What impact does working with trauma have on psychological therapists and what are the contributing factors?

Catherine Corker

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The candidate confirms that the work submitted is his/her own and that appropriate credit has been given where reference has been made to the work of others.

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1. Abstract

Psychological therapists working with service users presenting with trauma can be negatively and positively affected by their work. Client factors, therapist factors and work factors are thought to contribute to therapists' reactions however there are gaps in the research. To address this, the present study investigated the well-being of psychological therapists to test whether i) when working with complex Post-traumatic Stress Disorder (PTSD), perceived personal resilience and the supervisory relationship were associated with compassion satisfaction, burnout and secondary traumatic stress, and ii) perceived personal resilience and the supervisory relationship moderated the relationship between working with complex PTSD and compassion satisfaction, burnout and secondary traumatic stress.

Data from 298 psychological therapists was collected via an online questionnaire. Participants completed measures of resilience (Brief Resilience Scale), the supervisory relationship (safe base subscale of the Short-Supervisory Relationship Questionnaire), compassion satisfaction, burnout and secondary traumatic stress (Professional Quality of Life Scale). Demographic and background information was also collected. Multiple regression and analysis of variance were used to explore the associations between the variables and interaction effects.

Results showed a trend towards working with complex PTSD being associated with higher burnout and a significant association between working with complex PTSD and secondary traumatic stress. Perceived personal resilience was significantly positively associated with compassion satisfaction and significantly negatively associated with burnout and secondary traumatic stress once complex PTSD was controlled for. The quality of the supervisory relationship was significantly positively associated with compassion satisfaction and significantly

negatively associated with burnout once complex PTSD was controlled for. There was a trend towards the supervisory relatonship being associated with lower levels of secondary traumatic stress. The supervisory relationship also significantly interacted with the relationship between working with complex PTSD and compassion satisfaction. There was a trend towards an interaction effect between complex PTSD and the supervisory relationship on secondary traumatic stress. These findings suggest that client factors, clinician factors and work factors may affect psychological therapists' responses to their work.

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Abbreviations

BRS	Brief Resilience Scale
BABCP	British Association of Behavioural and Cognitive Psychotherapies
Complex PTSD	Complex Post-traumatic Stress Disorder
DSM-5	Diagnostic and Statistical Manual of Mental Disorders: Fifth Edition
HRA	Health Research Authority
ICD-11	International Classification of Diseases: 11th Revision
NHS	National Health Service
PIS	Participant Information Sheet
ProQOL	Professional Quality of Life
PTSD	Post-traumatic Stress Disorder
SD	Standard Deviation
SRQ	Supervisory Relationship Questionnaire
S-SRQ	Short Supervisory Relationship Questionnaire

2. Introduction

2.1 Personal relevance and background to the study

Prior to gaining a place on the clinical psychology doctorate I worked as a Cognitive Behaviour Therapist in a specialist NHS service for military veterans. The majority of my clinical work involved working with service users presenting with multiple traumas as a result of their time in the armed forces. Some service users also presented with childhood trauma. I found this work difficult at times but also extremely rewarding and I was frequently in awe of how resilient human beings are in the face of unimaginable situations and experiences. During my time with the service I reflected on the impact of the clinical work and on my personal reactions to being exposed to detailed trauma narratives. Supervision was particularly important to me during this role and I was thankful to have supportive relationships with both my clinical supervisor and my line manager in which I felt able to be open and honest about my responses to the work. In addition, I consider myself to be reasonably resilient and began to wonder if personal resilience affected my reactions to my clinical work. My experiences during this role inspired the presented research.

The present study aimed to build upon previous research by investigating the association between compassion satisfaction, compassion fatigue, working with service users presenting with complex PTSD, perceived personal resilience and the supervisory relationship. The following introduction sets the context of this study by providing definitions of PTSD and complex PTSD and presenting the prevalence rates of trauma. Subsequently, a literature review of the current research base regarding the potential impact of working with trauma will be presented including the definitions of compassion satisfaction and compassion fatigue utilised in this

study. The methodology will be presented followed by the results of this study. This piece concludes with a discussion of the findings and their implications. I hope this study will add to the research base on the impact of working with traumatised populations and will be clinically useful for psychological therapists, clinical supervisors and service managers.

2.2 Prevalence and incidence of trauma

Research indicates that most people will experience a traumatic event in their lifetime and those who report trauma are likely to have experienced multiple traumatic events (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995; Kessler, 2000). Research conducted in the USA found a lifetime prevalence rate for PTSD of 7.8%; this increased to 10.4% for women and reduced to 5% for men (Kessler et al., 1995). In addition, Kessler et al (1995) found that the risk of developing PTSD following exposure to a traumatic event is 8.1% for men and 20.4% for women. Much of the research regarding prevalence and incidence of PTSD has taken place outside of the UK limiting applicability of the findings to British populations. However, in 2007 the Adult Psychiatric Morbidity Survey, conducted in England, found that 3% of adults met the criteria for current PTSD and 42.2% reported experiencing at least one traumatic event in their lifetime (McManus, Meltzer, Brugha, Bebbington, & Jenkins, 2009). It should be noted though, that surveys of this nature may underestimate the incidence of PTSD in some communities (Frissa, Hatch, Gazard, Fear, & Hotopf, 2013).

2.3 Post-Traumatic Stress Disorder (PTSD) and Complex Post-Traumatic Stress Disorder (complex PTSD)

Traumatic experiences can be categorised as either Type I or Type II traumas. Clinicians working in this field recognise that Type I and Type II trauma are distinctly different both in terms of the nature of the traumatic events and the resulting symptoms (Cloitre et al, 2011). Type I trauma is described as a discrete, unexpected event involving threat to oneself or others and can result in PTSD (Lee, 2015). Whereas Type II trauma, often termed complex trauma, is described as repeated, inescapable anticipated trauma which can result in complex PTSD (Herman, 1992).

2.3.1 Post-Traumatic Stress Disorder (PTSD)

Post-traumatic stress disorder (PTSD), as defined by the DSM-5 (Diagnostic and Statistical Manual of Mental Disorders), encompasses four symptom clusters which must have been present for more than one month following exposure to threatened or actual death, serious injury, or sexual violence. The symptoms are as follows:

- Re-experiencing: recurrent involuntary distressing memories and/or dreams of the traumatic event, flashbacks during which the individual may feel or act like the traumatic event is reoccurring, intense or prolonged psychological distress and/or a physiological response when exposed to internal or external cues which resemble an aspect of the trauma.
- Avoidance: persistent avoidance of stimuli associated with the traumatic event such as avoidance of or efforts to avoid distressing memories, thoughts or feelings associated with the event and/or avoidance of external reminders of the event.

- Negative alterations in cognitions and mood beginning or worsening following the traumatic event: inability to remember important aspects of the traumatic event, persistent negative beliefs about oneself or the world, persistent distorted blame of oneself or others, persistent emotions related to the trauma (fear, guilt, horror), diminished interest in significant activities, feeling alienated from others and/or constricted affect.
- Alterations in arousal and reactivity: irritable or aggressive behaviour, self-destructive or reckless behaviour, hypervigilance, exaggerated startle response, difficulties concentrating and/or sleep disturbance (American Psychiatric Association, 2013).

2.3.2 Complex Post-traumatic Stress Disorder (complex PTSD)

Complex PTSD has yet to be recognised as a formal psychiatric diagnosis although it is thought that the forthcoming ICD-11 (International Classification of Diseases) will address this (McFetridge, et al., 2017). There is recognition within the literature that complex PTSD is a distinctly different presentation to PTSD although there remains discrepancies with regards to the definition of complex PTSD (Cloitre, et al, 2011; Lee, 2015). It has been suggested that complex PTSD is age-related and may develop if an individual is exposed to trauma during key developmental stages (Landes, Garovoy, & Burkman, 2013; Karatzias, Jowett, Begley, & Deas, 2016). Some research supports this suggestion indicating that traumatic events have a greater effect during childhood and those who experience trauma in adulthood are more likely to develop PTSD as opposed to complex PTSD (van der Kolk, Roth, Pelcovitz, Sunday, & Spinazzola, 2005). Others argue that repeated trauma, regardless of age, can have a similarly detrimental effect on adults (Landes et al, 2013; Herman, 1992; Courtois, 2004; Lee, 2015). It is theorised that trauma

occurring over long periods of time and involving entrapment may result in complex PTSD (Courtois, 2004; Lee, 2015; Maercker, et al, 2013). There is growing evidence to support this assertion; the symptoms associated with complex PTSD have been identified in populations exposed to combat, torture, domestic violence and political unrest (De Jong, Komproe, Spinazzola, van der Kolk, & Van Ommeren, 2005; Hinton and Lewis-Fernandez, 2011; Morina & Ford, 2009).

Maercker et al (2013) define complex PTSD as: "A disorder which arises after exposure to a stressor typically of an extreme or prolonged nature and from which escape is difficult or impossible. The disorder is characterised by the core symptoms of PTSD as well as the development of persistent and pervasive impairments in affective, self and relational functioning, including difficulties in emotion regulation, beliefs about oneself as diminished, defeated or worthless, and difficulties in sustaining relationships" (Maercker et al, 2013, p. 200). Maercker et al's (2013) definition was used in the current study due to the emphasis on the symptom profile, due to the definition being based on research and the opinions of expert clinicians and due to the research being conducted as part of ICD-11 Working Group (Maercker et al, 2013; Cloitre et al, 2013; Cloitre et al, 2011). In addition, initial investigations suggest good construct validity and that complex PTSD is a clinically relevant diagnosis however, the research is in its infancy (Knefel & Lueger-Schuster, 2013; Hyland et al, 2017).

The UK Psychological Trauma Society recently released guidelines for the treatment of complex PTSD; Cognitive Behaviour Therapy, Prolonged Exposure, Eye Movement Desensitisation and Reprocessing, and Narrative Exposure Therapy were included as potential treatment approaches (McFetridge et al, 2017). All of these approaches involve the service user and therapist discussing the traumatic events in detail, although the level of detail will vary depending on the therapeutic

approach. Therefore, psychological therapists working with service users presenting with complex PTSD are exposed to the traumatic narratives of their clients. I also suggest that therapists' who are not engaging in trauma focused work will still be exposed to the trauma narratives of their clients by reading case notes, engaging in case discussions and they will also bear witness to the distressing symptoms associated with complex PTSD.

As discussed, although complex PTSD is not yet a recognised diagnosis, many of those working in this field suggest that complex PTSD is distinctly different from PTSD (Courtois, 2004; Cloitre et al, 2011; Maercker et al, 2013). Therefore, psychological therapists working with service users presenting with complex PTSD may respond in distinctly different ways to those working with individuals with PTSD. However, there is little research regarding how working with varying degrees of trauma complexity affects psychological therapists. To my knowledge, no research has investigated the association between working with complex PTSD, as defined by the forthcoming ICD-11, and compassion satisfaction and compassion fatigue. The present research addressed this gap in the literature and also investigated the relationship between perceived personal resilience, the supervisory relationship and compassion satisfaction and compassion fatigue.

3. Literature Review

It is widely recognised by professional bodies and associations that exposure to service users' traumatic narratives can have a significant impact on psychological therapists (American Psychological Association, 2015; McFetridge et al, 2017). The literature regarding the relationship between working with service users presenting with trauma and the well-being of psychological therapists will be presented. A range of concepts have been developed to describe the potential positive and negative effects of working with trauma; these concepts will be explored with a particular emphasis on the concepts investigated within the current research; compassion satisfaction and compassion fatigue. Consideration will be given to the client, clinician and work factors associated with these variables. Due to the nature of this study particular consideration will be given to the current evidence base regarding perceived personal resilience, clinical supervision, compassion satisfaction and compassion fatigue.

3.1 Search Strategy

The following review utilised a literature search to retrieve an overview of the research on compassion satisfaction, compassion fatigue among psychological therapists. The searches were conducted using relevant terminology, including terms which are used interchangeably within the literature (vicarious trauma, secondary traumatic stress and burnout). Electronic literature searches were conducted to review the extent to which these concepts are discussed within the literature. Searches were conducted using Ovid Online: PsycInfo, Ovid Medline and Psyc Articles. Three separate searches were run to identify literature on i) compassion satisfaction and compassion fatigue, ii), compassion satisfaction, compassion fatigue and personal resilience and iii) compassion satisfaction, compassion fatigue and

clinical supervision. The searches returned 630 papers. The papers were screened for suitability by reviewing the titles and abstracts (see Appendix 1 for search strategy). A systematic research review was beyond the scope of this thesis.

3.2 Theoretical concepts used to measure the positive effects of working with trauma

There is growing interest and research in to the psychological well-being of clinicians working with service users who have been exposed to traumatic events (Figley, 1995; McCann & Pearlman, 1990; Pearlman & Mac Ian, 1995; Herman, 1992; Craig & Sprang, 2010; Sodeke-Gregson, Holttum, & Billings, 2013). Much of the research to date has focused on the detrimental impact of working within the helping professions. However, a shift in perspective has occurred over recent years and there has been acknowledgement of the beneficial effects (Radey & Figley, 2007). The positive psychology movement appears to have contributed to this literature and the terms post-traumatic growth, vicarious resilience and compassion satisfaction, which describe the positive effects of working with trauma, have emerged as a result (Linley & Joseph, 2007). Vicarious post-traumatic growth refers to the inspiration psychological therapists derive from hearing traumatic narratives of clients; it is suggested this work may result in a change in clinicians' world perspective and may improve a therapist's relationships with their significant others (Calhoun & Tedeschi, 1999). Vicarious resilience is defined as personal growth which results from working with service users presenting with trauma and witnessing their resilience (Hernandez, Gangsei, & Engstrom, 2007).

Compassion satisfaction was studied within the presented research and refers to the impact of emotional engagement and compassionate helping (Larsen & Stamm, 2008). Stamm (2002) coined the term compassion satisfaction and proposed that the negative effects of caring cannot be fully understood without understanding

the “positive payments” which transpire from caring for others. Compassion satisfaction is defined as the pleasure derived from being able to work effectively. For example, a healthcare professional may experience positive feelings regarding their ability to help others and to contribute to the service they work within or wider society (Stamm, 2010). Compassion satisfaction contributes to overall professional quality of life of helping professionals and does not preclude clinicians from also experiencing the detrimental effects of working with trauma. Personal factors such as affect and self-care, and service factors such as work resources are thought to contribute to compassion satisfaction (Radey & Figley, 2007). I chose to explore compassion satisfaction in the current study because it is not unique to clinicians working with trauma therefore comparisons can be made with other clinical specialities.

3.3 Prevalence of compassion satisfaction

A recent study indicated that over half of participating psychological therapists scored within the average range for compassion satisfaction (53.2%) and 38.8% scored highly (Sodeke-Gregson et al, 2013). Similarly, Craig and Sprang (2010) found that 46% of participating clinicians reported high levels of compassion satisfaction. However, neither of these studies included a definition of complex PTSD which limits our understanding of the link between working with complex PTSD and compassion satisfaction.

3.4 The helpful effects of working with trauma

3.4.1 Personal impact

Hyatt-Burkhart’s (2014) qualitative study concluded that trauma workers experience an improvement in their personal lives as a result of their work including becoming more patient, open-minded and appreciative of their lives. Overall this

work is thought to result in personal growth and satisfaction (Hyatt-Burkhart, 2014). This study focused specifically on working with children and adolescents and the mechanisms by which personal growth occurs is not clear although previous research has found similar results (Arnold, Calhoun, Tedeschi, & Cann, 2005). A review of the literature supports the view that working with trauma can have positive effects; it was concluded that being exposed to growth and resilience of trauma survivors is particularly powerful and that this work can prompt workers to reflect on their own lives and values, facilitating a new found appreciation of day to day experiences (Cohen & Collins, 2013).

3.4.2 Professional impact

The benefits of working with trauma are not limited to a therapist's personal life; research suggests that a therapist's clinical work can also benefit and working with trauma can result in increased faith in the therapeutic process and increased efficacy (Lonergan, O'Halloran, & Crane, 2004). Edelkott, Engstrom, Hernandez-Wolfe and Gangsei (2016) interviewed therapists working with torture survivors concluding that this work can result in a change in perspective and clinical skills. Trauma workers reported feeling more able to let the client take the lead, drew on a wide range of therapeutic models, recognised the importance of spirituality and some indicated a preference for strength based clinical approaches (Edelkott et al, 2016). Although the results of this study cannot be generalised to working with other populations, it appears to indicate that working with complex PTSD may be associated with positive effects.

To summarise, research has found that trauma workers report improvements in their personal and professional lives. However, it is helpful to note that there is a lack of quantitative empirical research in this area, the mechanisms by which the

positive effects occur remain unknown and to my knowledge no longitudinal research has been conducted which limits our understanding of how, why and when the positive effects of working with trauma occur.

3.5 Theoretical concepts used to measure the negative effects of working with trauma

Various terms have been coined to describe undesirable clinician reactions to working with traumatised service users. Vicarious trauma was described by McCann and Pearlman (1990) as alterations in the schemas and beliefs of clinician's due to working with individuals who have been exposed to traumatic events. Secondary Traumatic Stress was defined by Figley (1995) as "the natural consequent behaviours and emotions resulting from knowing about a traumatizing event experienced by a significant other-the stress resulting from helping or wanting to help a traumatized or suffering person" (Figley, 1995, p. 7). Symptoms of secondary traumatic stress include re-experiencing, avoidance and anxiety (Figley, 1995). Burnout is a well-established and widely used concept which has been found to be prevalent among trauma therapists. Burnout has been defined as reduced accomplishment and the loss of capacity to provide contributions which have a meaningful impact in the workplace (Schaufeli, Leiter, & Maslach, 2009). This conceptualisation of burnout suggests situational factors such as: job characteristics, occupational characteristics and organisational characteristics, and individual factors such as: demographic characteristics, personality characteristics and job attitudes contribute to burnout (Maslach, Schaufeli, & Leiter, 2001). It is described as an individual experience of stress in response to emotional and interpersonal factors specific to occupation and is not limited to working with service users who have experienced trauma (Maslach & Goldberg, 1998).

More recently, the term compassion fatigue has been coined to describe the potential consequences of empathic helping. Compassion fatigue was initially suggested as an alternative label for secondary traumatic stress and deemed more user friendly (Figley, 1995). Figley (1995) highlighted that “there is a cost to caring” (Figley, 1995, p.1) and compassion fatigue results in a similar presentation to PTSD (Figley, 1995). Over the years the concept of compassion fatigue has evolved. It has been suggested that compassion fatigue is a more generic presentation occurring in response to empathic practices; whereas secondary traumatic stress and vicarious trauma occur specifically in response to working with trauma survivors (Sabin-Farrell & Turpin, 2003). Compassion fatigue has been described as a care givers reduced interest or ability to be empathic towards service users (Adams, Boscarino, & Figley, 2006). More recently Stamm (2010) conceptualises compassion fatigue as the combined impact of secondary traumatic stress and burnout suggesting the following symptoms can emerge: fear, sleep difficulties, intrusive images, avoiding reminders of the traumatic events, exhaustion, frustration, anger and depression (Stamm, 2010). The latter definition was the subject of investigation within the presented study due to it not being limited to those working with trauma survivors.

The term compassion fatigue is often used interchangeably with secondary traumatic stress and vicarious trauma and there is a lack of clarity within the literature regarding an agreed terminology. There have been attempts to clarify the similarities and the differences between these terms however, overlap and lack of conceptual difference has been confirmed and there remains a lack of evidence suggesting that vicarious trauma, secondary traumatic stress and compassion fatigue are distinctly different concepts with some suggesting they are equivocal (Arvay, 2001; Jenkins & Baird, 2002; Baird & Kracen, 2006). There has been a lack of research in to the empirical differences and similarities of these concepts (Cieslak et

al, 2014). Due to the considerable number of studies using varying terminology and the lack of clarity regarding which processes are being researched the literature on secondary traumatic stress, vicarious trauma, compassion fatigue and burnout has been reviewed. I will use the term compassion fatigue when referring to the deleterious effects of working with trauma however, when citing specific research, I will use the terminology used by the authors.

3.6 Prevalence of compassion fatigue

Sodeke-Gregson et al's (2013) study indicated that psychological therapists working in secondary care services and trauma services reported high levels of compassion fatigue, and particularly endorsed questions associated with fear, intrusion, sleep difficulties and avoidance, with 70% scoring highly. In comparison, an earlier study found that just 5% of participants scored above the recommended cut-off for compassion fatigue (Craig & Sprang, 2010). However, this study was conducted in America and the sample is not comparable to the aforementioned study (Craig & Sprang, 2010). Neither study utilised a definition of complex PTSD.

3.7 The detrimental effects of working with trauma

3.7.1 Personal impact

A meta-synthesis of qualitative research concluded that working with service users presenting with trauma has an immediate emotional and somatic impact on workers, such as sadness and detachment (Cohen & Collens, 2013). The effects can be longer lasting impacting clinicians' schematic representations of themselves, the world and relationships; trauma workers reported an increased sense of danger, reduced perceived safety, mistrust of others and difficulties in relationships (Cohen & Collens, 2013). Branson, Weigand and Keller (2014) furthered our understanding of the potential personal impact of this work by investigating vicarious trauma and

sexual desire among mental health professionals concluding that sexual desire decreased as levels of vicarious trauma increased. However, the relationship was modest (r = -.24), it was not possible to establish causality, confounding variables may explain the results and the nature of participants clinical work was not clear.

Although some research suggests there may be negative personal consequences of working with trauma survivors, one study found no significant differences in cognitions and general levels of distress between trauma therapists and non-trauma therapists, although to my knowledge research of this nature is limited (van Minnen & Keijsers, 2000). In contrast, Holmqvist and Andersen's (2003) mixed method study found that therapists' working with survivors of political torture reported different feelings regarding their work in comparison to psychiatric staff who were not working with trauma. Quantitative data indicated trauma therapists were more likely than their counterparts, who were not working with trauma, to report feelings of detachment and anxiety and be more aware of existential issues (Holmqvist & Andersen, 2003). Qualitative data supported these findings indicating that trauma therapists experienced guilt, uncertainty, exhaustion, somatic symptoms and alterations in their views of the world (Holmqvist & Andersen, 2003). However, the qualitative arm of this study only involved 6 participants and did not compare the results with those of non-trauma therapists. Despite criticisms the results seem to indicate that working with trauma may impact negatively on therapists but there is a lack of research investigating complex PTSD in particular.

3.7.2 Professional Impact

Research has found that higher levels of compassion fatigue and burnout are associated with higher absence rates, lower commitment to occupation and lower

satisfaction at work (Sherring & Knight, 2009; Bride & Kintzle, 2011; McGeary, Garcia, McGeary, & Finley, 2014). However, data are drawn from a variety of mental health professionals working in a variety of clinical areas and to my knowledege no research has investigated the link between compassion fatigue, burnout, absence rates and commitment to work among psychological therpaists working with trauma. Research has found that therapists believe the negative effects of working with trauma may result in a reduction in quality of care and it is proposed that a therapist's ability to be compassionate and engaged with their clients may reduce (de Figueiredo, Yetwin, Sherer, Radzik, & Iverson, 2014; Garcia et al, 2016).

In summary, the detrimental effects of repeated exposure to distressing client narratives has been described as an occupational hazard of working with traumatised populations (Adams et al, 2006). Research suggests that working with service users presenting with trauma can negatively affect workers' personal life and performance at work. Thus highighting the importance of identifying factors which may reduce the negative effects of this work but no research has investigated clinician and work factors which may moderate the effects of working with trauma.

3.8 A theoretical model of compassion satisfaction and compassion fatigue

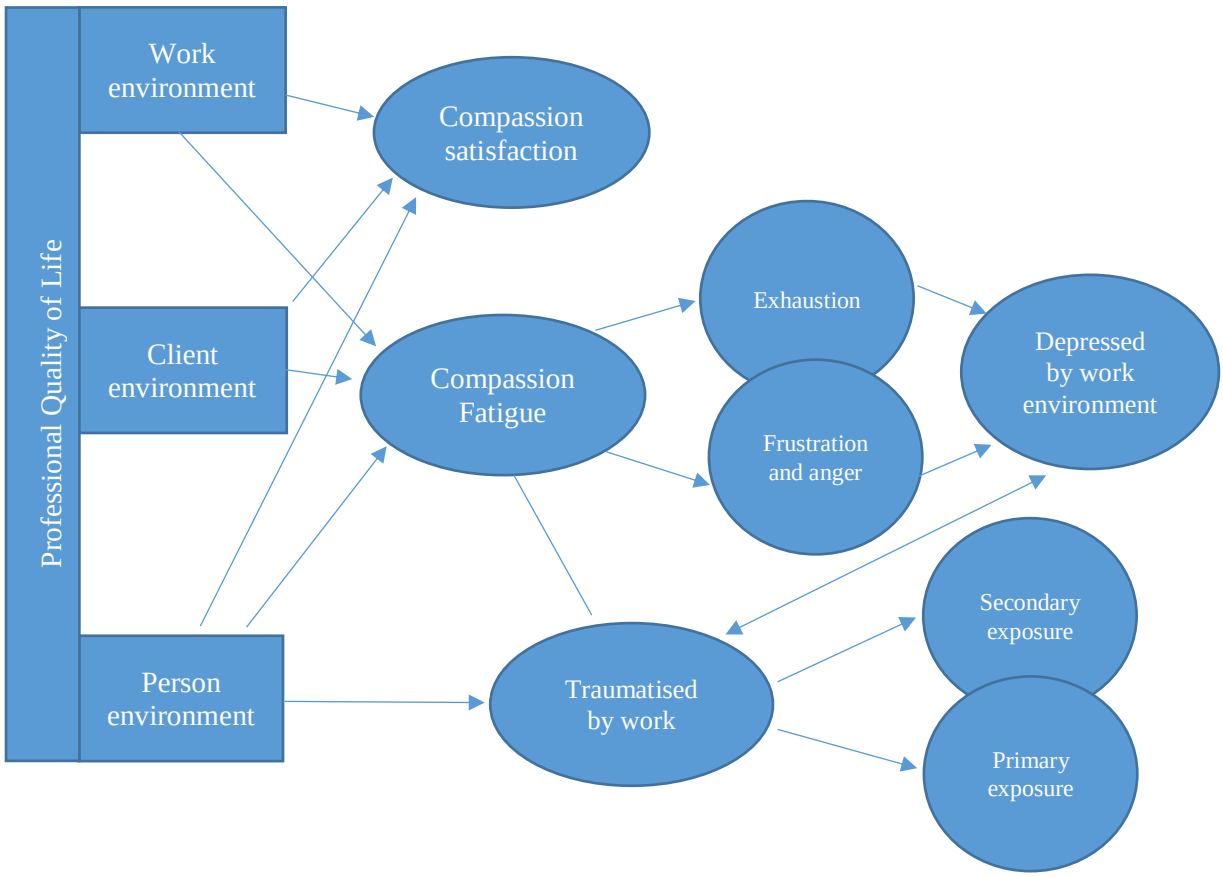
Professional Quality of Life (Stamm, 2010)

Professional quality of life refers to a helping professional's feelings about their work. Stamm (2010) proposed a theoretical model of Professional Quality of Life (see Figure 1) which encompasses compassion satisfaction and compassion fatigue (secondary traumatic stress and burnout). Stamm's (2010) model depicts a theoretical pathway of the positive and negative effects of helping others which contribute to professional quality of life and proposes that an individual may

experience compassion satisfaction and compassion fatigue simultaneously (Stamm, 2010). The model suggests that compassion satisfaction and compassion fatigue are contributed to by a combination of client factors, clinician factors and work factors.

The current study investigated the relationship between client factors and professional quality of life by exploring the link between working with service users presenting with complex PTSD and compassion satisfaction and compassion fatigue. Perceived personal resilience was measured to explore the link between clinician factors and compassion satisfaction and compassion fatigue. Finally, work factors were explored by investigating the perceived quality of the supervisory relationship and compassion satisfaction and compassion fatigue.

Figure 1: Professional Quality of Life Model (Stamm, 2010)



3.9 Factors associated with compassion satisfaction, compassion fatigue, vicarious trauma, secondary traumatic stress and burnout

Consideration will now be given to the current evidence base on factors associated with compassion satisfaction, compassion fatigue, vicarious trauma, secondary traumatic stress and burnout. These variables have been considered together due to the variation in concepts used to describe the negative effects of working with trauma, which has meant these terms are sometimes used interchangeably. Consistent with Stamm's (2010) theory of Professional Quality of Life consideration will be given to client factors, clinician factors and work factors. Clinical supervision and resilience will be considered in more detail because these variables were investigated within the current study.

3.9.1 Client factors

There is some evidence to suggest that the type of trauma service users present with may affect psychological therapists. Psychological therapists working with a higher number of patients presenting with sexual abuse histories report more PTSD-like symptoms than those working with fewer patients presenting with sexual abuse histories (Brady, Guy, Poelstra, & Brokaw, 1999). Similarly, working with interpersonal trauma was associated with higher levels of distress and trauma symptoms among therapists when compared to their counterparts working with either workplace trauma, victims of violent crime or unexpected death (Bober & Regehr, 2006). However neither study utilised a definition of complex PTSD and a recent study involving clinicians working with military veterans failed to find a link between trauma content and burnout (Garcia et al, 2016). The lack of research in to the effect of patient characteristics and specific types of trauma is one of the main criticisms of the current evidence base (Collins & Long, 2003; Garcia et al, 2016). Despite criticisms, qualitative research indicates that complexity of a client's trauma

history can contribute to compassion fatigue although participants also highlighted that complexity does not necessarily impede compassion satisfaction (de Figueiredo et al, 2014).

3.9.2 Therapist Factors

The link between personal characteristics of therapists and reactions to client trauma narratives has been established since the 1990's and more recent research confirms this link (Pearlman & Mac Ian, 1995; Hensel, Ruiz, Finney, & Dewa, 2015). Older age among samples of UK and American trauma therapists was associated with lower levels of burnout (Sodeke-Gregson et al, 2013; Garcia et al, 2015). Furthermore, age and experience have been found to be positively associated with compassion satisfaction (Craig & Sprang 2010; Sodeke-Gregson et al, 2013). Therefore indicating that the negative effects of trauma work may reduce as clinicians get older and as they gain more experience and that the positive effects may be enhanced. Quantitative research suggests that gender is associated with the negative effects of working with trauma and being female increases the incidence of compassion fatigue (Sprang, Clark, & Whitt-Woosley, 2007; Baum, Rahav, & Sharon, 2014). To date, there is mixed evidence regarding the association between level of education and training and the occurrence of compassion satisfaction and compassion fatigue (Sprang et al, 2007; Craig & Sprang, 2010).

The majority of the available evidence suggests that a personal history of trauma is positively associated with the occurrence of compassion fatigue but there remain inconsistencies within the literature; some studies have indicated trauma history results in an increase in the negative effects whereas others refute this claim (Baird & Kracen, 2006; Follette, Polusny, & Milbeck, 1994; Pearlman & Mac Ian,

1995; Schauben & Frazier, 1995). The variations in conceptualising the negative effects of working with trauma may partially account for differing conclusions.

Quantitative research has found that support from others and self-care is significantly negatively correlated with symptoms of secondary traumatic stress among health professionals and trauma therapists (Manning-Jones, de Terte, & Stephens, 2016; Rzeszutek, Partyka, & Goła, 2015). However, within the later study social support explained only 8% of the variance in symptoms of secondary traumatic stress. Qualitiative research provides further evidence of the importance of support from others and self-care, both of which may be linked to perceived personal resilience which will now be explored further (Killian, 2008).

Resilience and working with trauma

Among the literature, coping and resilience are often conceptualised in similar ways and there are inconsistencies regarding the measurement of and the definition of resilience (McCann et al, 2013). Smith et al (2008) define resilience as "the ability to bounce back or recover from stress" (p. 194), this definition of resilience was used within the present research due its focus on a person's perception of their own resilience rather than the resources available to them which may promote resilient responses to stress. Alternative models and measures of resilience focus on protective factors, coping methods or "resilience resources" available to an individual which may aid resilience (Ahern, Kiehl, Sole, & Byers, 2006; Smith et al, 2008).

It is suggested that resilience involves three stages: confronting the stressful event, considering a positive future outcome of the event and attempting to cope (Smith, Epstein, Ortiz, Christopher, & Tooley, 2013). Smith et al's (2013) model of resilience proposes that mindfulness, mood clarity, purpose in life, optimism and

active coping are key to resilience however, this model is based on cross-sectional research which did not involve a sample of clinicians. Theoretically, therapist resilience is likely to be associated with self-reported levels of compassion satisfaction and compassion fatigue. Ludick and Figley (2017) support this assertion proposing that resilience reduces the risk of compassion fatigue; it is suggested that self-care, the ability to let go of client suffering, experiencing a sense of satisfaction from one's work and social support promote resilience which may reduce compassion fatigue. However, there is a lack of empirical research in to the relationship between resilience and the negative effects of working with trauma despite the literature base relating to resilience and direct trauma. In one of the few studies conducted Temitope and Williams (2014) found that lower levels of self-reported clinician resilience was associated with compassion fatigue however, the relationship between resilience and the positive effects of working with trauma was not explored, the current study addressed this.

Theoretical accounts of resilience and the limited empirical research indicates that resilience of psychological therapists may be associated with the effects of working with trauma. However, little is known about the factors which predict resilience among health professionals and there are significant criticisms of the criteria previously implemented to define resilient responses (Killian, 2008; Johnson, Panagioti, Bass, Ramsey, & Harrison, 2017). It has been suggested that resilience research should include the following: a risk factor, a resilience factor and an outcome so that interaction effects can be explored (Johnson et al, 2017). Therefore the current study investigated if perceived personal resilience confers resilience by buffering the effects of working with a higher proportion of clients with complex PTSD.

3.9.3 Service Factors

Research has found that working within mental health settings and working with traumatised populations is associated with compassion fatigue and burnout among clinicians (Imai et al, 2004; Cohen & Collens, 2013). Similarly, Craig and Sprang (2010) found that work setting effects the prevalence of compassion fatigue and burnout concluding that working in an in-patient setting is associated with higher levels of distress among psychological therapists. In addition, working with a higher number of trauma clients and more clinical hours is positively associated with compassion fatigue (Schauben & Frazier, 1995; Bober & Regehr, 2006; Craig & Sprang, 2010). Results from a meta-analysis further substantiated the link between caseload and the negative effects of working with trauma; frequency of appointments with traumatised service users (r =.12), percentage of trauma clients on a therapists caseload (r =.19) and number of trauma clients (r =.16) were significant risk factors for secondary traumatic stress however, the effect sizes are considered small (Hensel et al, 2015). Working within a demanding service and organisational pressures have been identified as contributing to burnout among trauma therapists (de Figueiredo et al, 2014).

In contrast, it has been found that clinicians who have completed specialist trauma training report higher levels of compassion satisfaction and lower compassion fatigue and burnout in comparison to their colleagues who have not completed training (Sprang et al, 2007). Similarly, utilising evidence-based practice reduces burnout and compassion fatigue and increases compassion satisfaction (Craig & Sprang, 2010). Role diversity may also be a protective factor against compassion fatigue (Harrison & Westwood, 2009; de Figueiredo et al, 2014).

Quantitative and qualitative research suggests that support at work can promote the positive effects of working with traumatised service uses and reduce the

negative effects (Manning-Jones et al, 2016; Hensel et al, 2015; de Figueiredo et al, 2014). Hensel et al's (2015) meta-analysis concluded that support at work was significantly negatively associated (r = -.17) with the occurrence of secondary traumatic stress. The research base regarding the link between clinical supervision and compassion satisfaction and compassion fatigue is growing. The limited available research has found that clinical supervision is associated with the effects of working with trauma (Edwards et al, 2006; Lonergan, O'Halloran & Crane, 2004; Harrison & Westwood, 2009). The current literature on clinical supervision and the positive and negative effects of working with trauma will now be explored.

The supervisory relationship and working with trauma

Clinical supervision is valued across therapeutic modalities and is seen as an essential part of a psychological therapists' role despite variations in practices (Lambert & Ogles, 1997). Clinical supervision continues to attract significant attention as an area of research and within clinical practice (Fleming & Steen, 2012). The varying definitions of clinical supervision will be discussed followed by consideration of the current literature regarding the benefits of clinical supervision and the supervisory relationship. Consideration will then be given to the importance of the supervisory relationship when working with service users who present with trauma.

What is clinical supervision?

Clinical supervision is defined in various ways depending on professional background and preferred model of clinical supervision and there are opposing views within the literature (Wheeler & Richards, 2007; Fleming & Steen, 2012). Definitions of clinical supervision have been criticised due to imprecision regarding the tasks of the supervisor, lack of clarity regarding the characteristics of the

supervisory intervention, difficulties operationalising the concept, flawed methodology and being untestable (Milne, 2007). Milne (2007) developed an empirically based definition of clinical supervision which is now widely used and accepted (Division of Clinical Psychology, 2014). Supervision is described as a relationship-based education and training with "normative" (e.g. quality control), "restorative" (e.g. encouraging emotional processing) and "formative" (e.g. maintaining and facilitating supervisees' competence, capability and general effectiveness) objectives (Milne, 2007). However, the articles used to test Milne's (2007) definition involved a range of professionals and were drawn largely from the learning disabilities field therefore, raising questions regarding the generalisability of the definition to psychological therapists and specialities other than learning disabilities. Despite these criticisms Milne's (2007) definition of supervision may be the best available at this time.

Models of clinical supervision and the supervisory relationship

There are numerous models of clinical supervision and each emphasises the importance of the supervisory relationship to varying degrees, with some proposing that the relationship should be the main focus of supervision (Bordin, 1983; Holloway, 1995). However, models of clinical supervision have been criticised due to lacking a corresponding measure, being based on the therapeutic alliance between a service user and therapist and failing to acknowledge the evaluative component of supervision (Holloway, 1995; Bordin, 1983).

Beinart (2002, 2012) employed qualitative and quantitative methods to build on previous models of supervision. The results indicated that a containing relationship between supervisee and supervisor must develop before supervision functions such as evaluation can be facilitated (Beinart, 2002; Beinart, 2012).

Structural and personal/professional boundaries were identified as key contributors to perceived emotional safety and respect, rapport, support and satisfaction with supervision were considered the most effective elements (Beinart, 2002; Beinart, 2012). The Supervisory Relationship Questionnaire (SRQ) and the Short Supervisory Relationship Questionnaire (S-SRQ) correspond with Beinart's (2002, 2012) model allowing an empirical research base to be developed.

The existing models of supervisory relationships may be criticised for their focus on relational elements rather than evaluation and education. Additionally, measuring the impact of supervision and more specifically, the perceived quality of the supervisory relationship, is challenging due to the presence of numerous confounding variables and one model alone may not provide a comprehensive picture. Overall, empirical support for clinical supervision is limited by methodological issues including: lack of robust studies, small sample sizes and reliance on single sources of information (Spence, Wilson, Kavanagh, Strong, & Linda, 2001). Furthermore, the majority of research has been conducted outside of the UK (Wheeler & Richards, 2007). Despite the lack of empirically sound research, in practice, clinical supervision is considered an essential element of a psychological therapist's role, regardless of therapeutic modality (Wheeler & Richards, 2007).

Why is the supervisory relationship important when working with service users presenting with trauma?

Theoretically it has been suggested that acknowledgement and discussion of upsetting clinical experiences within supervision should normalise clinician responses to hearing upsetting information, increase support and reduce the potential impact of compassion fatigue upon therapeutic work (McCann & Pearlman, 1990; Arvay, 2001; Stamm, 2010; Killian et al, 2017). Berger and Quiros' (2014) recent paper considers how services and organisations can enhance their knowledge,

understanding and skills in treating traumatised service users, it is concluded that clinical supervision is particularly important when working with service users presenting with trauma and should be mandatory. Furthermore, it is argued that a strong supervisory relationship built on trust and safety facilitates sharing of information which in turn may reduce the deleterious effects of working with trauma (Berger & Quiros, 2014; Ladany, Ellis, & Friedlander, 1999; Spence, Fox, Golding, & Daiches, 2014). Similarly, Voss Horrell, Holohan, Didion and Vance (2011) reflect on their experiences of working with veterans within Veterans Affairs (VA) agencies and suggest the provision of peer support and supervision to prevent compassion fatigue. However, there is a lack of empirical research in this area and much of what is written is based on anecdotal and theoretical accounts (Berger & Quiros, 2014).

Some of the available quantitative research supports the assertion that the clinical supervision mitigates against the deleterious effects of therapeutic work. Community Mental Health nurses who rated clinical supervision as more effective scored less on measures of emotional exhaustion and depersonalisation (Edwards et al, 2006). Trust and rapport within the supervisory relationship was found to be significantly negatively correlated with two elements of burnout; emotional exhaustion (r = -.19) and depersonalization (r = - .23) (Edwards et al, 2006). However, the results indicate a weak correlational relationship, confounding variables may have impacted the results, the impact of working with trauma was not considered and the results may not be applicable to psychological therapists. A review of the literature concluded that supervision is a protective factor against vicarious trauma among therapists (Baird & Kracen, 2006). In contrast, Hensel et al's (2015) meta-analysis concluded that the quality of supervision was not a significant protective factor (r = -.09) for secondary traumatic stress. However, this

study involved a wide range of professionals and supervision experiences arguably differ depending in profession. In addition, the results may be explained in part by the limited number of studies included which investigated supervision and compassion fatigue. I argue this reflects a lack of research in this area which the present study aimed to address by investigating the association between the perceived quality of the supervisory relationship, compassion satisfaction and compassion fatigue among psychological therapists.

Qualitative research provides additional support for the assertion that the supervisory relationship is a protective factor; supervision and supervision as relational healing was identified by trauma therapists as a protective factor against compassion fatigue and as a contributor to compassion satisfaction (Harrison & Westwood, 2009; de Figueiredo et al, 2014). Therefore, current theoretical accounts and the limited available research indicates that supervisory relationship may facilitate compassion satisfaction and reduce compassion fatigue. However, to my knowledge there is no research investigating if the supervisory relationship moderates the relationship between working with complex PTSD and the positive and negative effects. This study aimed to address these shortcomings.

The aim of this study was to investigate the associations between client, clinician and work factors and compassion satisfaction and compassion fatigue (burnout and secondary traumatic stress). In addition, this research aimed to investigate if perceived personal resilience and the quality of the supervisory relationship moderated the effects of working with complex PTSD.

The following hypotheses were tested:

1. Working with more service users presenting with complex PTSD will be associated with lower compassion satisfaction, higher burnout and higher secondary traumatic stress.

2. Perceived personal resilience will be associated with higher compassion satisfaction, lower burnout and lower secondary traumatic stress once complex PTSD has been controlled for.

3. Personal resilience will moderate the relationship between working with service users presenting with complex PTSD and compassion satisfaction, burnout and secondary traumatic stress.

4. The quality of the supervisory relationship will be associated with higher compassion satisfaction, lower burnout and lower secondary traumatic stress once complex PTSD has been controlled for.

5. The quality of the supervisory relationship will moderate the relationship between working with service users with complex PTSD and compassion satisfaction, burnout and secondary traumatic stress.

4. Method

4.1 Study design

The present study was cross-sectional and utilised an online questionnaire to test the hypotheses outlined above.

4.2 Participants

Participants were psychological therapists. In order to recruit psychological therapists with a range of experiences, psychological therapists were recruited from a variety of psychological settings and services. The recruitment strategy enabled psychological therapists working with varying degrees of trauma in various settings to be recruited. In order to ensure psychological therapists working with clients with complex trauma histories were included, specialist trauma services were contacted as part of the recruitment strategy. Participants were excluded from the study if they were not a qualified psychological therapist.

4.3 Procedure

4.3.1 Recruitment

Recruitment took place between May 2016 and January 2017. Recruitment rates for online surveys among health professionals are typically low (Aerny-Perreten, Domínguez-Berjón, Esteban-Vasallo, & García-Riolobos, 2015). Therefore in order to recruit an adequate sample participants were recruited from a range of organisations and psychological services.

Contact was made with clinical directors or clinical leads within various NHS trusts and services, third sector organisations and private organisations. Consenting clinical directors, clinical leads or appointed local collaborators then

distributed a recruitment email to psychological therapists (see Appendix 2). To enhance recruitment follow-up email reminders were utilised; reminders have been shown to increase response rates among health professionals (Braithwaite, Emery, Lusignana, & Sutton, 2003; Aerny-Perreten et al, 2015; Cho, Johnson, & VanGeest, 2013). Once again, clinical directors, clinical leads or appointed local collaborators distributed the recruitment email on my behalf. The recruitment emails contained information about the study and a link to the online survey.

Consenting professional bodies advertised the study to their members, the advert contained information about the study and a link to the survey (see Appendix 3). In addition, the British Association of Behavioural and Cognitive Psychotherapies (BABCP) distributed the recruitment email to their accredited members. Social media was also utilised to advertise the research. All participants, regardless of how they were recruited, self-selected to take part in this research after receiving information about the study.

4.4 Measures

A questionnaire was designed to capture relevant background information, both personal and professional information was elicited (see Appendix 4). Participants were then asked to complete five validated questionnaires assessing the variables under investigation within this study.

4.4.1 Demographic and background information

Informed by previous research, this questionnaire asked participants to provide information about their employment, clinical work and personal information. Participants were asked to indicate professional background by selecting from the following options: Clinical Psychologist, Counselling Psychologist, Forensic Psychologist, Psychodynamic Psychotherapist, Nurse

Practitioner, Social Worker, Cognitive Behavioural Therapist or Psychiatrist. If none of these options were applicable participants were able to select “Other” and provide additional information. Information was elicited regarding number of years practising as a psychological therapist, completion of any specialist trauma training, contractual hours, type of service worked in and type of organisation.

Participants were also asked to provide information about their clinical work. Therapists indicated the main therapeutic modality used in their clinical work by selecting from: Cognitive Behavioural Therapy, Eye Movement Desensitisation and Reprocessing, Cognitive Analytic Therapy, Compassion Focused Therapy, Acceptance and Commitment Therapy, Psychodynamic, Narrative, Systemic and Dialectical Behaviour Therapy. If none of the options were applicable participants were able to select “Other” and asked to provide additional information. Participants were also asked to indicate the average number of service users seen per week, average number of hours of direct clinical work per week and if they had any other roles and responsibilities other than clinical work. Participants were asked to provide gender and age and to indicate whether they had ever experienced a traumatic event.

Participants were asked to provide information regarding frequency and duration of clinical supervision and the main mode of supervision: individual or group. In addition, participants were asked to indicate, on average, the percentage of service users they work with who present with psychological trauma, developmental trauma and complex PTSD by selecting: 0%, 1-10%, 11-20%, 21-30%, 41-50%, 51-60%, 61-70%, 71-80%, 81-90% or 91-100%.

4.4.2 Brief Resilience Scale (BRS)

The Brief Resilience Scale (BRS) measures an individual’s perception of their ability to bounce back from stress (Smith, Tooley, Christopher, & Kay, 2010;

Smith et al, 2008) (see Appendix 4). It is composed of 6 items, three of which are worded positively (e.g., “I tend to bounce back quickly after hard times”) and three of which are worded negatively (e.g., “I have a hard time making it through stressful events”). Using a Likert scale respondents’ are asked to indicate to what extent they agree with each of the six statements from: Strongly Disagree (1) to Strongly Agree (5). Reverse scoring is implemented for the negatively worded items: 2, 4 and 6. The mean of the 6 items is then calculated to provide an overall resilience score. The highest possible mean score on the BRS is 5 and a higher score indicates a higher degree of perceived personal resilience or ability to bounce back from stressful events. The BRS has been normed on a variety of populations including patient samples, healthy individuals and at-risk participants and the overall average resilience score is 3.70 (SD = 0.68) (Smith et al, 2013). A mean score of below 3.00 is considered a low resilience score and a score of above 4.30 is considered a high resilience score.

The BRS was included in the current study due to its focus on measuring an individual’s perceived ability to bounce back from stressful events (Smith, et al., 2008). In addition, a review of resilience measures concluded that the BRS is one of the highest quality measures of resilience currently available however, it is still only considered to be of moderate psychometric quality (Windle, Bennett, & Noyes, 2011). Finally, the BRS consists of 6 items therefore minimising the demand on participants. The BRS has also been used in a recent study investigating the relationship between compassion satisfaction, burnout, secondary traumatic stress and resilience (Temitope & Williams, 2015).

Smith et al (2008) concluded that internal consistency is good ($\alpha = .80 - .91$) and test retest reliability (ICC) was found to be between .62-.69 (Smith, et al., 2008).

The scale is positively correlated with resilience measures (r = .59), optimism (r = .45 to .69) and purpose in life (r = .46 to .67) whereas it is negatively correlated with negative interactions (r = -.25 to -.46) and pessimism (r = -.32 to -.56) thus, indicating convergent validity (Smith et al, 2008).

Permission to include the BRS in the present study was sought and received from the author (see Appendix 5).

4.4.3 Safe base subscale of the Short-Supervisory Relationship Questionnaire

The safe base subscale of the Short Supervisory Relationship Questionnaire (S-SRQ) was used in this study (see Appendix 4). The safe base subscale consists of 9 questions which measure the relational aspects of supervision and includes items relating to collaboration, safety, respect and non-judgemental attitudes (Cliffe et al, 2014). For example, “I felt able to openly discuss my concerns with my supervisor”. Respondents rate each question using a 7 point Likert scale from: Strongly Disagree (1) to Strongly Agree (7). Item scores for the safe base subscale of the S-SRQ range from 1 to 7; higher scores indicate a higher degree of agreement with statement. The safe base subscale has a maximum score of 63 and a minimum score of 9; a higher score indicates a more facilitative or collaborative supervisory relationship in which the supervisee feels respected and safe (Cliffe et al, 2014).

Research has shown that the perceived emotional bond between supervisee and supervisor is predicative of satisfaction with supervision therefore, the items included in the safe base subscale were deemed most relevant to measuring the quality of the supervisory relationship (Ladany et al, 1999). In addition, the safe base subscale accounts for 57.45% of the overall variance of the S-SRQ (Cliffe et al, 2014). Finally, it was thought that asking participants to complete one subscale, rather than the entire questionnaire, would reduce the demand on participants.

Findings show that the S-SRQ is reliable and valid. The S-SRQ has high internal reliability; the internal consistency of the entire scale is high (α=0.96), this is also the case for the safe base subscale (α=0.97). The S-SRQ is deemed to have acceptable test-retest reliability ($r(84)=0.94$, $p<0.001$, two-tailed). The scale has sound convergent validity as it is significantly correlated with other measures of the supervisory relationship. The predictive validity of the S-SRQ is good, the scale predicts satisfaction with supervision and effectiveness of supervision (Cliffe et al, 2014). Additionally, it is considered easy to use and to understand (Cliffe et al, 2014). Permission was sought and received from the author to use the SSRQ in this research (see Appendix 5).

Other measures of supervision were considered (Palomo, Beinart, & Cooper, 2010; Bahrick, 1989; Ladany, Hill, Corbett, & Nutt, 1996; Olk & Friedlander, 1992). However, the S-SRQ was deemed favourable due to it being based on an empirical model of supervision, rather than being transformed from a measure of therapeutic alliance, due to its focus on the relational aspects of supervision and due to it being relatively short (Palomo, Beinart, & Cooper, 2010).

4.4.4 Professional Quality of Life Scale (ProQOL)

The Professional Quality of Life Scale (ProQOL) is a 30-item questionnaire which measures compassion satisfaction and compassion fatigue (see Appendix 4). The ProQOL does not calculate a score for compassion fatigue, instead two scores are calculated: burnout and secondary traumatic stress which are theorised to contribute to compassion fatigue (Stamm, 2010). Therefore the scale consists of three subscales: compassion satisfaction, burnout and secondary traumatic stress. The compassion satisfaction subscale measures the pleasure one derives from their work for example, “I feel invigorated after my work with those I help”. The burnout

subscale measures symptoms such as exhaustion, frustration and depression usually associated with burnout for example, “I feel connected to others” (Stamm, 2010). The secondary traumatic stress subscale measures feelings of fear and work-related trauma for example, “I jump or am easily startled by unexpected sounds” (Stamm, 2010).

The ProQOL uses a Likert scale and asks respondents to indicate, over the previous 30 days, the extent to which they agree with each item by picking from: Never (1) to Very Often (5). The burnout subscale of the ProQOL includes 5 items which are reverse scored. The ProQOL is scored by totalling the items on each subscale, the raw scores are then converted to t scores. The ProQOL uses standardised scores to aid interpretation across the three subscales and so that comparisons to normative data can be made; the mean for each of three subscales is 50 (SD = 10) (Stamm, 2010).

The ProQOL is normed and standardised based on 1187 helping professionals (Stamm, 2010). Scoring higher on the compassion satisfaction subscale indicates greater satisfaction regarding one’s ability to care effectively within the role as a helping professional; approximately 25% of helping professionals are expected to score higher than 57 and 25% are expected to score below 43 (Stamm, 2010). Higher scores on the burnout and secondary traumatic stress subscales indicates an individual is at higher risk of experiencing the respective phenomena. Approximately 25% of helping professionals are expected to score above 57 on the burnout and secondary traumatic stress subscales and 25% are expected to score below 43 (Stamm, 2010).

The ProQOL has been utilised in numerous studies and has been found to be a reliable measure with alpha levels between 0.75 and 0.88 (compassion satisfaction:

$\alpha = 0.88$; burnout: $\alpha = 0.75$; secondary traumatic stress: $\alpha = 0.81$) (Stamm, 2009). Construct validity is considered to be good (Stamm, 2010). The subscales each measure distinct concepts however, a shared variance of 34% exists between the burnout and secondary traumatic stress subscales. The level of shared variance is likely explained by the level of distress common to both constructs (Stamm, 2010). Stamm (2010) highlights that the two scales measure the detrimental impact of working with traumatised populations however, the burnout subscale captures more general information whereas the secondary traumatic stress subscale captures fear based responses (Stamm, 2010).

The ProQOL is available for use for free within clinical and research settings therefore permission was not required from the author.

4.5 Bristol Online Surveys

An online survey including all of the measures described above, was set up using Bristol Online Survey. An online survey was utilised rather than traditional methods because an online survey can be more widely accessed; researchers are able to reach a large number of potential participants at a low cost (Kraut et al, 2004). However, there are queries regarding the psychometric and ethical implications of using online surveys. Many validated questionnaires are validated using traditional pen and paper versions (van Gelder, Bretveld, & Roeleveld, 2010; Ritter, Lorig, Laurent, & Matthews, 2004). However, research indicates that there is no significant difference between responses or reliability when comparing questionnaires administered via the internet with responses to a paper questionnaire (Ritter et al, 2004). Furthermore, it is suggested that online surveys reduce the impact of social desirability and thus, may improve the validity of findings (van Gelder et al, 2010).

4.6 Sample Size

A power calculation was completed using G*power which indicated that 76 participants were required. This was based on 3 predictor variables, power of 0.80 and an expected effect size of d=0.50 as suggested by Cohen (1992). In addition, consideration was given to the available research in this area, a recent similar study achieved a sample size of 253 and found this was sufficient for testing hypotheses (Sodeke-Gregson et al, 2013).

4.7 Ethical Considerations

Ethical Approval

Ethical approval for the study was sought and received from the School of Psychology, University of Leeds. Approval was granted on 4/4/2016 (Ref: 16-0104) (see Appendix 8). Once ethical approval was received an application was made to the Health Research Authority (HRA) for approval to recruit participants from the NHS. HRA approval was received on 23/5/2016 (see Appendix 8). Within NHS settings, approval was sought from NHS Research and Development departments before commencing recruitment. Within third sector and private organisations, approval was sought from senior management before commencing recruitment.

Prize draw incentive

Research has found that incentivising surveys increases response rates in general and among health professionals (Singer et al, 1999; Van Geest, Johnson, & Welch, 2007; Cho et al, 2013). Therefore, to enhance recruitment the study was incentivised by offering participants the opportunity to be entered in to a prize draw to win one of two Amazon vouchers worth £50. There are potential disadvantages to incentivising research, for example participants may feel coerced in to taking part.

However, there is limited evidence to suggest that monetary incentives exert undue influence upon participants (Singer & Couper, 2008). Furthermore, within the present study, not all participants received a financial reward for taking part.

Potential distress caused by taking part in the research

Although it was deemed unlikely, it was recognised that participants may find taking part in this research distressing because the survey required participants to reflect upon the impact their clinical work has on their psychological well-being. In addition, participants were asked to indicate if they had experienced a traumatic event. Participants were provided with relevant information in the Participant Information Sheet (PIS) which advised that taking part in the research was optional (see Appendix 6). At the end of the questionnaire information regarding where to seek further support was included (see Appendix 7).

Confidentiality

Information regarding confidentiality was included in the PIS (see Appendix 6). Participants were advised that two weeks after submitting their survey responses, their data would be anonymised and entered in to a spreadsheet in preparation for analysis. Each participant was allocated a number therefore, participants were not identifiable. Anonymised data was stored in a password protected document on the University of Leeds server.

Participants were given the opportunity to take part in a prize draw, those who wished to take part were asked to provide their email addresses. The PIS clearly stated that the email address provided would not be used for any reason other than to complete the prize draw and to contact the successful participants. Email address were extracted separately from the online survey centre and stored in a password protected file on the university server. After the prize draw was completed and the

winners had been contacted, all email address were permanently deleted from the university server.

Consent

Potential participants were advised that taking part in the research was voluntary. Participants were asked to complete a consent form (see Appendix 6) indicating whether or not they agreed to take part in the research.

4.8 Data Analysis

Missing data analyses were conducted on quantitative predictor and outcome variables and rates of missing data were very low (2.7% or less on each subscale). Little's chi-square statistic for testing whether values are missing completely at random (MCAR) indicated that that there was no systematic pattern to the missing data therefore, the missing data is considered ignorable (Little, 1988; Graham, 2009). However, missing data results in a loss of statistical power therefore imputation methods, which retain the data set in its entirety, are preferable over case deletion approaches (van der Heijdena, Donders, Stijnene, & Moons, 2006; Little & Rubin, 2014). Within the present study, mean imputation was utilised to replace the missing values for the quantitative variables; mean imputation involves replacing each missing value with the mean of the observed values for each variable (van der Heijden et al, 2006). Other methods of data imputation were considered however, because the rate of missing data was extremely low (≥2.7%) any biases caused by utilising mean imputation are thought to be inconsequential and less rigorous techniques for addressing missing data are deemed adequate (Graham, 2009; Little, Jorgensen, Lang, & Moore, 2014; Roth, 1994). There were three missing data points on the complex PTSD variable, imputation methods could not be utilised for this

variable due to it being dichotomised thus, pairwise deletion was utilised when the ANOVA and multiple regression analyses were conducted.

After the missing data was addressed the distribution of the data was explored using histograms and Q-Q plots. Two of the predictor variables, complex PTSD and S-SRQ, were significantly skewed therefore each was transformed from a continuous variable to a categorical variable using a median split. A median split involves splitting or dichotomising participants in to two groups; those who score above the median and those who score below the median (Dancey & Reidy, 2014). The secondary traumatic stress subscale of the ProQOL was not normally distributed therefore a transformation was applied. Once the data for this variable had been transformed the assumptions for normal distribution were met and therefore parametric tests could be used (Dancey & Reidy, 2014; Howell, 2013). The remaining predictor and outcome variables were considered to be normally distributed.

Initially the dataset was analysed to provide descriptive statistics. Spearman's Rho (r_s) and point-biserial correlation analyses were conducted because some of the predictor variables were not normally distributed and due to the inclusion of dichotomous variables with only two categories (Field, 2013).

Analytic statistics were used to test the hypotheses of this study. A hierarchal linear regression, which is used if there are two or more predictor variables, was conducted in SPSS. Hierarchal linear regression determines which predictors are significantly associated with a criterion variable while taking in to account that the predictors may be related to each other (Howitt & Cramer, 2014). After ensuring that the assumptions of hierarchical linear regression analyses were met (see Appendix 9) analyses were conducted to test whether complex PTSD, personal

resilience and the quality of the supervisory relationship were associated with compassion satisfaction, burnout and secondary traumatic stress. In addition, an interaction term was added to the regression model to explore if perceived personal resilience moderates the relationship between working with complex PTSD and compassion satisfaction, burnout and secondary traumatic stress. An interaction term is created by multiplying the predictor variable and the moderator variable and then entering the interaction in to the regression model (Howitt & Cramer, 2014).

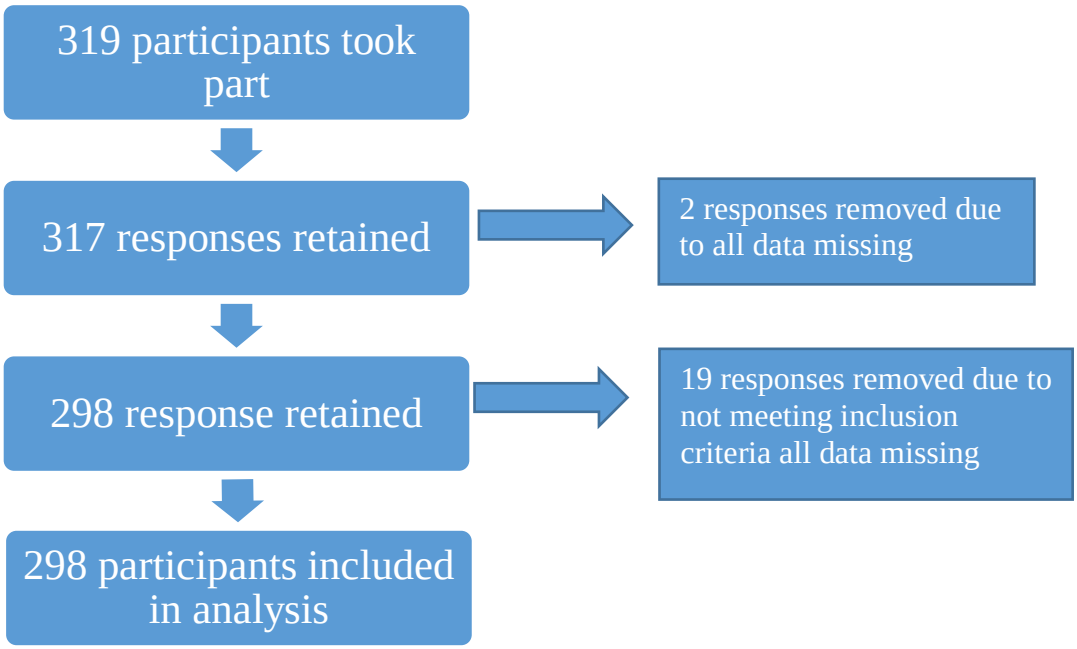
After checking that the assumptions of ANOVA were met (see Appendix 9), analyses were run using SPSS to test whether the interaction between the supervisory relationship and working with complex PTSD had an effect on compassion satisfaction, burnout and secondary traumatic stress. An ANOVA was used due to both of the predictor variables being dichotomous. ANOVA allows the mean scores on a dependent variable to be compared across two or more groups and it is often used to analyse survey data (Howitt & Cramer, 2014).

5. Results

5.1 Participant Characteristics

Three hundred and nineteen participants took part in this research. The final sample consisted of 298; two participants were excluded because they did not provide any data and 19 participants were excluded because they did not meet the inclusion criteria of being a qualified psychological therapist. A schematic representation of this process is illustrated in Figure 2.

Figure 2: Flow chart of participant retention



5.2 Personal characteristics of participants

Table 1 provides information regarding participants' professional background and employment including: profession, main therapeutic modality, type of service, type of organisation, the number of participants employed on a full time or part time basis and number of participants who have completed specialist trauma training. The majority of participants were female (78.9%), 20.5% were male and two participants (0.7%) did not provide information regarding gender. The mean age

of the sample was 41.85 (SD = 9.54) years with a range of 25 to 69 years. On average, participants had been practicing as a psychological therapist for 11.65 years (SD = 7.90). The majority of the sample had experienced a traumatic event (59.7%, data missing for 3 participants). The mean number of contractual hours per week was 31.94 (SD = 8.94) and the majority (63.3%) of participants worked full time.

5.3 Supervision and clinical work of participants

Table 2 provides information regarding clinical supervision. The majority (49%) of the sample attended clinical supervision on a monthly basis. Seven participants selected ‘Other’ and indicated that they attended supervision either every three weeks, every six weeks, up to five times a week or stated that they did not have any supervision at all. The majority (80.9%) of the sample received individual clinical supervision and the average duration of supervision was 73.84 (SD = 20.97) minutes. The sample engaged in a mean of 13.67 (8.57) hours of face to face clinical work per week.

Table 1: Professional background and employment information

Variable	Category	n (%)
Profession	Clinical Psychologist	172 (57.7)
	Counselling Psychologist	16 (5.4)
	Forensic Psychologist	5 (1.7)
	Psychodynamic Psychotherapist	6 (2.0)
	Nurse Practitioner	13 (4.4)
	Social Worker	1 (0.3)
	CBT Therapist	63 (21.1)
	Psychiatrist	3 (1.0)
	Other	19 (6.4)
	No response	0 (0)
Main Therapeutic Modality	Cognitive Behaviour Therapy (CBT)	153 (51.3)
	Eye Movement Desensitisation and Reprocessing (EMDR)	31 (10.4)
	Cognitive Analytic Therapy (CAT)	21 (7.0)
	Compassion Focused Therapy (CFT)	10 (3.4)
	Acceptance and Commitment Therapy (ACT)	4 (1.7)
	Psychodynamic	20 (6.7)
	Narrative	2 (0.7)
	Systemic	8 (2.7)
	Dialectical Behaviour Therapy (DBT)	8 (2.7)
	Other	39 (13.1)
	No response	1 (0.3)
Service	Adult: Primary Care Mental Health Service	48 (16.1)
	Adult: Secondary Care Psychological Therapies Team	55 (19)
	Adult: Crisis Team	1 (0.3)
	Adult: CMHT	12 (4.0)
	Adult: Specialist Trauma Service	34 (11.4)
	Adult: Physical Health	11 (3.7)
	Adult: Learning Disabilities Service	11 (3.7)
	Adult: Older Adult Service	7 (2.3)
	Adult: Forensic	14 (4.7)
	Adult: Specialist Veterans Service	21 (7)

	Adult: Armed Forces Personnel	1 (0.3)
	Adult: Neuropsychology	2 (0.7)
	Child: Tier 2 CAMHS	1 (0.3)
	Child: Tier 3 CAMHS	11 (3.7)
	Child: Specialist CAMHS	12 (4)
	Child: Paediatrics	2 (0.7)
	Other	47 (15.8)
	No Response	8 (2.7)
Organisation	NHS	233 (78.2)
	Third Sector	27 (9.1)
	Other Public Sector	6 (2.0)
	Private	26 (8.7)
	Other	4 (1.3)
	No Response	2 (0.7)
Trauma Training	Yes	197 (66.1)
	No	91 (30.5)
	No Response	10 (3.4)
Full time / Part Time work	Full time	189 (63.4)
	Part time	108 (36.2)
	No response	1 (0.3)

Table 2: Clinical Supervision

Variable	Category	No (%)
Frequency of clinical supervision	Weekly	30 (10.1)
	Fortnightly	95 (31.9)
	Monthly	146 (49)
	Every other month	20 (6.7)
	Other	7 (2.3)
	No response	0
Mode of supervision	Individual	241 (80.9)
	Group	47 (15.8)
	No response	10 (3.4)

5.4 Descriptive Statistics

Independent Variables

Complex PTSD

Table 3 illustrates the frequency of complex PTSD presentations across the sample. All participants who responded indicated that they worked with service users presenting with complex PTSD. The median for this variable was 51-60%.

This indicates that for 50% of participants, up to 50% of the service users they were working with presented with complex PTSD. For the remaining 50% of participants, between 51 and 100% of the service users they were working with presented with complex PTSD.

Table 3: Frequency of complex PTSD presentations

Variable	Category	No. (%)
Percentage of service users presenting with complex PTSD	0%	0 (0)
	1-10%	40 (13.4)
	11-20%	31 (10.4)
	21-30%	27 (9.1)
	31-40%	17 (5.7)
	41-50%	18 (6.0)
	51-60%	22 (7.4)
	61-70%	26 (8.7)
	71-80%	30 (10.1)
	81-90%	36 (12.1)
	91-100%	48 (16.1)
	No Response	3 (1.0)

Perceived personal resilience (measured by the BRS)

The mean resilience score within the present study was 3.65 indicating that participants scored below average (Smith, Epstein, Ortiz, Christopher, & Tooley, 2013). The majority of participants (60.7%) scored within the mid-range of resilience (3.01-4.29), 22.8% of participants scored low on resilience (2.00-3.00) and 16.4% of participants scored highly on resilience (4.30-5.00). The Cronbach's alpha for the overall scale was .850 which suggests the scale has good internal consistency, this is consistent with previous research (George and Mallery, 2002; Smith et al, 2013). This variable was considered normally distributed.

Perceived quality of the supervisory relationship (measured by the safe base subscale of the S-SRQ)

The mean total score for the safe base subscale was 56.81 (SD = 8.30) indicating that overall participants were engaged in supportive supervisory

relationships (Cliffe et al, 2014). Three participants rated their supervisory relationship very poorly allocating the minimum points to each item.

The Cronbach's alpha for the safe base subscale of the S-SRQ was .965. Therefore the reliability of the safe base subscale is considered excellent, the result is consistent with the original properties of the scale (George & Mallery, 2002; Cliffe et al, 2014). This variable was not normally distributed and so was dichotomised using a median split. Those considered to be in a weaker supervisory relationship scored between 9 and 58 (142 participants; 47.7%) whereas those considered to be in a better supervisory relationship scored between 59 and 63 (156 participants; 52.3%).

Dependent Variables

Compassion satisfaction, burnout and secondary traumatic stress (measured by the ProQOL)

Compassion satisfaction scores ranged from 25.35 to 71.24. Burnout scores ranged from 23.00 to 85.11 and secondary traumatic stress scores ranged from 30.19 to 84.19. Due to standardisation all three subscales had a mean of 50 (SD = 10.00). Utilising cut-off scores for the ProQOL is not recommended due the increased risk of Type 1 errors however, this information is provided to situate the sample. Table 4 summarises the rates of compassion satisfaction, burnout and secondary traumatic stress among the sample and illustrates the number of participants considered to be at low, average and high risk. As illustrated below, the majority of participants scored in the average range for compassion satisfaction, burnout and secondary traumatic stress (Stamm, 2010).

Table 4: Number of participants at low, average and high risk of compassion satisfaction, burnout and secondary traumatic stress

	Compassion Satisfaction No. (%)	Burnout No. (%)	Secondary Traumatic Stress No. (%)
Low	81 (27.2)	76 (25.5)	89 (29.9)
Average	139 (46.6)	147 (49.3)	133 (44.6)
High	78 (26.2)	75 (25.2)	75 (25.5)

The Cronbach's alpha for each subscale ranged from .731 to .897. The reliability for the compassion satisfaction subscale was .897 indicating good internal consistency, the reliability for burnout and secondary traumatic stress was .731 and .797 respectively indicating acceptable reliability (George & Mallery, 2002).

5.5 Associations between compassion satisfaction, burnout and secondary traumatic stress and predictor variables

Spearman's Rho and point-biserial correlation analyses were conducted because some of the predictor variables were not normally distributed and due the inclusion of dichotomous variables with only two categories (Field, 2013). Table 5 shows correlation data between compassion satisfaction, burnout, secondary traumatic stress and independent predictor variables. Table 5 denotes which correlation analysis was used. To retain as much of the data as possible, pairwise deletion was implemented when running correlation analysis.

Working with complex PTSD was significantly positively correlated with burnout (r_s = .122, p < .05) and secondary traumatic stress (r_s = .169, p < .01). The supervisory relationship was significantly positively correlated with compassion satisfaction (r_s = .199, p < 0.01) and there was a significant negative correlation between the supervisory relationship and burnout (r_s = -.179, p < .01) and secondary traumatic stress (r_s = -.126, p < .05). Significant correlation coefficients were found between perceived personal resilience and all the outcome variables (compassion

satisfaction (r_s = .333, p < 0.01); burnout (r_s = -.380, p < 0.01) and secondary traumatic stress (r_s = -.301, p < .01). The results indicate that personal resilience is positively correlated with compassion satisfaction and negatively correlated with burnout and secondary traumatic stress. The majority of the correlations coefficents presented, with exception to resilience, are considered small indicating weak associations (Cohen, 1988).

A large negative association was found between compassion satisfaction and burnout (r_s = -.685, p < 0.01) and a moderate negative association was found between compassion satisfaction and secondary traumatic stress (r = -330, p < 0.01), whilst a large positive association was found between burnout and secondary traumatic stress (r = .527, p < 0.01) (Cohen, 1988).

Table 5: Correlations between compassion satisfaction, burnout and secondary traumatic stress and independent variables

	Compassion Satisfaction	Burnout	Secondary Traumatic Stress
% clients with Complex PTSD	.027[1]	.122*[1]	.169**[1]
Quality of Supervisory Relationship	.199**[1]	-.179**[1]	-.126*[1]
Perceived Resilience	.333**[1]	-.380**[1]	-.301**[1]
Age	.154**[1]	-.129*[1]	-.047[1]
Gender (0=M,1=F)	.024[2]	.069[2]	.112[2]
Number of years practising as a therapist	.053[1]	-.057[1]	-.047[1]
Completion of trauma training (0=No, 1=Yes)	-.184**[2]	.141*[2]	.120*[2]
Full time or part time hours (0=pt,1=ft)	-.015[2]	-.039[2]	-.078[2]
Weekly contractual hours	.002[1]	.044[1]	.086[1]
No. service users seen per week	.100[1]	.038[1]	.114[1]
No. clinical hours per week	.145*[1]	-.020[1]	.047[1]
Experienced a traumatic event 0=No, 1=Yes)	.124*[2]	-.107[2]	-.116*[2]
Type of supervision (0=indiv.1=group)	.016[2]	-.019[2]	.020[2]
Duration of supervision	-.023[1]	.003[1]	.042[1]
Other non-clinical duties (0=no, 1=yes)	-.007[2]	.021[2]	.111[2]
Compassion Satisfaction	-------	-.688**[1]	-.330**[1]
Burnout		--------	.513**[1]
Secondary Traumatic Stress			--------

*significant at $p < 0.05$ **significant at $p < 0.01$

[1] Spearman's Rho

[2] Point-biserial

5.6 Effects of client, clinician and work factors on compassion satisfaction, burnout and secondary traumatic stress

The results pertaining to the hypotheses of this study will now be discussed, this section will be broken down in to three key areas: client factors, clinician factors and service factors.

5.6.1 Client Factors

Hierarchal regression analyses were performed to assess the association between working with complex PTSD and self-reported levels of compassion satisfaction, burnout and secondary traumatic stress. Table 6 illustrates the results. To control for age and gender, both were entered in to the first stage of the analysis (block 1) and complex PTSD was entered in to the second stage (block 2).

Table 6: Summary of hierarchical regression for complex PTSD and compassion satisfaction, burnout and secondary traumatic stress

	Beta	**ΔR^2**	**F Change**	**p value**
Compassion satisfaction				
Block 1		.032	4.762	p = .009
Gender	.077			p = .201
Age	.185			p = .002
Block 2		.000	.144	p = .704
Gender	.078			p = .200
Age	.186			p = .002
Complex PTSD	-.022			p = .704
Burnout				
Block 1		.028	4.209	p = .016
Gender	.042			p = .488
Age	-.151			p = .013
Block 2		.012	3.406	p = .066
Gender	.040			p = .505
Age	-.157			p = .010
Complex PTSD	.107			p = .066
Secondary traumatic stress				
Block 1		.020	2.954	p = .054
Gender	.100			p = .101
Age	-.075			p = .218
Block 2		.016	4.726	p = .031
Gender	.098			p = .107

Age	-.083	p = .172
Complex PTSD	.126	p = .031

Once entered in to the model, complex PTSD did not contribute to the model for compassion satisfaction ($\Delta R^2 = .000$). Complex PTSD explained an additional 1.2% of the variance in burnout scores, and an additional 1.6% of the variance in secondary traumatic stress scores. Complex PTSD was positively associated with secondary traumatic stress ($p < .05$) and burnout ($p = .066$), the model was statistically significant for secondary traumatic stress and approaching statistical significance for burnout.

5.6.2 Clinician factors

Hierarchal linear regression analyses were performed to assess the association between perceived personal resilience of psychological therapists and levels of compassion satisfaction, burnout and secondary traumatic stress. Age, gender and complex PTSD were controlled for by entering these variables in to the first two stages of the analysis (block 1 and block 2) and perceived personal resilience was then entered in to the model (block 3). To see if personal perceived resilience moderated the impact of working with complex PTSD on each of the dependent variables, an interaction term was entered in to the model (block 4). Table 7 illustrates the results.

Table 7: Summary of hierarchical regression for perceived personal resilience and compassion satisfaction, burnout and secondary traumatic stress

	Beta	**ΔR^2**	**F Change**	**p value**
Compassion satisfaction				
Block 1		.032	4.762	p = .009
Gender	.077			p = .201
Age	.185			p = .002
Block 2		.000	.144	p = .704
Gender	.078			p = .200
Age	.186			p = .002
Complex PTSD	-.022			p = .704

Block 3		.131	44.933	p = .000
Gender	.131			p = .022
Age	.206			p = .000
Complex PTSD	-.074			p = .178
Resilience	.369			p = .000
Block 4		.005	1.634	p = .202
Gender	.129			p = .024
Age	.209			p = .000
Complex PTSD	-.075			p = .170
Resilience	.437			p = .000
Complex PTSD * **Resilience**	-.097			p = .202
Burnout				
Block 1		.028	4.209	p = .016
Gender	042			p = .488
Age	-.151			p = .013
Block 2		.012	3.406	p = .066
Gender	.040			p = .505
Age	-.157			p = .010
Complex PTSD	.107			p = .066
Block 3		.193	72.460	p = .000
Gender	-.025			p = .646
Age	-.181			p = .001
Complex PTSD	.169			p = .001
Resilience	-.448			p = .000
Block 4		.000	.084	p = .772
Gender	-.026			p = .640
Age	-.180			p = .001
Complex PTSD	.169			p = .001
Resilience	-.433			p = .000
Complex PTSD * **Resilience**	-.021			p = .772
Secondary traumatic stress				
Block 1		.020	2.954	p = .054
Gender	.100			p = .101
Age	-.075			p = .218
Block 2		.016	4.726	p = .031
Gender	.098			p = .107
Age	-.083			p = .172
Complex PTSD	.126			p = .031
Block 3		.100	33.337	p = .000
Gender	.051			p = .382
Age	-.100			p = .083
Complex PTSD	.171			p = .002
Resilience	-.323			p = .000
Block 4		.000	.047	p = .829
Gender	.051			p = .379
Age	-.100			p = .082
Complex PTSD	.171			p = .002
	-.334			p = .000

Resilience	.017	p = .829
Complex PTSD * Resilience		

Once entered in to the model, resilience explained an additional 13.1% of the variance in compassion satisfaction scores, an additional 19.3% of the variance in burnout scores and an additional 10% of the variance in secondary traumatic stress scores. Each of the models were statistically significant (compassion satisfaction: $p < .01$; burnout: $p < .01$; secondary traumatic stress: $p < .01$); resilience was positively associated with compassion satisfaction and negatively associated with burnout and secondary traumatic stress.

When the interaction term was added (complex PTSD x perceived personal resilience), this accounted for an additional 0.5% of the variance in compassion satisfaction. The complex PTSD x perceived personal resilience interaction did not contribute to the model for burnout ($\Delta R^2 = .000$) or secondary traumatic stress ($\Delta R^2 = .000$). None of the models were statistically significant (compassion satisfaction: $p = .202$; burnout: $p = .772$; secondary traumatic stress: $p = .829$) disconfirming a moderating impact of resilience on the effects of working with complex PTSD.

5.6.3 Work factors

Hierarchal linear regression analyses were performed to assess the association between the supervisory relationship and self-reported levels of compassion satisfaction, burnout and secondary traumatic stress. Table 8 illustrates the results. Age, gender and complex PTSD were controlled for by entering these variables in to the first stage of the analysis (block 1) and the supervisory relationship variable was entered in to the second stage (block 2).

Once entered in to the model, the supervisory relationship explained an additional 3.8% of the variance in compassion satisfaction scores, an additional 4.6% of the variance in burnout scores and an additional 1.2% of the variance in secondary traumatic stress scores. The quality of the supervisory alliance was significantly positively associated with compassion satisfaction ($p < .01$) and significantly negatively associated with burnout ($p < .01$). The supervisory alliance was negatively associated with secondary traumatic stress and the model was approaching statistical significance ($p = .057$).

Table 8: Summary of hierarchical regression for the supervisory relationship and compassion satisfaction, burnout and secondary traumatic stress

	Beta	**ΔR^2**	**F Change**	**p Value**
Compassion satisfaction				
Block 1		.032	3.213	p = .023
Gender	.078			p = .200
Age	.186			p = .002
Complex PTSD	-.022			p = .704
Block 2		.038	11.724	p = .001
Gender	.070			p = .238
Age	.184			p = .002
Complex PTSD	-.029			p = .652
Supervisory relationship	.195			p = .001
Burnout				
Block 1		.040	3.964	p = .009
Gender	.040			p = .505
Age	-.157			p = .010
Complex PTSD	.107			p = .066
Block 2		.046	14.617	p = .000
Gender	.049			p = .411
Age	-.155			p = .009
Complex PTSD	.111			p = .051
Supervisory relationship	-.216			p = .000
Secondary traumatic stress				
Block 1		.036	3.570	p = .015
Gender	.098			p = .107
Age	-.083			p = .172
Complex PTSD	.126			p = .031
Block 2		.012	3.661	p = .057
Gender	.102			p = .091

Age	-.082	p = .176
Complex PTSD	.128	p = .027
Supervisory relationship	-.110	p = .057

An ANOVA was performed to test if the supervisory relationship moderated the relationship between working with complex PTSD and the outcome variables. An ANOVA was utilised because two of the predictor variables, complex PTSD and the quality of the supervisory relationship, were dichotomised (Tabachnick & Fidell, 2013). Age and gender were controlled for by entering these variables as covariates.

Consistent with earlier regression analyses, there was a non-significant main effect of complex PTSD ($F(1, 286 = .164, p = .686$) and a significant main effect of the supervisory relationship ($F(1, 286 = 12.897, p < .05$) on compassion satisfaction. There was a trend towards a significant effect of complex PTSD ($F(1, 286) = 3.637$, $p = .058$) and a significant main effect of the supervisory relationship ($F(1, 286) = 13.829, p < .001$) on burnout, which is consistent with results from previous regressions. As shown in previous regression analyses, there was a significant main effect of complex PTSD ($F(1, 286) = 5.219, p < .05$) and a trend towards a significant main effect of the supervisory relationship ($F(1, 286) = 3.844, p = .051$) on secondary traumatic stress.

There was a significant interaction effect between working with complex PTSD and the supervisory relationship, on compassion satisfaction ($F(1, 286) = 4.246, p < .05$) (see Appendix 10). Simple effects analysis indicated that for participants who were working with lower levels of complex PTSD, a better supervisory relationship was associated with significantly higher levels of compassion satisfaction in comparison to participants in a poorer supervisory relationship ($F (1, 286)=12.897, p < .001$). The interaction between complex PTSD

and the supervisory relationship on burnout was not statistically significant, F(1, 286) = 1.049, p = .307. There was a trend towards an interaction between complex PTSD and the supervisory relationship on secondary traumatic stress, F(1, 286) = 3.172, p = .076 (see Appendix 10) therefore this result was explored further. Simple effects analysis indicated that for participants who were working with lower levels of complex PTSD, a better supervisory relationship was associated with significantly lower levels of secondary traumatic stress in comparison to participants in a poorer supervisory relationship (F (1, 291)=7.363, p < .05).

To help orientate the reader, Table 9 provides the mean scores for compassion satisfaction, burnout and secondary traumatic stress for the following groups: participants working with lower levels of complex PTSD and reporting a poorer supervisory relationship, participants working with lower levels of complex PTSD and reporting a better supervisory relationship, participants working with higher levels of complex PTSD and reporting a poorer supervisory relationship and participants working with lower levels of complex PTSD and reporting a better supervisory relationship.

Table 9: Mean rates of compassion satisfaction, burnout and secondary traumatic stress across groups (Mean and SD)

Level of complex PTSD on case load	Supervisory relationship	Compassion Satisfaction Mean (SD)	Burnout Mean (SD)	Secondary Traumatic Stress Mean (SD)
1-50%	Poorer relationship	46.73 (9.80)	51.83 (9.74)	51.11 (10.92)
	Better relationship	53.50 (8.81)	46.18 (9.04)	46.43 (8.60)

51-100%	Poorer relationship	48.96 (10.75)	52.54 (9.83)	51.08 (9.58)
	Better relationship	50.61 (9.58)	49.38 (10.20)	51.09 (9.90)

5. Discussion and Recommendations

This chapter summarises the findings of this research and discusses the hypotheses tested. The theoretical and clinical implications of the results will be considered. This chapter concludes with the strengths and limitations of the study and comment on future research is made throughout.

6.1 Summary of findings

This study investigated the association between client factors, clinician factors and service factors and compassion satisfaction, burnout and secondary traumatic stress among psychological therapists.

It was hypothesised that working with clients presenting with complex PTSD would be associated with higher compassion satisfaction, lower burnout and lower secondary traumatic stress. The findings indicate that there is not a significant association between working with a higher number of service users with complex PTSD and compassion satisfaction and burnout. However, there was a trend towards working with higher levels complex PTSD being associated with higher burnout among the sample and a significant positive association between working with higher levels of complex PTSD and secondary traumatic stress.

There were two hypotheses relating to resilience: i) perceived personal resilience would be associated with higher compassion satisfaction, lower burnout and lower secondary traumatic stress once complex PTSD had been controlled for, and ii) perceived personal resilience would moderate the relationship between working with complex PTSD and compassion satisfaction and compassion fatigue. The first resilience hypothesis was supported; perceived personal resilience was significantly positively associated with self-reported compassion satisfaction and

significantly negatively associated with self-reported burnout and secondary traumatic stress among the sample, once complex PTSD had been controlled for. The second resilience hypothesis was not supported; perceived personal resilience did not significantly moderate the relationship between working with service users presenting with complex PTSD and compassion satisfaction, burnout and secondary traumatic stress. According to resilience frameworks the results indicate that perceived personal resilience is associated with improved well-being, but does not seem to buffer the impact of working with complex PTSD (Johnson et al, 2017).

There were two hypotheses relating to the supervisory relationship: i) the perceived quality of the supervisory relationship would be associated with higher compassion satisfaction, lower burnout and lower secondary traumatic stress among psychological therapists once complex PTSD had been controlled for, and ii) the quality of the supervisory relationship would moderate the relationship between working with complex PTSD and compassion satisfaction, burnout and secondary traumatic stress. The first supervision hypothesis was partially supported; the quality of the supervisory relationship was significantly positively associated with compassion satisfaction and significantly negatively associated with burnout among the sample, once complex PTSD had been controlled for. There was not a significant association between the supervisory relationship and secondary traumatic stress but there was a trend towards the supervisory relatonship being associated with lower levels of secondary traumatic stress.

The second supervision hypothesis was partially supported; the quality of the supervisory relationship significantly interacted with the relationship between working with complex PTSD and compassion satisfaction. The pattern was such that as the quality of the supervisory relationship increased the likelihood of

experiencing compassion satisfaction when working with complex PTSD increased. Although a significant interaction was found, it does not fit with current frameworks of resilience and therefore the supervisory relationship does not appear to confer resilience (Johnson et al, 2017). However, the supervisory relationship may enhance the positive effects (compassion satisfaction) of working with service users presenting with trauma and is an important area to explore further in future research. Further analysis indicated that the supervisory relationship was particularly important for psychological therapists working with lower levels of complex PTSD; a more favourable supervisory relationship was associated with higher levels of compassion satisfaction. There was no significant interaction effect between complex PTSD and the supervisory relationship on burnout and secondary traumatic stress. However, there was a trend towards a more favourable supervisory relationship being associated with lower levels of secondary traumatic stress when working with higher levels of complex PTSD. Further analysis indicated that the supervisory relationship was particularly important for psychological therapists working with lower levels of complex PTSD; a more favourable supervisory relationship was associated with lower levels of secondary traumatic stress among this group.

Overall the results indicate that the supervisory relationship and perceived personal resilience seem to be associated with more postive well-being of pscyhological therapists. There is some evidence to suggest that working with complex PTSD may be negatively associated with the well-being of psychologcial therapists. The results of this study provide partial support for Stamm's (2010) model of Professional Quality of Life and the existing literature which proposes that client factors, clinician factors and work factors contribute to compassion satisfaction and compassion fatigue (Stamm, 2010; Brady et al, 1999; Bober &

Regehr, 2006; Pearlman & Mac Ian, 1995; Hensel et al, 2015; Sodeke-Gregson et al, 2013; Craig & Sprang, 2010). The current research extended this evidence base by investigating the following factors: working with complex PTSD, perceived personal resilience and the supervisory relationship. The results will now be discussed in relation to the available literature and the implications of the findings will be considered.

6.2 Prevalence of compassion satisfaction, burnout and secondary traumatic stress

Normative data indicates that 25% of respondents' will score in the high risk range and 25% of respondents will score in the low risk range for each of the ProQOL subscales (compassion satisfaction, burnout, secondary traumatic stress) (Stamm, 2010). Studies exploring prevalence of compassion satisfaction, burnout and secondary traumatic stress using the ProQOL have found that between 8% and 25% of psychological therapists are at low risk of reporting low levels of compassion satisfaction, between 22% and 70% are at high risk of secondary traumatic stress and between 25% and 26% are at high risk of burnout (Sodeke-Gregson et al, 2013; Temitope & Williams, 2015). The rates of compassion satisfaction, burnout and secondary traumatic stress found within the present study are comparable to existing research and normative data with the exception of Sodeke-Gregson et al (2013) who reported 8% of their sample were deemed at low risk of reporting low levels of compassion satisfaction and 70% were deemed at high risk for secondary traumatic stress (Sodeke-Gregson et al, 2013; Temitope & Williams, 2015; Stamm, 2010). The discrepancy in findings may in part be explained by the differences in the sample; Sodeke-Gregson et al (2013) surveyed therapists working in trauma services and secondary care services engaging in

trauma focused work whereas the current study involved therapists working in a variety of settings, working with varying levels of trauma complexity.

When interpreting prevalence rates it is important to consider that the ProQOL is not a diagnostic tool and Stamm (2010) suggests using the continuous scores rather than cut-off scores due to the increased likelihood of a Type I error occuring when using cut-off scores.

6.3 Client factors

The findings of this study indicate that working with more service users presenting with complex PTSD may be a risk factor for burnout and secondary traumatic stress however, complex PTSD only explained a small proportion of the variance in scores (1.2% to 1.6%). The results provide partial support for previous qualitative studies which concluded that complexity of a client's trauma history increased compassion fatigue (de Figueiredo et al, 2014; Cohen & Collens, 2013). Previous qualitative research indicates that working with trauma can have a positive effect on therapists, the current study failed to provide quantitative support for this assertion (Hyatt-Burkhart, 2014; Cohen & Collens, 2013). Previous research has found that working with traumatised populations reduces compassion satisfaction; the findings of the current study are similar however, in the present study there was non-significant negative association between complex PTSD and compassion satisfaction (Killian, 2008).

6.4 Clinician factors

The findings of the current study suggest that perceived personal resilience may be associated with lower levels of burnout and secondary traumatic stress and higher levels of compassion satisfaction, but the results suggest that perceived

resilience does not buffer the impact of working with complex PTSD. The findings of this study replicate and extend previous research which concluded that low resilience among counsellors in New Zealand was associated with higher levels of secondary traumatic stress in comparison to counsellors reporting higher levels of perceived personal resilience (Temitope & Williams, 2015). There is a lack of research in this area and future studies should address this.

6.5 Work Factors

The results of this study indicate that the supervisory relationship may be associated with lower levels of burnout and secondary traumatic stress and higher levels of compassion satisfaction. Partial support was found for the hypothesis that the supervisory relationship would interact with complex PTSD. The findings of this study support and extend previous research which has found that support at work and clinical supervision is associated with lower levels of burnout and secondary traumatic stress and higher levels of compassion satisfaction (Hensel et al, 2015; Manning-Jones et al, 2016; de Figueiredo et al, 2014; Edwards, et al., 2006; Baird & Kracen, 2006; Harrison & Westwood, 2009).

6.6 Theoretical Implications

Cognitive theories suggest that an individual's experience of the world is governed by their schematic beliefs, and working with traumatised service users may result in lasting alterations to schemas (McCann & Pearlman, 1990). New experiences are thought to result in assimilation or accommodation of schemas; assimilation occurs when the experience corresponds with existing schemas resulting in no change, whereas accommodation occurs when the schema is altered on account of new information being incorporated (Sabin-Farrell & Turpin, 2003). Therefore, when psychological therapists are exposed to information about their

client's traumatic experiences, the way they see themselves and the world may be altered. The results of the current study may provide partial support for cognitive theories; working with more service users presenting with complex PTSD was significantly associated higher levels of secondary traumatic stress which may reflect an alteration in participants' views of themselves and the world. However, causality cannot be determined based on the results of this cross-sectional study and longitudinal research is required which enables comparisons to be made between psychological therapists working with complex PTSD, PTSD and other presentations.

Resilience is considered a personal resource therefore the findings of this study provide support for the theoretical assertion that clinician resilience influences the incidence of compassion satisfaction, burnout and secondary traumatic stress (Smith et al, 2013; Stamm, 2010). However the results of this study indicate that perceived personal resilience does not moderate the effects of working with complex PTSD. Therefore, although perceived personal resilience appears to be a protective factor, it does not confer resilience based on current theoretical frameworks of resilience (e.g., Johnson et al, 2014).

The results of this study provide tentative empirical support for theoretical models of clinical supervision which emphasise the restorative nature of clinical supervision and the importance of the supervisory relationship however, a specific model or definition of clinical supervision was not utlised in the current study (Milne, 2007; Bordin, 1983; Beinart & Clohessy, 2009; Beinart, 2002; Beinart, 2012; Holloway, 1995). Recently attachment theory has been used to explain the supervisory relationship and its effects and theoretically it has been suggested that the supervisory relationship represents an attachment bond. It is proposed that

supervisors act as a safe base for supervisees from which they can develop personally and professionally (Pistole & Watkins, 1995; Beinart & Clohessy, 2009). The results of this study may lend support to the assertion that supervisors act as a safe base for supervisees based on the finding that participants in a better supervisory relationship reported higher levels of compassion satisfaction and lower levels of burnout and secondary traumatic stress. However, causality cannot be determined within the current study and there remain difficulties establishing the mechanisms by which a successful supervisory relationship is formed (Beinart & Clohessy, 2009).

One possible explanation of the link between a more favourable supervisory relationship and higher compassion satisfaction and lower burnout and secondary traumatic stress may be the influence of supervision on self-efficacy. Self-efficacy, as applied to psychological therapists, is a therapist's belief that they are able to practice effectively therefore, supervision may enhance therapists' self-efficacy in their ability to deal with complex clinical presentations which may otherwise provoke stress (Wheeler & Richards, 2007). This is especially relevant for therapists working with complex PTSD; therapeutic competency in this specialist area is of particular importance because the treatment is likely to be multi-modal and trans-theoretical in contrast to treatments for PTSD for which there is a substantial evidence base indicating CBT or EMDR (Courtois, 2004; Cloitre et al, 2011; McFetridge et al, 2017). Arguably, self-efficacy is an important cornerstone of clinical supervision due to its "formative" role which aims to facilitate supervisees' competence; the available research indicates that the supervisory relationship is linked to higher self-efficacy among psychological therapists (Milne, 2007; Watkins, 2014). However, further research is required to investigate the link

between the supervisory relationship, self-efficacy, compassion satisfaction and compassion fatigue.

6.7 Clinical Implications

The findings of this study lend some support to the recommendation that therapists should limit the number of trauma clients they work with and that caseload diversity should be promoted (Killian, 2008; Harrison & Westwood, 2009; Voss Horrell et al, 2011; Bober & Regehr, 2006). However, it remains unclear how many trauma clients is too many and the mechanisms by which compassion satisfaction and compassion fatigue occur are unknown.

Resilience is considered a dynamic trait which can be altered with appropriate interventions (Smith et al, 2010). The findings of the current study suggest that higher levels of resilience among psychological therapists may be associated with higher compassion satisfaction, lower burnout and lower secondary traumatic stress Therefore, I propose that interventions which specifically aim to enhance perceived personal resilience among psychological therapists would be beneficial. There is acknowledgement within the literature that preventative approaches which promote and enhance resilience among healthcare professionals are required and that interventions should consider the interface between individual and contextual factors (McCann et al, 2013; McAllister & McKinnon, 2009). Numerous studies have acknowledged the importance of creating work environments which promote self-care among health professionals and the impact of mindfulness programmes on resilience among staff is increasingly becoming an area of interest. Research indicates that mindfulness programmes increase compassion satisfaction, decrease burnout and that mindfulness is a promising intervention to increase resilience among health professionals (Foureur, Besley, Burton, Yu, &

Crisp, 2013; Kemper, Mo, & Khayat, 2015; Galantino, Baime, Maguire, Szapary, & Farrar, 2005; Shapiro, Astin, Bishop, & Cordova, 2005; Craigie et al, 2016). Therefore, I suggest that mindfulness programmes or mindfulness training should be more readily available to psychological therapists as a means of promoting resilience. However the current available literature in this area is flawed due to numerous methodological issues; some studies are correlational thus causality cannot be established and some did not utilise a measure of resilience instead assuming that decreases in stress confer resilience (Foureur et al, 2013; Kemper et al, 2015). In addition, a variety of mindfulness programmes have been researched, with differing structures, and it remains unclear how much mindfulness training and practice is required to increase resilience among health professionals. Finally, to my knowledge there is a lack of longitudinal research regarding the sustainability of mindfulness practice among psychological therapists, existing research indicates that although therapists believe that self-care strategies are useful they do not necessarily engage in self-care practices (Bober & Regehr, 2006).

One of the limitations of resilience based approaches is that they focus on making changes at an individual level. However, arguably this is not sufficient and may inadvertently blame clinicians who may not be coping with the psychological demands of their work, changes at an organisational or service level are also required (Killian, 2008; Stamm, 2010; Voss Horrell et al, 2011; Sabin-Farrell & Turpin, 2003; de Figueiredo et al, 2014; Bober & Regehr, 2006). Therefore the current study also investigated a work factor; the quality of supervisory relationship.

Based on the finding that a more favourable supervisory relationship was associated with lower levels of burnout, lower levels secondary traumatic stress and higher levels of compassion satisfaction I suggest that clinical supervision,

specifically the relationship between supervisor and supervisee should be prioritised by clinicians, supervisors and service managers. I suggest that the clinical supervisors endeavour to create a safe supervisory relationship which acts as a safe base for supervisees to explore and discuss their reactions to their work (Beinart, 2012; Palomo et al, 2010). Research indicates that boundaries, support, respect, openess, commitment, sensitivity, collaboration, education and evaluation contribute to the supervisory relationship (Beinart, 2012). Rapport and feeling supported are deemed particularly important therefore should be prioritised by supervisors (Beinart, 2012). However, it is recognised that creating a favourable and helpful supervisory relationship is challenging therefore strategies to enhance the relationship should be considered (Scaife, 2009).

Investing time at the start of the supervisory relationship and collaboratively devising a supervision contract may support the development of a safe supervisory relationship by giving adequate consideration to the supervisees hopes and individual development (Bordin, 1983; Beinart, 2012; Hughes, 2012). Agreeing the practicalities of supervision such as when and where supervision will take place is likely to promote a containing relationship (Beinart, 2012; Hughes, 2012). Hughes (2012) suggests that boundaries, being clear, being consistent, acknowledging contextual factors, creating an environment of mutual trust and being curious are likely to facilitate a favourable supervisory relationship. In addition, feedback is deemed an important aspect of the supervisory relationship; I suggest that supervisor dyads consider using a measure of the supervisory relationship as a means of providing and eliciting feedback (Beinart, 2012). Cliffe et al (2014) found that the majority of participants deemed a measure of the supervisory relationship to be a helpful way of facilitating feedback within supervision. However, a third of participants also indicated they would feel uncomfortable discussing the results with

their supervisor (Cliffe et al, 2014). It has also been suggested that supervisor training programs utilise a supervision measure (Palomo et al, 2010).

Training in clinical supervision for potential or existing clinical supervisors which includes a focus on the supervisory relationship may be of benefit and indirectly reduce the deleterious effects of therapeutic work and enhance the positive effects. There is consensus in the literature that training in clinical supervision is necessary and effective and it is thought that failing to provide such training could result in supervisory practices which are detrimental to both clinicians and service users (Milne, 2010; Milne, Sheikh, Pattison, & Wilkinson, 2011; Gonsalvez & Milne, 2010). However, historically there is a lack of robust research in to the training of clinical supervisors, efficacy of supervisor training and the effects of training, including if the supervisory relationship is enhanced (Gonsalvez & Milne, 2010; Milne & James, 2002). I suggest the relationship and models of clinical supervision which emphasise the relational aspects of supervision should be a key component of supervisor training (Hawkins & Shohet, 2006; Beinart, 2012; Beinart & Clohessy, 2009; Bordin, 1983; Fleming, 2012). Furthermore, supervisors should receive appropriate organisational and managerial support for example, supervision of supervision (Hughes, 2012).

The current study found that the supervisory relationship was particularly valuable to psychological therapists working with lower numbers of service users presenting with complex PTSD. The educative element of the supervisory relationship may provide one explanation of this finding, this assertion is supported by professional guidelines (Milne, 2007; Division of Clinical Psychology, 2014; Beinart, 2012; Holloway, 1995). The British Psychological Society (2008) suggest that supervision by an appropriately experienced practitioner should be sought when

developing new skills. Therefore, for psychological therapists who are newly qualified, lack experience of working with complex PTSD or who do not engage in this work regularly, supervision is particularly important. Service managers should be mindful of this when allocating cases to psychological therapists with less experience of working with complex PTSD and should ensure that appropriate and supportive supervision is available.

7 Strengths and limitations

7.1 Strengths

The current study had several strengths. To my knowledge, this study is the first of its kind to include a specific and empirical definition of complex PTSD therefore adding to and extending the evidence base on the effects of working with traumatised populations. An important and novel aspect of the study was the use of the BRS and the safe base subscale of the S-SRQ to investigate factors which may enhance compassion satisfaction and mitigate against compassion fatigue. In addition, this study investigated if perceived personal resilience and the supervisory relationship moderate the impact of working with complex PTSD. Data from 298 participants was included within the analyses and the sample size is considered adequate and is comparable to existing research in this area. Participants worked in a range of services and had range of professional backgrounds which is also considered a strength of this study.

7.2 Limitations

Recruitment and participation

The representativeness of the sample should be considered in relation to the generalisability of the findings. Various ways of recruiting participants were utilised and participants self-identified and self-selected to take part in this research therefore introducing potential bias. Participants who elected to take part in this study may have done so due to having a particular interest in the effects of working with trauma or due to being personally affected by the issues under investigation.

Measures

The nature and method of data collection is a weakness of this study. The measures used were self-report questionnaires and it is unclear if participants' answers accurately reflect their experiences; social desirability may have impacted the responses of participants although it is hoped that responding online minimised the risk of biased responses (Paulhus, 1984).

The ProQOL can be criticised on methodological and theoretical grounds. Stamm (2010) proposed that compassion fatigue is composed of secondary traumatic stress and burnout however a meta-analysis indicates that the two respective subscales have a shared variance of 55% indicating that the two terms cannot be empirically distinguished from each other and the relationship between the two may be overstated (Cieslak et al, 2014). In addition, the ProQOL measure focuses on symptoms of secondary traumatic stress and burnout which are arguably the observable detrimental effects of working with trauma. There is less emphasis on the cognitive effects therefore the current study may have failed to measure a key element of therapists' responses to their work. The safe base subscale of the S-SRQ was utilised in the current study however the generalisability of the S-SRQ has not yet been fully established; it was developed based on data from trainee clinical psychologists thus its applicability to qualified psychological therapists is unknown (Cliffe et al, 2014). Resilience is a complex concept which is difficult to define and operationalise which has resulted in the development of numerous measures of resilience many of which utilise differing definitions and there is currently no "gold-standard" for measuring resilience (Windle et al, 2011). The Brief Resilience Scale fails to consider the impact of internal and external resources on resilience and the multifaceted nature of resilience, this may have affected the results of this study (Windle et al, 2011; Luthar, Cicchetti, & Becker, 2000). Finally, the current study

did not specify the nature of participants input with service users, trauma focused therapy or otherwise, rather it was a preliminary investigation utilising a specific definition of complex PTSD. Therefore, conclusions cannot be drawn regarding what type of therapeutic work is associated with compassion satisfaction and compassion fatigue.

Study design and statistical analysis

The current study was cross-sectional; all of the data was collected at the same time therefore causality cannot be determined and it was not possible to establish if the results would remain stable. Many of the predictor and outcome variables in this study are considered dynamic thus may not accurately reflect the ongoing experiences of the sample which affects the application of the findings. I did not enter all significantly correlated variables in to the regression analyses; this may have influenced the results of the study.

The majority of participants within this study rated their relationship with their supervisor as positive therefore a median split was conducted. A median split was also conducted for the complex PTSD variable. Information regarding the supervisory relationship and complex PTSD was lost by dichotomising these variables, effect sizes may have been reduced as a result and using a median split can increase the likelihood of finding spurious effects (Field, 2013). Longitudinal or qualitative research would aid our understanding of the findings of this study, particularly the dynamic processes involved.

Conclusion

Over recent years there has been increasing interest in the impact of working with traumatised service users. To date, this is the first study which has implemented a definition of complex PTSD. The association between perceived personal

resilience and the supervisory relationship and self-reported compassion satisfaction, burnout and secondary traumatic stress was also investigated. Furthermore, this is the first study to investigate whether the effects of working with complex PTSD were moderated by perceived personal resilience and the supervisory relationship. The results of this study provide some evidence to suggest that working with complex PTSD may be negatively associated with the well-being of psychologcial therapists. In addition, perceived personal resilience and the supervisory relationship seem to be associated with more postive well-being of pscyhological therapists. However, there is no evidence to indicate that perceived personal resilience and the supervisory relationship confer resilience. The findings of this study have important implications for individual clinicians, service managers and organisations. Based on the results of this study it is suggested that clinician's and service managers consider the number of complex PTSD clients on therapists' case load, that consideration is given to work-place programmes which increase resilience among psychological therapists and that the supervisory relationship is prioritised. Further research in to this interesting and relevant area is required to substantiate the current findings.

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APPENDICIES

Appendix 1: Search Strategy

The syntax of the search strategy is below:

Retrieved 10th March 2017

Database: Ovid MEDLINE (R) <1946 to March Week 2 2017>, PsycINFO <1806 to March Week 2 2017>, PsycARTICLES Full Text.

Search Strategy:

Search 1

1 compassion satisfaction.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (420)

2 compassion fatigue.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (1334)

3 burnout.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (23261)

4 secondary traumatic stress.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (806)

5 vicarious trauma.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, an, sy, tx, sh, ct, tc, id, tm] (471)

6 professional quality of life.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (372)

7 job satisfaction.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm]

8 1 or 2 or 3 or 4 or 5 or 6 or 7 (48520)

9 psycholog*.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (1422020)

10 psychological therap*.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (4005)

11 psychotherap*.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (269933)

12 mental health work*.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (3953)

13 therap*.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (3242184)

14 9 or 10 or 11 or 12 or 13 (4550688)

15 complex post traumatic stress disorder.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (93)

16 complex post traumatic stress.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (104)

17 complex ptsd.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (572)

18 complex trauma.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (930)

19 type 2 trauma.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (19)

20 type II trauma.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (44)

21 post traumatic stress disorder.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (16004)

22 post traumatic stress.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (18855)

23 ptsd.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (48495)

24 psychological trauma.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (4248)

25 type 1 trauma.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (3)

26 type I trauma.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (32)

27 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 (59089)

28 8 and 14 and 27 (711)

29 limit 28 to "all adult (19 plus years)" (708)

30 limit 29 to English (684)

31 remove duplicates from 30 (630)

Search 2

1 compassion satisfaction.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (420)

2 compassion fatigue.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (1334)

3 burnout.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (23261)

4 secondary traumatic stress.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (806)

5 vicarious trauma.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, an, sy, tx, sh, ct, tc, id, tm] (471)

6 professional quality of life.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (372)

7 job satisfaction.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm]

8 1 or 2 or 3 or 4 or 5 or 6 or 7 (48520)

9 psycholog*.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (1422020)

10 psychological therap*.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (4005)

11 psychotherap*.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (269933)

12 mental health work*.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (3953)

13 therap*.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (3242184)

14 9 or 10 or 11 or 12 or 13 (4550688)

15 complex post traumatic stress disorder.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (93)

16 complex post traumatic stress.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (104)

17 complex ptsd.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (572)

18 complex trauma.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (930)

19 type 2 trauma.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (19)

20 type II trauma.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (44)

21 post traumatic stress disorder.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (16004)

22 post traumatic stress.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (18855)

23 ptsd.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (48495)

24 psychological trauma.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (4248)

25 type 1 trauma.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (3)

26 type I trauma.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (32)

27 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 (59089)

28 8 and 14 and 27 (711)

29 resilien*.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (46303)

30 28 and 29 (203)

31 limit 30 to "all adult (19 plus years)" (201)

32 limit 31 to English (201)

33 remove duplicates from 32 (196)

Search 3

1 compassion satisfaction.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (420)

2 compassion fatigue.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (1334)

3 burnout.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (23261)

4 secondary traumatic stress.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (806)

5 vicarious trauma.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, an, sy, tx, sh, ct, tc, id, tm] (471)

6 professional quality of life.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (372)

7 job satisfaction.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm]

8 1 or 2 or 3 or 4 or 5 or 6 or 7 (48520)

9 psycholog*.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (1422020)

10 psychological therap*.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (4005)

11 psychotherap*.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (269933)

12 mental health work*.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (3953)

13 therap*.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (3242184)

14 9 or 10 or 11 or 12 or 13 (4550688)

15 complex post traumatic stress disorder.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (93)

16 complex post traumatic stress.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (104)

17 complex ptsd.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (572)

18 complex trauma.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (930)

19 type 2 trauma.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (19)

20 type II trauma.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (44)

21 post traumatic stress disorder.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (16004)

22 post traumatic stress.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (18855)

23 ptsd.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (48495)

24 psychological trauma.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (4248)

25 type 1 trauma.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (3)

26 type I trauma.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (32)

27 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 (59089)

28 8 and 14 and 27 (711)

29 clinical supervision.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (3954)

30 supervision.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (56193)

31 supervisory relationship.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (1183)

32 supervisory alliance.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (220)

33 supervision rapport.mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, sy, tx, ct, tc, id, tm] (0)

34 29 or 30 or 31 or 32 or 33 (56312)

35 28 and 34 (141)

36 limit 35 to "all adult (19 plus years)" (139)

37 limit 36 to English (139)

38 remove duplicates from 37 (137)

Appendix 2: Recruitment email

Dear colleague,

I am a trainee clinical psychologist at the University of Leeds and I am currently recruiting participants for my thesis research.

The aim of this research project is to explore if working with traumatised individuals has an impact upon psychological therapists and to investigate factors which predict both the positive and negative effects. The results of this research will be useful for individual clinicians, supervisors and service managers and will contribute to our understanding of how to promote the well-being of psychological therapists.

You are invited to complete a one-off questionnaire which should take no more than 30 minutes. If you would like to take part, please click the following link https://leeds.onlinesurveys.ac.uk/how-does-working-with-trauma-affect-psychological-therapists

Participants will be entered in to a prize draw for 2 £50 amazon vouchers.

It is hoped the results of this research will be useful for individual clinicians, supervisors and service managers.

If you have any questions about the research please do not hesitate to contact me or my supervisors.

Principal Investigator	**Supervisor**	**Supervisor**
Catherine Corker umcco@leeds.ac.uk	Dr Judith Johnson j.johnson@leeds.ac.uk	Prof. Daryl O'Connor d.b.oconnor@leeds.ac.uk

Ethics ref: 16-0104 Approval date: 04/04/16 IRAS ID: 204407

Thank you for your time.

Kind regards,
Catherine Corker
Psychologist in Clinical Training
University of Leeds

Appendix 3: Advertisements for professional networks / websites

Psychological therapists – how does your work affect you? What helps you help others? How can your work place help you help others? We want to hear from you!

You are invited to take part in a new online study investigating the effects of working with traumatised individuals:

https://leeds.onlinesurveys.ac.uk/how-does-working-with-trauma-affect-psychological-therapists

The aim of this research project is to explore if working with traumatised individuals has an impact upon psychological therapists and to investigate factors which predict both the positive and negative effects. The results of this research will be useful for individual clinicians, supervisors and service managers and will contribute to our understanding of how to promote the well-being of psychological therapists.

If you would like to take part in this research please click the following link https://leeds.onlinesurveys.ac.uk/how-does-working-with-trauma-affect-psychological-therapists

The questionnaire should take no more than 30 minutes and participants will be entered in to a prize draw for 2 £50 Amazon vouchers.

If you have any questions about the research please do not hesitate to contact me or my supervisors.

Principal Investigator	Supervisor	Supervisor
Catherine Corker umcco@leeds.ac.uk	Dr Judith Johnson j.johnson@leeds.ac.uk	Prof. Daryl O'Connor d.b.oconnor@leeds.ac.uk

Ethics ref: 16-0104 Approval date: 4/4/16 IRAS ID: 204407

Appendix 4: Measures

Please tell us about yourself…		
1	Gender?	Please state:
2	How old are you?	Please enter your age:
Please tell us about your professional background…		
3	What is your current role?	Please select one:
		Clinical Psychologist
		Counselling Psychologist
		Forensic Psychologist
		Psychodynamic Psychotherapist
		Nurse Practitioner
		Social Worker
		CBT Therapist
		Psychiatrist
		Other, please specify:
4	How many years have you been practising as a psychological therapist?	Please enter number:
5	Have you completed any specialist trauma training?	Please select one:
		Yes
		No
6	What is the main therapeutic modality you use within your clinical work?	Please select one:
		Cognitive Behaviour Therapy (CBT)
		Eye Movement Desensitisation and Reprocessing (EMDR)
		Cognitive Analytic Therapy (CAT)
		Compassion Focused Therapy (CFT)
		Acceptance and Commitment Therapy (ACT)
		Psychodynamic

		Narrative	
		Systemic	
		Dialectical Behaviour Therapy (DBT)	
		Other, please specify:	
Please tell us about your current job… Please answer the following questions in relation to your main employment			
7	Are you employed on a full-time or part-time basis?	Please select one:	
		Full-time	
		Part-time	
8	How many hours are you contracted to work each week?	Please enter number:	
9	What type of service do you spend most of your time in?	Please select one:	
		Adult: Primary Care Mental Health Service	
		Adult: Secondary Care Psychological Therapies Team	
		Adult: Crisis Team	
		Adult: CMHT	
		Adult: Specialist Trauma Service	
		Adult: Physical Health	
		Adult: Learning Disabilities Service	
		Adult: Older Adult Service	
		Adult: Forensic	
		Adult: Specialist Veterans Service	
		Adult: Armed Forces Personnel	
		Adult: Neuropsychology	
		Child: Tier 2 CAMHS	
		Child: Tier 3 CAMHS	
		Child: Specialist CAMHS	
		Child: Paediatrics	

		Other, please specify:	
10	What type of organisation do you spend most of your time in?	Please select one:	
		NHS	
		Third Sector	
		Other Public Sector e.g. Ministry of Defence	
		Private Sector	
Please tell us about your work as a psychological therapist… Please answer the following questions based on your experiences over the last 3 months and in relation to your main employment.			
11	On average, how often do you attend clinical supervision?	Please select one:	
		Weekly	
		Fortnightly	
		Monthly	
		Every Other Month	
		Other, please specify:	
12	What is the average duration of each supervision session?	Please enter number of minutes:	
13	What is the main type of clinical supervision you receive?	Individual	
		Group If you receive group supervision, how many supervisees are present?	
14	On average, how many service users do you see per week in your capacity as a psychological therapist?	Please enter number:	
15	On average, how many hours of face-to-face clinical work do you engage in per week in your capacity as a psychological therapist?	Please enter number:	
16	On average, what percentage of the service users you treat are veterans or members of the armed forces?	Please select one:	
		0% 1%-10% 11%-20% 21%-30% 31%-40% 41%-50% 51%-60% 61%-70% 71%-80% 81%-90%	

		91%-100%
17	On average, what percentage of the service users you work with present with psychological trauma?	Please select one: 0% 1%-10% 11%-20% 21%-30% 31%-40% 41%-50% 51%-60% 61%-70% 71%-80% 81%-90% 91%-100%
18	On average, what percentage of the service users you work with present with developmental trauma?	Please select one: 0% 1%-10% 11%-20% 21%-30% 31%-40% 41%-50% 51%-60% 61%-70% 71%-80% 81%-90% 91%-100%
Complex PTSD can occur following exposure to traumatic events (in childhood or adulthood) and results in all or most of the following symptoms: • Re-experiencing of the event(s) • Avoidance of traumatic reminders • Excessive hypervigilance or an enhanced startle reaction • Affect dysregulation (e.g. heightened emotional reactivity, violent outbursts, reckless or self-destructive behaviour, tendency to experience prolonged dissociative states when under stress, emotional numbing) • Negative self-concept (e.g. persistent beliefs of worthlessness, defeat or of oneself as diminished, deep and pervasive feelings of shame or guilt) • Interpersonal disturbances (e.g. difficulties maintaining relationships, difficulties in feeling close to others, avoidance or little interest in relationships and social engagement)		
19	Based on the above definition, on average, what percentage of the service users you work with present with complex PTSD?	Please select one: 0% 1%-10% 11%-20% 21%-30% 31%-40%

		41%-50% 51%-60% 61%-70% 71%-80% 81%-90% 91%-100%
20	What other roles and responsibilities do you have within your main job, other than direct clinical work?	Please select all of those that apply:
		None
		Providing Clinical Supervision
		Line Management
		Duty Clinician
		Consultation
		Teaching and Training
		Service Evaluation and Audit
		Research
		Other, please specify:
Please tell us if you have experienced a traumatic event…		
21	Have you ever experienced a traumatic event?	Please select one:
		Yes
		No

The Brief Resilience Scale

Bruce W. Smith, University of New Mexico, bwsmith@unm.edu

Instructions: Use the following scale and **circle** one number for each statement to indicate how much you disagree or agree with each of the statements.

1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

---

1. I tend to bounce back quickly after hard times..	1	2	3	4	5
2. I have a hard time making it through stressful events……..	1	2	3	4	5
3. It does not take me long to recover from a stressful event…….	1	2	3	4	5
4. It is hard for me to snap back when something bad happens……..	1	2	3	4	5
5. I usually come through difficult times with little trouble..……	1	2	3	4	5
6. I tend to take a long time to get over set-backs in my life…….	1	2	3	4	5

THE SHORT SUPERVISORY RELATIONSHIP QUESTIONNAIRE (S-SRQ)

The following statements describe some of the ways a person may feel about his/her supervisor. **To what extent do you agree or disagree with each of the following statements about your relationship with your supervisor? Please tick the column which matches your opinion most closely.**	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Agree	Strongly Agree
SAFE BASE SUBSCALE							
1. My supervisor was approachable							
2. My supervisor was respectful of my views and ideas							
3. My supervisor gave me feedback in a way that felt safe							
4. My supervisor was enthusiastic about supervising me							
5. I felt able to openly discuss my concerns with my supervisor							
6. My supervisor was non-judgemental in supervision							
7. My supervisor was open-minded in supervision							
8. My supervisor gave me positive feedback on my performance							
9. My supervisor had a collaborative approach in supervision							

Professional Quality of Life Scale (ProQOL)

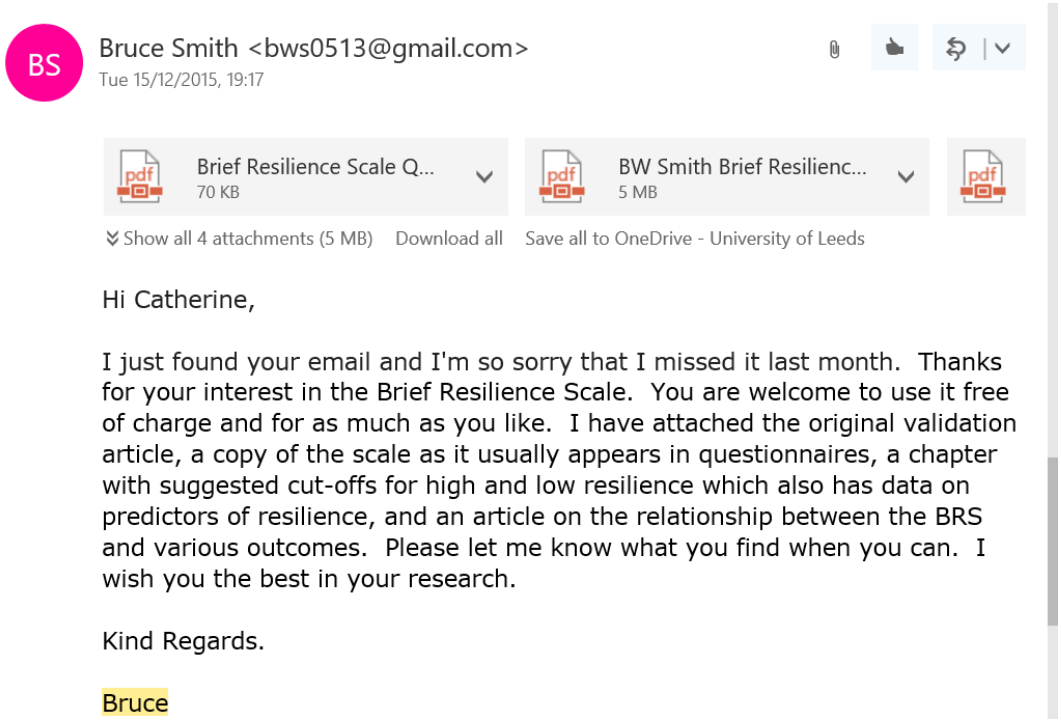
Compassion Satisfaction and Compassion Fatigue
(ProQOL) Version 5 (2009)

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

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

_____ 1. I am happy.
_____ 2. I am preoccupied with more than one person I *[help]*.
_____ 3. I get satisfaction from being able to *[help]* people.
_____ 4. I feel connected to others.
_____ 5. I jump or am startled by unexpected sounds.
_____ 6. I feel invigorated after working with those I *[help]*.
_____ 7. I find it difficult to separate my personal life from my life as a *[helper]*.
_____ 8. I am not as productive at work because I am losing sleep over traumatic experiences of a person I *[help]*.
_____ 9. I think that I might have been affected by the traumatic stress of those I *[help]*.
_____ 10. I feel trapped by my job as a *[helper]*.
_____ 11. Because of my *[helping]*, I have felt "on edge" about various things.
_____ 12. I like my work as a *[helper]*.
_____ 13. I feel depressed because of the traumatic experiences of the people I *[help]*.
_____ 14. I feel as though I am experiencing the trauma of someone I have *[helped]*.
_____ 15. I have beliefs that sustain me.
_____ 16. I am pleased with how I am able to keep up with *[helping]* techniques and protocols.
_____ 17. I am the person I always wanted to be.
_____ 18. My work makes me feel satisfied.
_____ 19. I feel worn out because of my work as a *[helper]*.
_____ 20. I have happy thoughts and feelings about those I *[help]* and how I could help them.
_____ 21. I feel overwhelmed because my case [work] load seems endless.
_____ 22. I believe I can make a difference through my work.
_____ 23. I avoid certain activities or situations because they remind me of frightening experiences of the people I *[help]*.
_____ 24. I am proud of what I can do to *[help]*.
_____ 25. As a result of my *[helping]*, I have intrusive, frightening thoughts.
_____ 26. I feel "bogged down" by the system.
_____ 27. I have thoughts that I am a "success" as a *[helper]*.
_____ 28. I can't recall important parts of my work with trauma victims.
_____ 29. I am a very caring person.
_____ 30. I am happy that I chose to do this work.

Appendix 5: Permission to use measures



BS

Bruce Smith <bws0513@gmail.com>

Tue 15/12/2015, 19:17

Brief Resilience Scale Q... 70 KB

BW Smith Brief Resilienc... 5 MB

Show all 4 attachments (5 MB) Download all Save all to OneDrive - University of Leeds

Hi Catherine,

I just found your email and I'm so sorry that I missed it last month. Thanks for your interest in the Brief Resilience Scale. You are welcome to use it free of charge and for as much as you like. I have attached the original validation article, a copy of the scale as it usually appears in questionnaires, a chapter with suggested cut-offs for high and low resilience which also has data on predictors of resilience, and an article on the relationship between the BRS and various outcomes. Please let me know what you find when you can. I wish you the best in your research.

Kind Regards.

Bruce

RE: SSRQ

TC

Thomas Cliffe

Thu 01/10/2015, 09:16

Catherine Corker

S-SRQ_2014.pdf 18 KB

Download Save to OneDrive - University of Leeds

Hi Cat

No problem-happy to help! I've attached the S-SRQ for you.
Any further questions please let me know.

Best wishes

Tom

Dr Tom Cliffe
Lecturer in Clinical Psychology
Clinical Psychology Training Programme | Leeds Institute of Health Sciences
University of Leeds | Charles Thackrah Building | 101 Clarendon Road | Leeds LS2 9LJ
Tel +44 (0)113 343 3407 | T.D.Cliffe@leeds.ac.uk

Appendix 6 : Participant Information Sheet (PIS) and Participant Consent Form

UNIVERSITY OF LEEDS

Doctor of Clinical Psychology Programme

Ethics ref: 16-0104 Approval date: 4/4/16 IRAS ID: 204407

Information sheet for participants.

Title of the research project

Is helping helpful? What impact does working with traumatised individuals have on psychological therapists and what are the contributing factors?

What is the purpose of the project?

The aim of this research project is to investigate if working with traumatised service users affects the psychological well-being of psychological therapists. Both the positive and negative effects will be investigated including predicting factors such as client, clinician and work factors.

The aim of this research project is to explore your experience of working with traumatised service users by collecting information on the following domains:

- The supervisory relationship
- Professional quality of life
- Burnout
- Resilience
- Well-being
- Demographic information and information regarding your current work will also be collected

What will the research involve?

You will be asked to complete a survey composed of five brief questionnaires relating to the above domains. You will only fill these out on one occasion. In addition, there will be an opportunity for you to share your opinions regarding the positive and negative effects of working with traumatised individuals and how the supervisory relationship affects how you respond to working in this field.

Do I have to take part?

Taking part in this research is voluntary. It is up to you to decide whether or not to take part. If you take part and then change your mind, you can withdraw from the study up to 2 weeks after submitting your data. You will not be asked to give a reason for withdrawing from the study. Participants will be given the opportunity to be entered in to a prize draw to win one of two £50 Amazon vouchers.

What will happen to my data?

Two weeks after you submit your questionnaire the data will be anonymised and entered onto a spreadsheet. This data will then be analysed. Therefore, you will not be able to withdraw from the study at this point.

The spreadsheet and analysis will be stored in a password protected document on the university server. With regards to qualitative data, you will not be asked to provide your name or any identifiable information however, if identifiable information is provided, pseudonyms will be utilised. The qualitative data and analysis will be stored in a password protected file on the university server. Data will be stored for 3 years before being destroyed.

For the purposes of the prize draw, you will be asked to provide your email address. The winners of the prize draw will be contacted via email once data collection is complete. Your email address will not be used for any reason other than to contact you should you be successful in the prize draw. Email address will be deleted once the prize draw is complete.

How will I consent?

If you decide to take part, you will be asked to fill in a consent form prior to completing the survey.

What are the possible disadvantages of taking part?

Taking part in the study could potentially be distressing as you will be reflecting on your own personal responses to working with trauma. Information will be provided to where you can seek support if required.

What are the possible benefits?

This study is investigating the impact of working with traumatised service users and factors which may promote beneficial effects and reduce detrimental effects. Therefore, the results could benefit individual clinicians, supervisors and service managers.

What will happen to the results of the research project?

The results of this study will be written up for submission of the research thesis as part of the Doctor of Clinical Psychology Training Programme. All data will be completely anonymised as detailed above. This project may also be written up and submitted to an academic journal

Who to contact for further information?

Principal Investigator	**Supervisor**	**Supervisor**
Catherine Corker umcco@leeds.ac.uk	Dr Judith Johnson j.johnson@leeds.ac.uk	Prof. Daryl O'Connor d.b.oconnor@leeds.ac.uk

Thank you for taking the time to read this sheet and for considering taking part in the study.

Participant Consent Form

UNIVERSITYOFLEEDS
Doctor of Clinical Psychology Programme
Participant Consent Form

Ethics ref: 16-0104 Approval date: 04/04/16 IRAS ID: 204407

Please circle as applicable

I have read the participant information sheet.	Y/N
I have had the opportunity to ask questions.	Y/N
I have received enough information about this research.	Y/N
I understand that I can withdraw from this research up to 2 weeks after submitting my questionnaire	Y/N
I agree to take part in this research.	Y/N
I wish to be entered in to prize draw	Y/N
I agree for my email address to be used for the purpose of the prize draw	Y/N

Name.....

Signed.....

Email.....

Date.....

Consent Form Version 3 28/3/16

Appendix 7: Debrief information

Thank you for taking the time to participate in this research.

The aim of this research is to investigate the well-being of psychological therapists working with traumatised individuals. In addition, the research is investigating factors which predict compassion satisfaction, compassion fatigue, burnout and psychological well-being by asking participants to provide information about themselves, their clients and their work as a psychological therapist. This study is also investigating if the quality of the supervisory relationship and clinician resilience moderates the relationship between working with traumatised service users and compassion satisfaction, compassion fatigue, burnout and well-being.

Where to get further support

Some of the questions asked you to reflect on your personal experiences and personal reactions to working with traumatised service users which may have been upsetting. If you feel you need additional support, you may wish to contact Mind on 0300 123 3393 or the Samaritans on 116 123.

If you would like further information about the study then please do not hesitate to get in touch.

Principal Investigator	Supervisor	Supervisor
Catherine Corker umcco@leeds.ac.uk	Dr Judith Johnson j.johnson@leeds.ac.uk	Prof. Daryl O'Connor d.b.oconnor@leeds.ac.uk

Appendix 8: Ethical Approval and HRA Approval

Dear Judith Johnson,

Title of study: Is helping helpful? What impact does working with traumatised individuals have on psychological therapists and what are the contributing factors?

Ethics reference: 16-0104

I am pleased to inform you that the above research application has been reviewed by the IPS Research Ethics Committee and has been approved. Please note that this approval only relates to the particular version of documentation supplied in this specific application (ref no: 16-0104; date approved: 04-Apr-2016). If you wish to make any amendments to the approved documentation, please note that all changes require ethical approval prior to implementation.

Please note: You are expected to keep a record of all your approved documentation, as well as documents such as sample consent forms, and other documents relating to the study. This should be kept in your study file, which should be readily available for audit purposes.
You will be given a two week notice period if your project is to be audited. There is a checklist listing examples of documents to be kept which is available at http://ris.leeds.ac.uk/EthicsAudits

Yours sincerely,

IPS Research Ethics Committee
(Chair: Donna Lloyd)

NHS
Health Research Authority

Miss Catherine Corker
Trainee Clinical Psychologist
Leeds Teaching Hospital
Clinical Psychology
Charles Thackrah Buildng
101 Clarendon Rd
LS2 9LJ

Email: hra.approval@nhs.net

23 May 2016

Dear Miss Corker

Letter of HRA Approval

Study title:	**Is helping helpful? What impact does working with traumatised individuals have on psychological therapists and what are the contributing factors?**
IRAS project ID:	**204407**
Sponsor	**University of Leeds**

I am pleased to confirm that **HRA Approval** has been given for the above referenced study, on the basis described in the application form, protocol, supporting documentation and any clarifications noted in this letter.

Participation of NHS Organisations in England

The sponsor should now provide a copy of this letter to all participating NHS organisations in England.

Appendix B provides important information for sponsors and participating NHS organisations in England for arranging and confirming capacity and capability. **Please read *Appendix B* carefully**, in particular the following sections:

- *Participating NHS organisations in England* – this clarifies the types of participating organisations in the study and whether or not all organisations will be undertaking the same activities
- *Confirmation of capacity and capability* - this confirms whether or not each type of participating NHS organisation in England is expected to give formal confirmation of capacity and capability. Where formal confirmation is not expected, the section also provides details on the time limit given to participating organisations to opt out of the study, or request additional time, before their participation is assumed.
- *Allocation of responsibilities and rights are agreed and documented (4.1 of HRA assessment criteria)* - this provides detail on the form of agreement to be used in the study to confirm capacity and capability, where applicable.

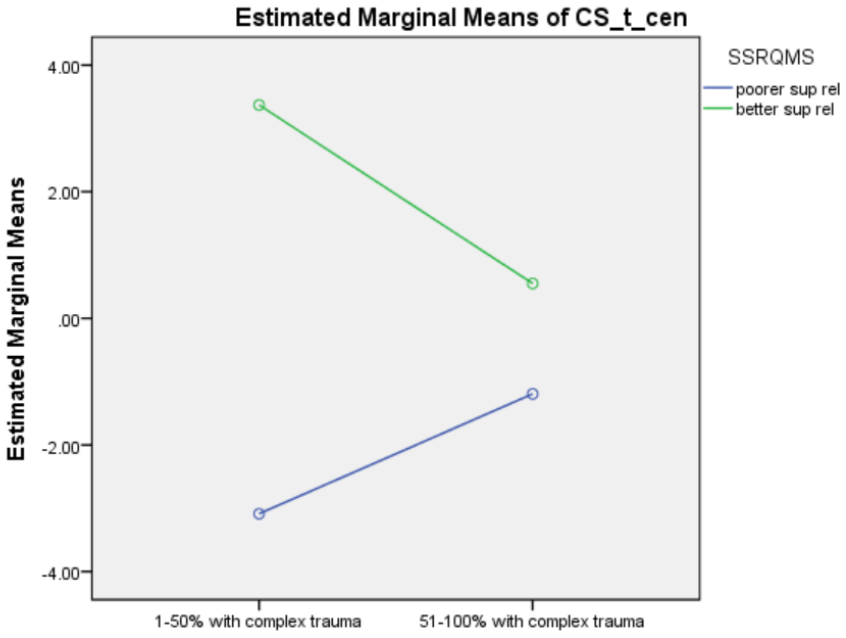
Appendix 9: Checking assumptions of hierarchical linear regression and ANOVA

The underlying assumptions of hierarchical linear regression were met. Sample size was considered adequate and the data set deemed appropriate (Tabachnick & Fidell, 2013). The dependent variables entered in to the model were normally distributed. Multicollinearity was considered and all of the independent variables were deemed to be conceptually different. The outcome and predictor variables entered in to the model were centred (Tabachnick & Fidell, 2013). The Durbin-Watson test was conducted to test for independence of observations. Residuals were examined indicating homoscedasticity and linearity and there were no significant outliers (Tabachnick & Fidell, 2013). Hierarchical linear regression was utilised because specific hypotheses were being tested; complex PTSD was added to the model in the early stages based on previous research and theoretical considerations (Field, 2013; Tabachnick & Fidell, 2013).

The assumptions of ANOVA were also considered; the homogeneity of variance assumption was met, Levene's test was non-significant for each of the outcome variables (Field, 2013).

Appendix 10: Interaction graphs

Graph of interaction between complex PTSD and safe base subscale of the s-srq for compassion satisfaction



Graph of interaction between complex PTSD and safe base subscale of the s-srq for secondary traumatic stress