent to which personal physical and mental health and wellbeing was affected by COVID-19 pandemic, and personal loss (demise of a close friend or family member) due to COVID-19 pandemic (yes/no). To control for the common-method variance bias, two items from the Generalized Overall Fashion Consciousness scale (Gould & Stern, 1989) would be included as theoretically unrelated markers. In addition, the participants would be required to answer four quality assurance questions, such as “*please answer strongly agree for this question.*”

Data for the quantitative longitudinal study would be collected using self-report measures. The following measures will be used to collect data:

The impact of the COVID-19 pandemic on work will be assessed using a self-constructed scale. Participants would be asked to indicate whether following the onset of the pandemic, they experienced an increase in the number of bereaved clients and/or clients with heightened anxiety issues or mood disorders on their caseloads. The participants would also be asked to report if they experienced feelings of professional helplessness (i.e. inability to meaningfully or substantively help their clients owing to the pandemic), professional isolation, and difficulty in physically and psychologically distancing themselves from their clients.

Job demands and job resources would be measured using the Copenhagen Psychosocial Questionnaire (COPSOQ III; Burr et al., 2019). The questionnaire is having well-established internal consistency (Burr et al., 2019) and factorial structure (Kristensen, Hannerz, Hogh, & Borg, 2005; Pejtersen, Kristensen, Borg, & Bjorner, 2010).

Compassion fatigue and compassion satisfaction would be measured using the Professional Quality of Life Scale Version 5 (ProQOL 5; Stamm, 2010). It is a standardized thirty item scale with established psychometric properties (Stamm, 2010).

Data for the interview would be collected using a semi-structured interview schedule with open-ended and close-ended questions developed by the research team.

⁴⁹ The mode of interview - online versus face-to-face - will be determined after the completion of the quantitative study, taking into cognizance the advice of the health authorities.

Data Analysis

After the data are collected and entered in SPSS version 23 (IBM Corp, 2015), descriptive statistical analysis will be conducted to compute means, standard deviations, and zero-order correlations. In case of missing data, the mean value would be entered in substitution (Creswell & Creswell, 2018). However, if a participant has not responded to most of the items on a scale, then that participant's data would not be used for further analysis. Data of participants who fail to answer satisfactorily to quality assurance items, would not be included in the analysis. To test for non-response bias, wave analysis (Leslie, 1972) would be conducted to determine whether participants who responded after receiving the first email are different from those who responded after receiving the second or third emails. Following this, exploratory factor analysis and confirmatory factor analysis would be performed for the scale measuring the impact of COVID-19 pandemic on work. Confirmatory factor analysis would also be conducted for scales measuring other variables to confirm their factorial structures.

After establishing the factorial validity of scales, a collinearity diagnosis would be performed to ensure that the predictors are not correlated with each-other (Field, 2013). Each variable would be standardized (as it reduces multicollinearity; Aiken, 1991; Frazier, 2004) and plotted on a scatterplot to test assumptions of linearity and additivity, and homoscedasticity (Field, 2013). The Levene's test for equality of variance would also be conducted to gain additional evidence of homogeneity of variance (Field, 2013). To determine the normality of residuals, the outcome of Kolmogorov-Smirnov test, P-P plot, Q-Q plot, and skewness and kurtosis statistics would be examined (Field, 2013). Finally, to determine the independence of errors, the Durbin-Watson test would be carried out (40). However, if these assumptions are not met, then adequate measures would be taken. If the assumption of multicollinearity is not met, then a principal component analysis (PCA) would be carried out on the predictors and moderators to produce a set of uncorrelated factors (Field, 2013). And if the assumptions of linearity and additivity, normality of residuals, and homogeneity of variance are unmet, then data would be transformed using Log transformation ($\log(X_i)$) and bootstrapping would be performed to produce conservative bias corrected confidence intervals (Field, 2013).

After checking for assumptions, a hierarchical, multiple regression model would be carried out to examine the impact of job demands, 'impact of COVID-19 pandemic on work', interaction between job demands and 'impact of COVID 19 pandemic on work', and job resources on burnout, secondary traumatic stress, and compassion satisfaction, measured at three different time intervals. Sociodemographic covariates would be controlled for. To test the moderational impact of the 'impact of COVID-19 pandemic on work' and job resources, the predictors and moderators would be centered around the grand mean and PROCESS model 2 (Hayes, 2018) would be used. It produces 1000 bias-corrected confidence intervals (CIs) to test the moderation. To determine how the relation between the predictors and the outcome change at varying levels of the moderators, the technique developed by Johnson and Neyman (1936) would be used. It returns a zone of significance with lower and upper values of the moderators (Aiken, 1991; Hayes, 2018).

The qualitative interview data would be analysed using a hybrid form of thematic analysis (Fereday, & Muir-Cochrane, 2006). It is a combination of inductive and deductive approaches to thematic analysis (Willig, 2013). It is deemed appropriate for the aim of the study because it would allow the researchers to confirm the findings of the longitudinal study and also explore novel themes.

Collaboration with the Professional Body

We seek to collaborate with the National Counselling Society for two primary reasons mentioned below:

- We firmly believe that experienced practitioners at the [Name of the Professional Body of Mental Health Professionals] would be able to provide us adequate support in terms of their subject-matter expertise to enhance the applied implications of the proposed research project.
- Since the National Counselling Society is one of the largest bodies of counsellors and psychotherapists in the UK, we believe that a collaboration with the society would be conducive for the collection of data from a highly representative group of counsellors and psychotherapists across the country.

We would be sharing the findings of the study with the National Counselling Society at each and every stage of the project. The findings would be shared in the form of an executive report following each wave of data collection and the final culmination of the project.

We welcome suggestions and insights from the members of the society⁵⁰ to enhance the applicability of this project to aid the amelioration of the psychological health and wellbeing of counsellors and psychotherapists affected by the COVID-19 pandemic. This collaboration would also make significant scientific contributions as it would be the first longitudinal study to examine the work-related factors associated with compassion fatigue and compassion satisfaction in counsellors and psychotherapists.

⁵⁰ We are open to discussions regarding the participation of the National Counselling Society in this project.

Implications

The proposed research would empirically explore the role of the COVID-19 pandemic in contributing to compassion fatigue and compassion satisfaction in counsellors and psychotherapists. Its findings are likely to have significant pragmatic and scientific implications for mental health and other related allied healthcare professionals in the UK and other countries across the world.

The research team foresees the following practical implications of the proposed research project:

- It would highlight the prevalence of burnout, secondary traumatic stress, and compassion satisfaction in counsellors and psychotherapists in the UK.
- The longitudinal design of the proposed research would indicate the accelerating or decelerating trend of burnout, secondary traumatic stress, and compassion satisfaction in counsellors and psychotherapists, as a function of time and the impact of the COVID-19 pandemic on work.
- It is likely to provide a framework for healthcare organisations to safeguard the mental health and wellbeing of their staff. For instance, if co-workers' support (a job resource) is found to moderate the impact of workload (a job demand) on compassion fatigue, then it could highlight the need for team-building initiatives.

The scientific implications of the proposed research, according to the research team are stated below:

- According to the best knowledge of the research team, the proposed research would be the first longitudinal study to explore the impact of the COVID-19 pandemic on the mental health and wellbeing of mental health professionals.
- It would also be the first longitudinal study to examine the impact of job demands and job resources on compassion fatigue and compassion satisfaction in counsellors and psychotherapists.
- The study is likely to contribute to the literature on compassion fatigue and compassion satisfaction by exploring it from the perspective of occupational health psychology, which to the best knowledge of the research team has not been investigated in detail.

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Appendix C: Interview Schedule used in Semi-Structured Interviews

Part one: Demographic details and rapport formation

1. Hello. How are you?

2. How has your day been so far?

The aim of our conversation today is to understand how the coronavirus pandemic has affected your work as a mental health professional and how that has affected your psychological wellbeing. So, before we talk about it, I would like to ask some basic questions about yourself and your occupation. Are you fine with that?

3. How would you identify your gender (man/woman/transgender)?

4. What is your age?

5. What is your occupation (clinical psychologist, counsellor, or psychotherapist)?

6. Do you work at a hospital, a clinic, in community or in private practice?

7. Are you currently working full-time or part-time? If part-time, then for how many hours do you work for in a week?

8. For how many years have you been working in the field of mental health?

9. Could you describe your caseload? Would you say that you work with certain specific groups like children or criminal offenders?

10. Do you work with clients who are victims of physical or sexual trauma like domestic violence, sexual abuse, accident survivors, or some other kind of trauma?

11. If yes, then what percentage of your caseload, would you say, is made up of clients with such experiences?

12. What is your preferred psychotherapeutic approach such as cognitive-behaviour therapy, psychodynamic therapy, arts therapy, integrated therapy or some other form of psychotherapy?

13. At a general level, what are your thoughts about your occupation?

14. How do you feel about working with clients who are dealing with mental health issues (or individuals belonging to a specific group)?

Part two: Impact of the COVID-19 Pandemic on personal wellbeing

As you know that we are in the midst of a pandemic and that coronavirus has impacted a lot of individuals both physically and psychologically, I would like to ask some questions related to how the pandemic has affected your personal wellbeing.

15. Did you get infected with coronavirus at any point of point since March 2020?

16. If yes, have you recovered? How has it impacted your psychological health and wellbeing?

17. How has coronavirus impacted your relationship with your family and friends?

18. Did you experience any personal loss like the demise of a family member or friend owing to the pandemic?

19. If yes, how long has it been since you lost your family member or friend? How has it impacted your psychological health and wellbeing? Did you seek any professional help to cope with your loss? Did you take a break from your work to cope with your loss? Have you resumed your practice now?

Part three: Impact of COVID-19 Pandemic on work

As you must be aware that coronavirus has taken the lives of many people globally and in the UK in particular, with the number of deaths being one of the highest in the world, I am now going to ask some questions regarding the impact of the pandemic on your professional wellbeing.

20. How would you say the pandemic has affected your professional life?

21. Are you working with your clients from home via online-or tele-counselling or are you going to your clinic or hospital? How do you feel about it?

22. In your opinion, has work-from home affected your personal life?

23. Has there been a change in your caseload owing to the pandemic?

24. Have there been any specific concerns brought on by your clients, post-pandemic? Or, are you seeing a difference in the issues reported by your clients now?

25. Do you feel that the pandemic has imposed some constraints on the purview of your work like the suggestions you can give to your clients now?

26. Has the pandemic has influenced your relationship with your clients? If yes, then how? What is its impact on you?

27. Which other aspect of your work do you think is affecting your psychological and professional wellbeing?

28. Do you think that the pandemic has influenced your relationship with your colleagues and supervisor in some way? If yes, then how? How does that make you feel?

29. Have you received some assistance from your organisation during these times to help you manage your work and your feelings about work?

30. Is your organisation providing additional support to its employees? If yes, then have you sought it and has it been useful?

31. Is there anything that you would like your organisation to do for its employees to support them during this pandemic?

Part four: Conclusion

We have reached the end of our conversation.

32. In addition to the information you have shared, would like to share some other experiences related to the pandemic?

33. Would you like to ask me something?

Thank you for your time.

**Appendix D: A Sample of Coding and Initial Theme Development in Interpretative
Phenomenological Analysis**

Table 1

A Sample of IPA Coding and Initial Theme Development

Participant Pseudonym		Participant Gender	Participant Age
Amy		Female	49 years
Initial theme	Line No.*	Interview text	Comment (Code)
	271	Interviewer: So, you could not observe certain behavioural cues and you think that was because of the software that the organization recommended.	
	272		
Variations in online counselling	273	Participant: Absolutely yeah, and I'm sure I'm sure there's a lot of relational social cues you can't pick up on 'cause you don't relate the same, you know how much, you know body language, you just can't see 'cause staring into a screen is quite unnatural. Oh, I think there's loads of stuff. Having said that, I really don't rule out, I think it's a brilliant, you know, for those people who, you know for certain pieces of work and with certain people I think it's a really powerful tool. I just really don't think it should be you know, the, the go to unless, it should be a choice, yeah that you think about while you are using it.	The experience of online therapy varies on a case-by-case basis. <i>(Differences in perceived usefulness of online counselling)</i>
	274		
	275		
	276		
	277		
	278		
	279		
	280	Interviewer: Okay, so when you were working from home and you were providing counselling or psychotherapeutic services online, do you think that affected in some way or the other your personal life such as, your relationship with your partner?	
	281		
	282		
Impact of remote work on quality of care	283	Participant: I'm not sure my relationship, but you know we're both working from home, on our computers in separate rooms, you know, yeah, I mean, my work is in my house and in a way that I've always tried to, you know, I've always liked a really clear divide, you know, my driving to and from work, changing my clothes when I get home, that's all kind of gone, so I do think it's, it's made, for a while I was having problem trying to find that professional, the boundaries just felt so blurred that I think I was over personal almost, all my professionalism kind of drip, dropped a bit,	The blurring of boundaries between personal and professional life had a minor impact on practice. <i>(Negative impact)</i>
	284		
	285		
	286		
	287		
	288		
	290		

		not, not worryingly but I also thought I don't wanna have to stand on ceremony, I'm in my home, I don't, I'm gonna be more myself 'cause this is my space.	<i>of poor boundary management)</i>
	291	Interviewer: Sorry, you said something I could not understand. You said that you did not want to stand what?	
	292		
	293	Participant: You know, be all kind of anxious	
	294	and formal like you might in a normal teams	
Coping with remote work	295	meeting. I, I refuse to bring work stiffness, you	Trying to adjust to work from home.
	296	know, it's my home. I guess that's, that's maybe	
	297	something like that. Yeah, and just being aware	
	298	of, you know I'm working here and the kitchen is	Remote working led to an increase in the amount of work done which further led to secondary traumatic stress.
Increase in perceived workload	299	here and my partner has to eat, so just juggling,	<i>(The impact of increased workload on secondary traumatic stress)</i>
	300	you know, making sure everything is confidential	
	301	and when he can come in and use things. But more than anything I've worked longer, I think because I turned that you know, I turn the computer on early in the morning and it's easy just to keep going up and keep going, so home working is great in some ways, but particularly for things like therapy or working with distressed people's needs, I, I don't want to be traumatized in my own home, you know, this is my safe space, so all the same things hold.	
	302	Interviewer: So, Amy you mentioned just right	
	303	now that you do not want to be traumatized as a result of your work, so I would like to request you to elaborate a bit further on it.	
	304	Participant: I guess, certainly in team meetings	
	305	when we discuss referrals and assessments, we get	
	306	to hear horrific details of people's lives. I'm sitting	
	307	in my living, you know, at least when work you	
	308	go away, you talk about it and that's work and	
	309	then you can come home whereas, now I'm	Remote work blurred the boundaries between personal and professional lives which made it difficult to psychologically disengage from work whilst being at home which further led to secondary trauma.
Lack of psychological detachment	310	surrounded by my things and it's more intrusive I	<i>(An obfuscation of boundaries led to secondary traumatic stress)</i>
	311	guess it's again it's just about having those divides	
	312	between work stuff and home stuff. So I'm sat in	
	313	my living room, in the place where I'm going to	
	314	eat with my mom at the weekend and listening to some sadistic child abuse story, you know, so we do have to manage the very distressing traumatic material both in case discussions but also in therapy 'cause obviously we work with people who've had horrific experiences and managing that anyway, normal life is hard enough, but managing that while you're in your home which isn't your workplace yeah, I just think it, it's just something that takes its toll I guess or you know, you gotta be even more careful with your boundaries.	

*Line numbers are from the interview transcript, which was not in the form of a table.

Table 2

Transformation of Codes into Initial Themes in IPA for One Participant

Line No.	Code	Initial Theme
174-176	Impact of work during pandemic on mental health	Burnout
183-189	Impact of remote work and lockdown on mental health	Burnout
218-228	Professional helplessness experienced due to the restrictions imposed by the lockdown	Professional helplessness
229-230	Impact of poor occupational wellbeing on quality of care	Detrimental impact on clients' treatment
237-245	Experience of professional helplessness varies on a case-by-case basis	Professional helplessness
251-253	Practical problems with online counselling	Online counselling – Limitations
254-260	Inability to observe non-verbal cues in online therapy and technical glitches	Online counselling – Limitations
264-270	Technical glitches affected the observation of pivotal clinical cues	Online counselling – Limitations
273-278	Differences in perceived usefulness of online counselling	Variations in online counselling
286-290	Negative impact of poor boundary management	Impact of remote work on quality of care
294-297	Trying to adjust to work from home	Coping with remote work
297-301	The impact of increased workload on secondary traumatic stress	Increase in perceived workload
304-314	An obfuscation of boundaries led to secondary traumatic stress	Lack of psychological detachment
322-329	Impact of the pandemic or lockdown on the continuation of treatment provided to clients	Detrimental impact on clients' treatment
353-357	Using one's own experiences as therapeutic tools	Increase in self-disclosure
363-373	Uneven distribution of work led to tensions in the workforce	Impact of increased work on team dynamics
373-376	Tensions in the workforce due to increased workload and uneven distribution of work	Impact of increased work on team dynamics
384-395	Lack of support from the management	Lack of managerial support
398-401	Lack of support from the management	Lack of managerial support
410	The pandemic exacerbated the structural and management problems	Debunking management problems
436-443	Lack of recognition of employees' voice	Lack of managerial support

The Impact of Psychosocial Hazards during the COVID-19 Pandemic on the Psychological Wellbeing of Mental Health Professionals in the UK: A Mixed-Methods Study

Page 1: Participant Information

**PARTICIPANT INFORMATION DEPARTMENT OF
PSYCHOLOGY**

School of Social Sciences

Project Title: The Impact of Psychosocial Hazards during the COVID-19 Pandemic on the Psychological Wellbeing of Mental Health Professionals in the UK: A Mixed-Methods Study

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We would like to invite you to take part in a research study examining the association between your perceived working conditions and emotions at work and self-rated work-related attitudes and well-being. You have been invited to participate in this study, because you are a practitioner working in the field of mental health support and delivery of services in the UK. Before you begin, we would like you to understand why the

research is being done and what it involves for you.

What is the purpose of this study?

The aim of the present study is to understand the association between perceived working conditions and psychological wellbeing of mental health professionals during the COVID-19 pandemic.

The COVID-19 pandemic has had devastating consequences in terms of the [loss of human life](#) and the social and economic crisis evident from the rising numbers of cases of domestic violence ([UK Parliament Report, 2020](#)) and financial losses and unemployment ([Jones, Palumbo, & Brown, 2020](#)). This is likely to impact the mental health and wellbeing of the general population which is further likely to affect the work of mental health professionals. This challenge is likely to be exacerbated by the fact that there is a shortage of mental health professionals in the UK ([Migration Advisory Committee, 2019](#)) and the prevalence of common mental disorders is increasing on an annual basis, from 24% in 2007 to 39% in 2016 ([McManus, Bebbington, Jenkins, & Brugha, 2016](#)).

The shortage of staff, the emotionally taxing nature of the profession, and the additional challenges posed by the pandemic are likely to impact the workload of the existing personnel in mental healthcare which can affect their health and wellbeing. Research suggests that 40% of mental health professionals in the UK report high levels of depression ([British Psychological Society, 2018](#)) and over 70% are vulnerable to experiencing chronic levels of secondary traumatic stress ([Sodeke-Gregson, Holtum, & Billings, 2013](#)). Compromised psychological wellbeing of professionals can negatively impact the services they provide to their clients which can further impair the course and outcome of treatment. Therefore, the aim of this study is to explore the work-related factors associated with the psychological wellbeing of mental health professionals in the UK during the COVID-19 pandemic.

Why have I been invited?

You have been invited to take part in this study because your professional activities include working directly with clients in the area of mental health support and delivery of services.

Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part, you will be asked to agree to a consent form. You may change your mind about being involved at any time, or decline to answer a particular question. You are free to withdraw at any point before or during the study without giving a reason. If you decide to withdraw your

information after submitting the questionnaire, then you can do so by contacting the principal investigator via email at the email address provided above. You will not be

required to provide any reason and there will be no consequences for your withdrawal. However, kindly note that you can withdraw your submitted information latest by two weeks from the date you submit this questionnaire.

What will I be asked to do?

If you agree to participate, you will be asked to fill a consent form and provide your demographic details. To prevent disclosure of your identity, you will not be asked for your name and none of the information you provide will identify your place of work. However, you will be asked to provide your publically-available or work-based email address. The reason behind this is that the present research is a longitudinal study that aims to examine your psychological wellbeing over a period of time. To achieve this objective, you will receive a similar invitation to participate in a survey three months from now (that is, March 2021) and another invitation, three months after the second invitation (that is, July 2021). Your email address will be used to match your responses provided at three separate occasions. It allows the research team to gather concrete evidence that has the potential to influence policy decision-making. Also, a randomly selected group of participants will be contacted after the first survey to take part in an online interview.

After providing your demographic details, you will be redirected to an online survey that will take about 20-25 minutes to complete. The survey will ask you to provide some information about your occupation, the emotions you may experience at work, and the impact of the COVID-19 pandemic on your personal and professional wellbeing. It will also ask you to read some statements and report the extent to which those statements are applicable to you.

Will I get to know the findings of this study?

If you are interested in knowing the findings of this study, then do not hesitate in contacting the principal investigator at the email address given above. Please note that we will only be able to share the overall findings of this study and not your individual results. A summary of the results will also be shared with the professional body you are affiliated with.

Will the research be of any personal benefit to me?

We cannot promise that the study will help you, but the information we will get from this study may provide better insight into the nature and impact of this work on professionals working this area, and yield some future insights and recommendations for workplace health interventions to support mental health professionals.

Are there any possible disadvantages or risks in taking part?

We believe that it is very unlikely that the statements in the questionnaire will make you feel upset or distressed. However, if you feel upset or distressed during or after filling the questionnaire, then we encourage you to discuss your feelings or worries with your general practitioner (GP) or contact the “Samaritans of Nottingham” (anonymous 24/7 helpline (tel: 116 123, email: jo@samaritans.org)).

What will happen to the information I provide?

The information you provide will only be used for academic purposes. We will use it to examine the impact of COVID-19 pandemic on your work and its subsequent impact on your psychological wellbeing over a period of time. Your information will be completely anonymised that is, you cannot be identified via your responses. Only the principal investigator and co-investigators will have access to the data you provide. Also, your responses to questions will be encrypted and saved in a secure data archive.

Also, please note, that if you wish to withdraw your information then kindly contact the researcher, latest by two weeks after submitting your responses, at the email address provided above.

Under UK Data Protection laws, the University is the Data Controller (legally responsible for the data security) and the Chief Investigator of this study (named above) is the Data Custodian (manages access to the data). This means we are responsible for looking after your information and using it properly.

You can find out more about how we use your information and to read our privacy notice at: <https://www.ntu.ac.uk/m/library/supporting-researchers/research-data-management>.

The data collected for the study will be looked at and stored by the principal investigator and co-investigators from Nottingham Trent University, UK who are organising and conducting this study.

At the end of the project, all raw data will be kept securely by the University under the terms of its data protection policy. After ten years from now, the data will be disposed of securely.

If you have any questions or concerns, please don't hesitate to ask. We can be contacted at any time at the email addresses above.

Thank you for taking part!

Page 2: Participant Consent

1. I have read and understood the Participant Information.

Yes

No

2. I understand that I am free to withdraw from the study without giving a reason for doing so.

Yes

No

3. I understand that aggregated and non-identifiable data from this study might be used in academic research reports or publications.

Yes

No

4. I confirm that I am 18 years old or over.

Yes

No

5. I agree to participate in a survey about my emotions at work, work-related attitudes, and wellbeing.

Yes

No

Page 3: Demographic Information

6. Are you presently based in the UK?

Yes No

7. Kindly indicate your age by selecting an appropriate option below:

Less than or equal to 30 years 31-

40 years

41-50 years

51-60 years

61-70 years

More than 70 years

8. Kindly indicate your gender by selecting an appropriate option below:

Male

Female

Other

Prefer not to say

9. Kindly indicate your racial or ethnic group by selecting an appropriate option below:

- White
- Black Caribbean

- Black African
- Indian Pakistani
- Bangladeshi
- Chinese Middle
- Eastern Mixed
- Other
-

10. What is your highest educational qualification?

- High School/Professional Diploma Graduate
- Post-Graduate
- Doctorate
-

11. Kindly indicate your partnership status by selecting an appropriate option below:

- Married
- Partnered
- Single
- Separated
- Divorced
- Prefer not to say

12. Do you have any dependents (such as children or elder family members) to look after?

Yes No

13. If you answered yes to the previous question, then kindly indicate the number of dependents.

1

2

3

4

More than 4

14. Are you directly involved in providing mental health services to clients?

Yes No

15. Kindly indicate your occupation by selecting an appropriate option below:

Clinical Psychologist

Psychotherapist

Counsellor

Social Worker

16. Are you registered with the Health and Care Professions (HCPC) Council?

Yes No

17. Kindly indicate the occupational sector you work in by selecting an appropriate option below.

- Government hospital/clinic
- Private hospital/clinic Private
- practice

18. Kindly indicate your work experience in mental healthcare by selecting an appropriate option below:

- Less than 1 year
- 1-5 years
- 6-10 years
- 11-15 years
- 16-20 years
- More than 20 years

19. Kindly indicate your therapeutic approach in practice.

- Eye Movement Desensitization and Reprocessing Eclectic
- or Integrated therapy
- Cognitive therapy
- Behaviour therapy
-

- Psychodynamic therapy Solution
- Focused therapy Other
-

20. Do you work full-time or part-time?

- Full-time
- Part-time

21. Kindly indicate your average weekly caseload by selecting an appropriate option below:

- Less than or equal to 10 clients
- 11-20 clients
- 21-30 clients
- 31-40 clients
- More than 40 clients

22. Do you work with traumatized clients who are victims of physical or sexual abuse?

- Yes No
-

23. What is the percentage of traumatized clients on your caseload?

- Less than or equal to 10%

- 11-20%
- 21-30%
- 31-40%
- 41-50%
- More than 50%

24. How would you rate your general health and wellbeing in the past 30 days?

- Very Poor
- Poor
- Moderate
- Good Very
- Good

25. Kindly indicate the professional body you are affiliated with. *Required*

- National Counselling Society
- United Kingdom Council for Psychotherapy
- Division of Clinical Psychology, British Psychological Society

26. Kindly provide your publicly-available or work-based email address (it will not be shared with anyone and will be used to contact you to participate in two follow-up surveys).

27. Were you personally infected with coronavirus?

Yes No

28. If you answered yes to the previous question, then kindly indicate if you have recovered and resumed your practice now.

Haven't fully recovered

Have recovered but haven't resumed practice yet Have

recovered and resumed practice

29. Did you experience any personal loss (demise of a family member or friend) owing to the COVID-19 pandemic?

Yes No

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

30. I am happy.

- Never Rarely
- Sometimes
- Often
- Very Often
-

31. I am preoccupied with more than one person I help.

- Never Rarely
- Sometimes
- Often
- Very Often
-

32. I get satisfaction from being able to help people.

- Never
- Rarely

- Sometimes
- Often
- Very Often

33. I feel connected to others.

- Never Rarely
- Sometimes
- Often
- Very Often
-

34. I jump or am startled by unexpected sounds.

- Never Rarely
- Sometimes
- Often
- Very Often
-

35. I feel invigorated after working with those I help.

- Never Rarely
- Sometimes
- Often
- Very Often
-

36. I find it difficult to separate my personal life from my life as a mental health professional.

- Never Rarely
- Sometimes
- Often
- Very Often
-

37. I am not as productive at work because I am losing sleep over traumatic experiences of a person I help.

- Never Rarely
- Sometimes
- Often
- Very Often
-

38. I think that I might have been affected by the traumatic stress of those I help.

- Never Rarely
- Sometimes
- Often
- Very Often
-

39. I feel trapped by my job as a mental health professional.

- Never Rarely
- Sometimes
- Often
- Very Often
-

40. Because of my work, I have felt "on edge" about various things.

- Never Rarely
- Sometimes
- Often
- Very Often
-

41. I like my work as a mental health professional.

- Never Rarely
- Sometimes
- Often
- Very Often
-

42. I feel depressed because of the traumatic experiences of the people I help.

- Never

- Rarely
- Sometimes
- Often
- Very Often

43. I feel as though I am experiencing the trauma of someone I have helped.

- Never Rarely
- Sometimes
- Often
- Very Often
-

44. I have beliefs that sustain me.

- Never Rarely
- Sometimes
- Often
- Very Often
-

45. I am pleased with how I am able to keep up with mental healthcare techniques and protocols.

- Never Rarely
- Sometimes
-

- Often Very
- Often

46. I am the person I always wanted to be.

- Never Rarely
- Sometimes
- Often
- Very Often
-

47. My work makes me feel satisfied.

- Never Rarely
- Sometimes
- Often
- Very Often
-

48. I feel worn out because of my work as a mental health professional.

- Never Rarely
- Sometimes
- Often
- Very Often
-

49. I have happy thoughts and feelings about those I help and how I could help them.

- Never Rarely
- Sometimes
- Often
- Very Often
-

50. I feel overwhelmed because my case [work] load seems endless.

- Never Rarely
- Sometimes
- Often
- Very Often
-

51. I believe I can make a difference through my work.

- Never Rarely
- Sometimes
- Often
- Very Often
-

52. I avoid certain activities or situations because they remind me of frightening experiences of the people I help.

- Never Rarely
- Sometimes
- Often
- Very Often
-

53. I am proud of what I can do to help.

- Never Rarely
- Sometimes
- Often
- Very Often
-

54. As a result of my helping, I have intrusive, frightening thoughts.

- Never Rarely
- Sometimes
- Often
- Very Often
-

55. I feel "bogged down" by the system.

- Never Rarely
- Sometimes
-

Often Very

Often

56. I have thoughts that I am a "success" as a mental health professional.

Never Rarely

Sometimes

Often

Very Often

57. I can't recall important parts of my work with trauma victims.

Never Rarely

Sometimes

Often

Very Often

58. I am a very caring person.

Never Rarely

Sometimes

Often

Very Often

59. I am happy that I chose to do this work.

- Never Rarely
- Sometimes
- Often
- Very Often
-

Page 6: Characteristics of Work

Below are some questions about the characteristics of your work, your relations with your colleagues and supervisor, and your experiences at your workplace. Respond to each question by selecting the most appropriate option. **Private practitioners are requested to only answer the questions applicable to them.**

60. How often do you not have time to complete all your work tasks?

- Always Often
- Sometimes
- Seldom
- Never/hardly ever
-

61. Do you get behind with your work?

- Always Often
- Sometimes
- Seldom
- Never/hardly ever
-

62. Do you have to work very fast?

Always Often

Sometimes

- Seldom Never/hardly
- ever

63. Do you work at a high pace throughout the day?

- To a very large extent To a
- large extent Somewhat
- To a small extent
- To a very small extent
-

64. Does your work require that you remember a lot of things?

- Always Often
- Sometimes
- Seldom
- Never/hardly ever
-

65. Does your work demand that you are good at coming up with new ideas?

- Always Often
- Sometimes
- Seldom
- Never/hardly ever
-

66. Does your work require you to make difficult decisions?

- Always Often
- Sometimes
- Seldom
- Never/hardly ever

67. Does your work put you in emotionally disturbing situations?

- Always Often
- Sometimes
- Seldom
- Never/hardly ever

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

- Always Often
- Sometimes
- Seldom
- Never/hardly ever

69. Is your work emotionally demanding?

- To a very large extent

- To a large extent
- Somewhat
- To a small extent
- To a very small extent

70. Are you required to treat everyone equally, even if you do not feel like it?

- Always Often
- Sometimes
- Seldom
- Never/hardly ever
-

71. Does your work require that you hide your feelings?

- To a very large extent To a
- large extent Somewhat
- To a small extent
- To a very small extent
-

72. Are you required to be kind and open towards everyone – regardless of how they behave towards?

- To a very large extent To a
- large extent Somewhat
-

- To a small extent
- To a very small extent

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

- Always Often
- Sometimes
- Seldom
- Never/hardly ever
-

74. Can you influence the amount of work assigned to you?

- Always Often
- Sometimes
- Seldom
- Never/hardly ever
-

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

- To a very large extent To a
- large extent Somewhat
- To a small extent
- To a very small extent
-

76. Do you have any influence on HOW you do your work?

- Always Often
- Sometimes
- Seldom
- Never/hardly ever
-

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

- To a very large extent To a
- large extent Somewhat
- To a small extent
- To a very small extent
-

78. Can you use your skills or expertise in your work?

- To a very large extent To a
- large extent Somewhat
- To a small extent
- To a very small extent
-

79. Can you leave your work to have a chat with a colleague?

- Always

- Often
- Sometimes
- Seldom
- Never/hardly ever

80. Do you have to do overtime?

- Always Often
- Sometimes
- Seldom
- Never/hardly ever
-

81. Is your work meaningful?

- To a very large extent To a
- large extent Somewhat
- To a small extent
- To a very small extent
-

82. Do you feel that the work you do is important?

- To a very large extent To a
- large extent Somewhat
- To a small extent
-

To a very small extent

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

To a very large extent To a

large extent Somewhat

To a very small extent To

a small extent

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

To a very large extent To a

large extent Somewhat

To a small extent

To a very small extent

85. Is your work recognized and appreciated by the management?

To a very large extent To a

large extent Somewhat

To a small extent

To a very small extent

86. Are you treated fairly at your workplace?

- To a very large extent To a
- large extent Somewhat
- To a small extent
- To a very small extent
-

87. Does your work have clear objectives?

- To a very large extent To a
- large extent Somewhat
- To a small extent
- To a very small extent
-

88. Do you know exactly which areas are your responsibility?

- To a very large extent To a
- large extent Somewhat
- To a small extent
- To a very small extent
-

89. Are contradictory demands placed on you at work?

- To a very large extent

- To a large extent
- Somewhat
- To a small extent
- To a very small extent

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

- To a very large extent To a
- large extent Somewhat
- To a small extent
- To a very small extent
-

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

- To a very large extent To a
- large extent Somewhat
- To a small extent
- To a very small extent
- I do not have a superior
-

92. To what extent would you say that your immediate superior is good at solving conflict?

- To a very large extent

- To a large extent
- Somewhat
- To a small extent
- To a very small extent
- I do not have a superior

93. How often is your immediate superior willing to listen to your problems at work, if needed?

- Always Often
- Sometimes
- Seldom
- Never/hardly ever
- I do not have a superior
-

94. How often do you get help and support from your immediate superior, if needed?

- Always Often
- Sometimes
- Seldom
- Never/hardly ever
- I do not have a superior
-

95. How often does your immediate superior talk with you about how well you carry out your work?

- Always Often
- Sometimes
- Seldom
- Never/hardly ever
- I do not have a superior

96. How often do you get help and support from your colleagues, if needed?

- Always Often
- Sometimes
- Seldom
- Never/hardly ever
- I do not have colleagues

97. How often are your colleagues willing to listen to your problems at work, if needed?

- Always Often
- Sometimes
- Seldom
- Never/hardly ever
- I do not have colleagues

98. How often do your colleagues talk with you about how well you carry out your work?

- Always Often
- Sometimes
- Seldom
- Never/hardly ever
- I do not have colleagues
-

99. Is there a good atmosphere between you and your colleagues?

- Always Often
- Sometimes
- Seldom
- Never/hardly ever
- I do not have colleagues
-

100. Is there good co-operation between the colleagues at work?

- Always Often
- Sometimes
- Seldom
- Never/hardly ever
- I do not have colleagues
-

101. Do you feel part of a community at your place of work?

- Always Often
- Sometimes
- Seldom
- Never/hardly ever
- I do not have colleagues
-

102. Are you worried about becoming unemployed?

- To a very large extent To a
- large extent Somewhat
- To a small extent
- To a very small extent
-

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

- To a very large extent To a
- large extent Somewhat
- To a small extent
- To a very small extent
-

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

- To a very large extent

- To a large extent
- Somewhat
- To a small extent
- To a very small extent

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

- Very satisfied
- Satisfied
- Neither/nor
- Unsatisfied Very
- unsatisfied

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

- To a very large extent To a
- large extent Somewhat
- To a small extent
- To a very small extent
-

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

- To a very large extent To a
- large extent

- Somewhat
- To a small extent
- To a very small extent

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

- To a very large extent To a
- large extent Somewhat
- To a small extent
- To a very small extent
-

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

- To a very large extent To a
- large extent Somewhat
- To a small extent
- To a very small extent
-

110. Are conflicts resolved in a fair way?

- To a very large extent To a
- large extent Somewhat
- To a small extent
- To a very small extent
-

111. Is the work distributed fairly?

- To a very large extent To a
- large extent Somewhat
- To a small extent
- To a very small extent
-

112. Have you been exposed to threats of violence (from a client) at your workplace during the last 12 months?

- Yes, daily Yes,
- weekly Yes,
- monthly
-
- Yes, a few times
- No

113. Have you been exposed to physical violence (from a client) at your workplace during the last 12 months?

- Yes, daily Yes,
- weekly Yes,
- monthly
-
- Yes, a few times
- No

114. How well does this descriptions fit on you as a person? "I am always able to solve difficult problems, if I try hard enough."

- Fits perfectly
- Fits quite well
- Fits a little bit
- Does not fit

115. How well does this descriptions fit on you as a person? "I feel confident that I can handle unexpected events."

- Fits perfectly
- Fits quite well
- Fits a little bit
- Does not fit

Page 7: Survey Completed

Thank you for completing the survey.

If you felt upset or distressed while filling the questionnaire, then we encourage you to discuss your feelings or worries with your general practitioner (GP) or contact the “Samaritans” (anonymous 24/7 helpline (tel: 116 123, email: jo@samaritans.org)).

If you decide to withdraw you the information you have shared in this survey then kindly send an email to the principal investigator at jasmeet.singh2019@my.ntu.ac.uk. You can withdraw your information latest by two weeks from today. You do not have to state any reason and there will be no consequences for your withdrawal.

Appendix F: Impact of Covid-19 Pandemic on Doctoral Project

The original aim of current doctoral project was to conduct a systematic review and a mixed-methods study to investigate the occupational risk and preventative factors associated with compassion fatigue in mental health professionals (clinical psychologists, counsellors, and psychotherapists) practicing in the UK. The systematic review synthesised and critically analysed empirical literature on this topic area. However, due to unprecedented challenges posed by the COVID-19 pandemic, the plan to conduct a mixed-methods study had to be significantly altered. The pragmatic reasons which led to this decision are discussed below.

A pertinent methodological limitation in extant research highlighted in the second chapter of this thesis was a dearth of longitudinal studies on compassion fatigue in mental health professionals. Therefore, one of the aims of this doctoral project was to fill this gap in the literature by conducting a longitudinal study with three waves of data collection (the duration of each wave was four weeks) separated by a gap of three months each on job demands and job resources associated with compassion fatigue in UK-based clinical psychologists, counsellors, and psychotherapists. Since longitudinal studies are generally considered methodologically more rigorous than cross-sectional studies (Taris & Kompier, 2014; Neuman, 2014) and because it would have aided the clarification of temporal relations between burnout and secondary traumatic stress dimensions of compassion fatigue (Stamm, 2010) which so far have only been examined by one empirical study in literature (Shoji et al., 2015), the prospect of conducting a longitudinal study on this construct and occupational group appeared plausible. To pursue this idea further, five professional bodies of mental health professionals were contacted by email in August 2020. Three of them – the Division of Clinical Psychology (DCP) of the British Psychological Society (BPS), the National Counselling Society (NCS), and the United Kingdom Council for Psychotherapy (UKCP) – expressed interest in formulating a research collaboration. In a series of meetings with representatives from these bodies, the

research proposal, sampling strategy, the research questionnaire (included in appendix E (p. 337)), and general terms and conditions of research collaboration were discussed and agreed. The research questionnaire comprised of items from the middle form of Copenhagen Psychosocial Questionnaire (COPSOQ III; Burr et al., 2019) and the Professional Quality of Life Scale Version 5 (ProQOL 5; Stamm, 2010) in addition to socio-demographic items and two self-constructed items for assessing the impact of COVID-19 pandemic on general physical and psychological health and wellbeing.

It was agreed with professional bodies that whilst the questionnaire was to be shared with all their members, the main population of interest was employees (i.e., those working full-time or part-time in public or private mental health organisations). The decision to also share the questionnaire with private practitioners (i.e., self-employed professionals) however was taken because of five practical reasons. First, professional bodies mentioned that it was not practically possible to share the questionnaire with only employees because their list servers included all members irrespective of their work settings. Second, a large proportion of members of professional bodies worked in hybrid settings (i.e., they were employed by an organisation but also worked as private practitioners in their own time). Third, it would permit the assessment of burnout, secondary traumatic stress, and compassion satisfaction in private practitioners in the midst of a pandemic which would facilitate the development of constructive executive reports for included professional bodies. Fourth, representatives from professional bodies shared that employees constitute a large percentage of their membership rotas indicating that it was possible to collect data from a representative sample of target population. Fifth, some job demands and job resources assessed by COPSOQ III (Burr et al., 2019) such as cognitive demands, emotional demands, demand for hiding emotions, meaning of work, and social support from supervisor among others were deemed applicable to both employees as well as private practitioners. Thus, including private practitioners would have allowed the examination

of at least one longitudinal model comprising of variables applicable to both the professional groups. In light of these reasons, the target population included both employees as well as private practitioners with the caveat that two separate empirical models would be examined in data analysis: one comprising of variables applicable to both the groups and the other including only employees and relevant variables. It is also important to highlight that the research questionnaire explicitly identified some items as non-applicable to private practitioners.

The first wave of data collection commenced in November 2020 however, by the end of it, the total number of mental health professionals who completed the questionnaire was 165. This was less than the expected sample size by a large margin. Representatives from each professional body mentioned that their annual surveys were completed by approximately 700-800 professionals. Thus, with collaboration with three professional bodies bearing in mind the challenges imposed by national lockdowns and the second wave of pandemic and the anticipated rate of attrition in succeeding waves of data collection, the expected sample size for the first wave was 800 – 1000 participants. However, the actual sample size was only 20% of the lower limit of anticipated sample size. Thus, to mitigate the likelihood of an extremely small sample by the third wave of data collection which would have presented additional challenges for data analysis, the time period for the first wave of data collection was extended by two weeks. Representatives from professional bodies were requested to share the research invitation one more time with their members however, it yielded only modest results. The sample size increased to 183 participants which was also not sufficient to conduct a longitudinal study. Thus, after consultation with supervisors and representatives from professional bodies, the plan of conducting a longitudinal investigation was substituted with a cross-sectional study with an extended period of data collection terminating on 31st May 2021.

Following data collection, the total sample comprised of 366 professionals. However, it was observed during the phase of data cleaning that collected data were highly problematic. It was

skewed in terms of representation of professionals from varied work settings – the percentage of private practitioners (81.15%) exceeded that of employees (16.94%) thus, a large majority of work-related variables could not be examined.⁵¹ In addition, the proportion of missing data for items in COPSOQ III (Burr et al., 2019) was so large (>50%) that no missing data imputation technique could be used. Thus, the only remaining viable option was to utilise responses to items in ProQOL 5 scale (Stamm, 2010) to conduct a psychometric study and follow it with a phenomenological study on professionals’ occupational experiences during the pandemic. The psychometric study utilised a novel technique in network psychometrics to explore the structure of ProQOL 5 (Stamm, 2010) in a sample of UK-based mental health professionals and the qualitative study explored the experiences of those professionals during the first and second waves of COVID-19 pandemic.

⁵¹ The reason behind low rate of participation from employees became apparent after conducting the qualitative study (chapter four). NHS employees who were interviewed for the study stated that their workload increased unexpectedly during the second wave of pandemic which coincided with the first wave of data collection for quantitative study (November 2020 – March 2021). Thus, they were likely much busier during that time period and less likely to respond to research invitation.