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The exploration of the impact of secondary traumatisation on professionals working with forensic clients.

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Thesis Abstract

Chapter Two: This is a systematic review examining the impact of secondary traumatisation upon professionals working with forensic populations. A narrative synthesis revealed that professionals who work with forensic clients are at risk of being secondarily traumatised. More specifically, the synthesis revealed that professionals who have less face-to-face contact with clients, who are younger or have been in professions longer are more susceptible to being secondarily traumatised. Additionally, previous traumatic experiences were identified as a risk factor for professionals. Finally, psychological empowerment and compassion satisfaction were identified as potential moderating factors for secondary traumatisation.

Chapter Three: The literature has identified The Secondary Traumatic Stress Scale (STSS; Bride et al., 2004) as an essential tool for the measurement of secondary traumatic stress amongst professionals (Beck, 2011). Consequently, Chapter Three evaluates the psychometric properties of STSS in depth. The review revealed several strengths and weaknesses of the measure. Most notably it was highlighted that there was a risk that professionals could engage in socially desirable responses because of the core belief that highlighting symptomology of STS will impact their ability to successfully do their role (Kellogg et al., 2018). Therefore, using multiple sources during assessments would strengthen findings.

Chapter Four: This quantitative study aimed to explore the relationship and predictive nature of several risk factors identified as contributing to the development of STS. The factors explored within the study were identified following extensive review of the literature and included time spent with clients (Borjanić Bolić, 2018), age of professionals (Baird & Jenkins, 2003), length of time

in the role (Turgoose et al., 2017), previous exposure to trauma (Choi, 2011) and the development of burnout (Adams et al., 2006). It was established in Chapter Four that exposure to physical assault within the workplace and outside of work correlated with higher levels of STS In addition to this, the study found that greater experiences of workplace burnout could predict the development of STS. No significant relationship was established within this study between STS and time spent with clients, age of professionals and time in the role.

Chapter Five: This quantitative study aimed to provide insight regarding whether professionals' personal ideations regarding societal status could buffer the effects of working with traumatised clients. Within forensic settings, there are significant hierarchical differences amongst detained clients and professionals. Social dominance is defined as the degree to which one endorses hierarchical distinctions (Sidanius & Pratto, 1999). Within the current study it was found that Social Dominance Orientation (SDO) was not a moderator of STS. However, it was established that positive ideations regarding violence were a significant moderator of STS. In addition to this, it was established that endorsement of violence was correlated with the development of STS. Moreover, the current study found that there was a correlation between the strength of punitive attitudes held by professionals and their endorsement of SDO.

Chapter Six: This chapter focusses on synthesising the findings of the chapters, exploring the implications that were identified within the thesis and considering potential gaps that were identified within the literature. Recommendations were made regarding the future directions for research, and how the focus upon professionals working with the forensic populations impacts the general literature. In addition to this, recommendations were made regarding how services and

establishments can help to support professionals and can adapt recruitment processes which will assist in the protection of staff from the development of secondary traumatisation. Overall, it is concluded that more consideration needs to be paid to the welfare of professionals working with forensic clients.

Chapter One: Overview

The overall objective of this thesis is to provide the reader with a robust overview of the impact of secondary traumatisation upon individuals who work with forensic populations. The thesis will focus on building upon the research which has explored prevalence rates, symptomology, risk factors and protective factors of secondary traumatisation (Foley & Massey, 2020). Additionally, there will be exploration of how the adaptation of services has contributed to the overserved difficulties for professionals and what changes can be implemented.

Trauma informed services

When considering trauma informed services, the relevant literature presents a significant link between the exposure to traumatic events as a child and long-term adverse mental health outcomes (Zlotnick et al., 2008). Numerous individuals that come into contact with mental health services have experienced abuse (Mauritz et al., 2013). In addition to this, individuals that have engaged with forensic services specifically, will have likely been exposed to marginalisation, poverty, racism or violence – all of which are concepts that positively correlate with poor mental health (Paradies, 2006). This compelling evidence base has resulted in services scrutinising psychological and social variables which contribute to distress (Bath, 2008). Consequently, many psychologically informed services have adapted as they begin the process of ensuring that they are trauma-informed (Raja, 2015). There is a general conceptualisation amongst senior leaders within mental health services that endorsing this method of working will ensure a more robust understanding of service users' adversity (Muskett, 2014). Trauma-informed services are defined as a "systemic development that is grounded in the need of understanding how traumatic exposure impacts a service user's neurological, biological, psychological and social development" (Butler et al.,

2011). As a result, trauma-informed services are based on psychology, neurology and social sciences (Huckshorn, & LeBel, 2013). In addition to this, attachment and trauma theories have been influential in the creation of trauma-informed services (Hamberger et al., 2019).

The trauma-informed model is a strategy that has been identified as relevant to most services and establishments. This includes schools, physical health, social care and forensic services (Cole et al., 2013). Within this model, it is assumed that individuals who have traumatic pasts may struggle to develop trusting and meaningful relationships within health and care services and may feel unsafe within their environments. In an attempt not to re-traumatise individuals, services have been structured in a way that encompasses safety and trust. This method of work has been endorsed by findings within relevant research. For example, Esaki and Larkin (2013) found that there was an improvement in individuals' well-being, following engagement with trauma-informed services. For example, prison services now utilise the key working system which involves clients having weekly discussions with personal officers. The aim of this system is to improve relationships with operational staff and assist with clients' adjustments to prison. This adaptation in working style enables clients to increase their sense of safety and build trusting relationships with professionals. In addition to this, the literature has provided evidence that suggests that trauma carries a significant economic cost within society (Dolezal et al., 2009). It is argued that trauma-informed services help to significantly reduce this economic cost. For example, LeBel and Goldstein (2005) found that trauma-informed services utilised restraints and seclusion less than non-trauma informed services. This distinct difference in restrictive practices utilised by services can be attributed to the substantial reduction in the financial burden that trauma has upon the economy. Lastly, staff

within trauma-informed services have been impacted by the appropriate changes to training, supervision and ethos of services (Hales et al., 2017). It must be noted that this emphasis on a different way of working with clients can positively impact staff members as they feel more competent in their ability to conduct their role (Baetz et al., 2019). This is also evidenced by the findings within empirical studies which highlight that staff often flourish because of the investment made by the organisation; this has been shown to be connected to staff retention (Shanock & Eisenberger, 2006).

Power threat meaning framework

Given that organisations are adapting their methods of working with clients in accordance with the trauma-informed model, the research has now begun to explore different diagnostic models. One of the most novel, but influential models that has been conceptualised within the context of trauma-informed practice is The Power Threat Meaning Framework (Johnstone & Boyle, 2018). The Power Threat Meaning Framework has been created to assist professionals with their ability to conceptualise more hopeful narratives with service users (Johnstone & Boyle, 2018). The distinction between this and previous theoretical models such as the medical or cognitive model, is the aim to divert service users away from rationalising themselves as blameworthy, weak, deficient or 'mentally ill' (Boyle, 2020). The research has found that professionals can do this by highlighting the link between social factors such as poverty, inequality and discrimination alongside trauma while discussing plausible emotional responses (Read & Harper, 2020). Underpinning the framework is the ideation that we do not necessarily have to solely focus on the individual when understanding their distress. The

framework rationalises that many of us are a part of a wider society that is advocating for fairness (Read & Harper, 2020).

The objective is to equip professionals with a further understanding of how to conceptualise and understand an individual's distress. Within this model there is an emphasis placed on replacing the traditional psychiatric practice of merely asking "what is wrong with you?" (Johnstone & Boyle, 2018). This leads the framework to recommend that professionals replace the previous question with the following: "what has happened to you?" (How is power operating in your life?), "How did it affect you?" (What kind of threats does this pose?) "What sense did you make of it?" (What is the meaning of these situations and experiences to you?), and "What did you have to do to survive?" (What kinds of threat response are you using? (Johnstone & Boyle, 2018). The function of power within society is extensively explored within the model. The model highlights the function of power, for example the legal and relational power in relation to its association to the behavioural and emotional difficulties of individuals (Cromby, 2020). Additionally, the framework conceptualises how behavioural and emotional difficulties are potentially related to various adversities an individual may be subjected to within their life span (Griffiths, 2019). It is argued that poverty can be identified as adversity that can lead to further difficulties during one's life (Pare & Felson, 2014). A concept that is explored within the framework is the susceptibility of individuals who have been traumatised to be re-traumatised. More specifically, these individuals may be subject to traumatisation within services (Sweeney et al., 2018). Thus, Johnstone and Boyle (2018) emphasise the importance of the difference in power amongst service users and professionals and discusses how this can contribute to an individual being re-traumatised.

Additionally, the research has explored the concept of power and its influence over the type of threats that an individual will likely be exposed to (Harper, & Cromby, 2020). Within the framework, there is particular interest in emotional responses regarding the perceived threat and how individuals are potentially mediated by their biological system (Johnstone & Boyle, 2018). There maintains a strong evidence-base that highlights the conditions that contribute to an individual flourishing or failing within life (Thøgersen, 2006). The threat concept within the framework ensures that professionals consider how core needs being met or not can influence an individual's trajectory. More specifically, these concepts are mostly related to the understanding of how an individual conceptualises safety and security. Thus, within the framework there is an emphasis on ensuring that professionals understand that there is a relationship between an individual's attachment style and how they understand the world; particularly how threatening they view the world to be (Johnstone & Boyle, 2018). Moreover, the model is unique in its consideration and prominence on ensuring that professionals understand the meaning of an event that is contributing to an individual's distress (Johnstone & Boyle, 2018). Authors highlight the need to understand the social and cultural context in understanding the experience and expression of power, threat and an individual's response to threat (Johnstone, 2020). This new outlook in understanding individuals' meaning is imperative within the framework, particularly with reference to informing professionals of how one expresses or experiences mental distress (Grant & Gadsby, 2018). Within the evidence base it is stated that meaning can be assessed by interpreting an individual's behaviour, beliefs or bodily reactions (Johnstone & Boyle, 2018). This in-depth understanding of clients' distress has been influential within trauma-

informed services, particularly with regard to shaping how appropriately professionals work with clients.

Nevertheless, what both the Power Threat Meaning Framework and trauma-informed models fail to highlight is the potential impact upon professionals who are instructed and trained to work with clients using this methodology. The Power Threat Meaning Framework discusses in depth the potential ramifications of professional power concerning service users (Johnstone & Boyle, 2018). Additionally, each concept within the framework is constructed in relation to power. However, the authors do not address the potential ramifications upon professionals if there is a considerable loss of power. This is particularly relevant within forensic environments that can be highly emotive and volatile (Lewis & Ireland, 2019). In addition to this, critics of the model have explored whether the construction of the model was a technique from psychologists to highlight the flaws of the medical model and to replace psychiatrists as the top mental health professionals (Johnstone et al., 2019). However, the authors note that they were not considering any particular professional when they were constructing the framework and their points in relation to power were generic (Johnstone et al., 2019). Despite this, it can be argued that the framework does not appropriately consider the role of power with regard to the majority of professionals within psychiatric services. It can also be suggested that this framework is mostly applicable within hospital settings, and forensic settings such as prisons were not appropriately considered during the conceptualisation of the framework. It therefore seems plausible and appropriate to explore whether working with traumatised clients can impact professionals, particularly within forensic settings.

Cost of caring

Figley (1995) highlighted that some professionals will experience trauma following their engagement with traumatised clients and has described this impact as the 'cost of caring'. Working with clients who have experienced trauma can put professionals at risk of being primarily and secondarily traumatised (Trippany et al., 2004). Secondary trauma is defined as indirect exposure to trauma through a first-hand account or narrative of a traumatic event. The vivid recounting of trauma by the survivor and the clinician's subsequent cognitive or emotional representation of that event may result in a set of symptoms and reactions that parallel PTSD (e.g., re-experiencing, avoidance and hyperarousal; Motta, 2008). It has been noted that working with traumatised clients can be described as an occupational hazard that can be difficult for employers to prevent (Branson et al., 2014). Within psychiatric and forensic services in the UK, aggression and violence has been highlighted as an issue for professionals (Bonner & McLaughlin, 2007). Aggression can appear in many forms within these environments; including physical assault, verbal abuse and bullying (Edward et al., 2014). The literature notes that these experiences can have significant psychological impacts upon professionals (Edward et al., 2014). The ramifications of encountering aggression or violence can lead to professionals experiencing fatigue, anxiety and low self-worth (Rowe & Sherlock, 2005). In addition to this, further aftereffects can range from professionals being somewhat shaken, to being distressed for some time, through to Post-Traumatic Stress Disorder (PTSD; Bonner et al., 2002). Over recent years the literature has explored the impact on professionals who have been directly exposed to traumatic encounters (McElvaney & Tatlow-Golden, 2016). However, the research has considerably overlooked the impact that

indirect trauma may have upon professionals because of the proximity of their relationship with traumatised clients.

Secondary exposure to a traumatic event has been noted in the research as having a similar impact on an individual as being exposed to the primary traumatic stimuli (Choi, 2011). The research has begun to explore whether there is a cost of caring for clients with mental health problems and trauma histories (Hensel et al., 2015). Secondary traumatisation can cause potential emotional distress to professionals and has been described as a potential hazard alongside primary trauma within the workplace (MacRitchie & Leibowitz, 2010). The literature exploring this area is currently growing, and researchers are beginning to conceptualise which professionals are more at risk of potential adverse effects. Occupations such as Medical Doctors (Huggard et al., 2013), Audiologists (Severn et al., 2012), Psychologists (Pearlman & Saakvitne, 1995) and Nurses (Vachon et al., 2015) have all been explored within the literature. The research states that the three most common conditions associated with secondary traumatisation is STS, compassion fatigue and vicarious trauma (Nimmo & Huggard, 2013). It has been noted that researchers do to a degree, believe that these terms are somewhat interchangeable (Nimmo & Huggard, 2013).

Vicarious trauma

Vicarious trauma has been described as being a normal response by individuals that have interactions with traumatised individuals (McCann & Pearlman, 1990). It has been proposed that an individual's internal well-being can be negatively impacted by a person verbally disclosing their traumas (Pearlman & Saakvitne, 1995). Referenced within the literature, it is noted that individuals who are suffering from vicarious trauma will experience the effects of the individual's

trauma that has been disclosed to them, even though they have not experienced the traumatic experience themselves (Lerias & Byrne, 2003). It has been argued that if vicarious trauma is described as a normal response to hearing someone's trauma, it should be considered significant for professionals that work with traumatised clients (Molnar et al., 2020). It has also been observed that cumulative exposure to survivors of trauma can cause harmful changes to professionals (Baird & Jenkins, 2003). Changes that have been identified can include cynicism, reduction in trust, irritability, fear and distortion regarding an individual's outlook upon their environment (Baird & Kracen, 2006; McCann & Pearlman, 1990).

Symptoms of vicarious trauma include an individual experiencing intrusive imagery through dreams, flashbacks or thoughts (Adams & Riggs, 2008). It has also been noted that individuals will struggle with their feelings of safety, control, trust, intimacy and esteem (Adams & Riggs, 2008). It has been acknowledged by authors that the impact and effects of vicarious trauma build up over time and are noted to be permanent. This cumulative build-up of vicarious trauma will likely cause a reduction in job performance and empathy (Schauben & Frazier, 1995). Salston and Figley (2003) have explained that the prevention and treatment of vicarious trauma is difficult. Authors note that professionals have a responsibility to themselves to recognise when they are subject to symptomology of vicarious trauma. However, it is also acknowledged that this can be hard and can also be influenced by several factors. These include cultural barriers, stigma associated with asking for help and the fact that it is often difficult to identify whether there is something wrong with you as the onset of symptoms develop slowly (Foley & Massey, 2020).

Compassion Fatigue

Johnson (1992) devised the term "compassion fatigue" when describing emotional changes that occurred for nurses that were engaging with traumatised clients. Johnson noted that this was a unique burnout that was experienced by professionals that 'care'. Compassion fatigue has been identified as distinctive from burnout because it is hypothesised that the professional must display empathy which consequently leads to physical, mental and emotional exhaustion (Potter et al., 2010). In addition to this, individuals will display feelings of hopelessness and dissociation (Radey & Figley, 2007). Tehrani (2010) found that 50% of family liaison officers experienced 'high' or 'very high' levels of compassion fatigue when compared to a controlled sample. Additionally, researchers found that this sample endorsed the lack of justice within the world concept when compared to the control group. The literature suggests several factors contribute to the development of compassion fatigue amongst professionals. These factors include a lack of organisational support, poor self-care, previous experiences of trauma, lack of satisfaction within their workplace and role and lack of organisational control (Radey & Figley, 2007). There have been several methods that have been identified within the literature which can help with the prevention of compassion fatigue. These include professionals changing roles, increasing their resilience and taking appropriate time off (Salston & Figley, 2003). In addition to this, personality characteristics of professionals have been identified as significant mediators for the onset of compassion fatigue (Burnett et al., 2020). The difficulty that has been associated within any caring profession is the lack of resources available and therefore the implementation of the various protective factors identified seem difficult.

Secondary Traumatic Stress

The development of Secondary Traumatic Stress (STS) was first coined by Figley (1983) who initially observed the phenomenon in counsellors. It was noted that professionals were experiencing traumatic symptomology that was similar to that experienced by the individual that they were treating. It was explained by Figley, that this can be described as a secondary traumatic reaction to working with traumatised clients. It is important to note that despite there being research which has explored this phenomenon it is not yet identified as a diagnosable mental health condition (Molnar et al., 2017). However, Figley (1995) formally defined STS as the "natural bodily consequence, behaviours and emotions resulting from interacting with a traumatic event by a significant other". He further added that this was the stress which resulted from attempting to assist a traumatised individual. It has been documented that the onset of STS can occur without warning (Dominguez-Gomez & Rutledge, 2009). Furthermore, the research notes that the symptomology described can be identical to PTSD; this includes hypervigilance, avoidance and increased arousal (Figley, 1995). It has been described within the research that like other associated diagnoses of secondary traumatisation, STS is a consequence of caring and can be deemed as an occupational hazard.

The negative impact of secondary traumatisation upon professionals has been explored within the literature to an extent. Several consequences have been identified which include poor job performance, increased sickness, decreases in morale among staff and reductions in empathy (Bourke & Craun, 2014). In addition to this, several risk factors have been noted which contribute to the development of the above identified secondary traumatisation diagnoses. These

risk factors include previous personal experience of trauma (Choi, 2011) and personality characteristics (Maguire & Byrne, 2017). Therefore, secondary traumatisation is a phenomenon that should not be ignored as it has significant ramifications upon professionals that come into contact with traumatised clients. Additionally, the adaptation of services and models which requires professionals to become more comfortable understanding clients' trauma could leave professionals vulnerable to further complications that they are not aware off.

Rationale for thesis

There have been shortfalls identified within the research concerning secondary traumatisation before this thesis commenced. The research has explored prevalence rates, symptomology, risk factors and protective factors of secondary traumatisation (Foley & Massey, 2020). However, the lack of focus on secondary traumatisation within the forensic literature highlights the need to understand how this phenomenon is impacting professionals working with this client group. Establishments and services within the forensic field are being asked to systemically adapt and adopt a more trauma-informed approach (Procter et al., 2017). It has been highlighted how beneficial this approach can be for clients whilst in services and once reintegrated back into the community (Levenson & Willis, 2019). Nevertheless, within the literature, there are not robust conclusions that have been drawn regarding how these adaptations may impact the professionals that are working with these clients. What is more concerning is that professionals working with forensic clients are often overlooked when examining the impact of working with traumatised clients. The forensic research often focusses on the effects of professional characteristics (Bennett et al., 2013). Additionally, the research has often explored the effectiveness of treatment

programmes (Schmucker & Lösel, 2015), recidivism rates (Rettinger & Andrews, 2010) and reasons for offending behaviour (Snowden et al., 2011). However, it seems as though the research ignores how difficult forensic settings can be to work in, and how damaging the experiences can be to the professionals' that work within them. It can be argued that there is an unconscious suggestion that professionals are expected to deal with and manage the psychological distress that can derive from working within these environments without adequate support. Thus, gaining greater insight into how therapeutic relationships can contribute to the development of secondary traumatisation within forensic services can significantly assist with the implementation of the appropriate support for professionals.

With the above in mind, the main reasons that this thesis will focus on secondary traumatisation are as follows:

Professionals' wellbeing is a neglected concept within the forensic research. As a result, a thorough understanding of how professionals working with forensic clients' environments are impacting them, as well as what factors are supporting them is necessary. To date, the literature has not appropriately explored this concept in depth using a wide range of professionals. There is a need to become familiar with the consequences of working within forensic establishments and services for professionals, particularly with the implementation of new and innovative models. Therefore, collating all of the current empirical studies within the research area whilst also exploring the consequences of working with forensic clients will provide greater insight regarding the development of secondary traumatisation.

In addition to this, this thesis will attempt to identify gaps within the research associated with the research area. Recommendations within this thesis can contribute to adaptations of support offered by services that will be beneficial for professionals. Necessary adjustments can be made to training, recruitment and supervision. The findings within this thesis will therefore have real-world applicable implications that can assist with professions, services and establishments. This is supported by Brunero and Stein-Parbury (2008), in which it was argued that there needed to be more emphasis on clinical supervision for nurses who can often become burntout and begin to struggle with their role. Additionally, Taylor and Cooper (2008) noted that the prison environment and lack of support from senior management contributed to a high turnover of officers. Both of the above examples highlight how services and establishments can let down professionals by not always considering their wellbeing appropriately.

A richer understanding of the impact of secondary traumatisation upon forensic professionals will hopefully contribute to improved support. In summary, the objective of this thesis is to explore different concepts regarding secondary traumatisation with the aim of obtaining a greater understanding of the relevance of secondary traumatisation in relation to various professions working with forensic clients; whilst paying particular attention to prevalence rates, symptomology, risk factors and moderating factors regarding the development of secondary traumatisation.

Structure of Thesis

This thesis will consist of six chapters that will examine the concept of secondary traumatisation in several different ways. The author was motivated to build upon the existing research that had been established that explored

secondary traumatisation. Understanding the impact of secondary traumatisation upon professionals working with forensic clients within a climate where professionals are becoming more curious regarding client trauma is imperative. This will likely assist in encouraging establishments and services to develop robust measures which protect and further support professionals within these environments. These chapters will demonstrate what knowledge we can add to the limited awareness of the development of secondary traumatisation amongst professionals' working with forensic clients, what psychometric is the most appropriate when exploring secondary traumatisation and whether we fully understand what risk factors and protective factors are most influential regarding their relationship with secondary traumatisation.

This thesis includes an introduction (Chapter One) and an overall discussion chapter (Chapter Six) that aims to bring all the findings together. The main four chapters have a unique focus and can be read independently. These chapters comprise of Chapter Two which is a systematic review investigating the impact of secondary traumatisation upon professionals working with forensic populations. Chapter Three is a critical review of the STSS (Bride et al., 2004) - it is of note that this tool is used in both Chapter Four and Chapter Five. Chapter Four is a quantitative research project which explores the various risk factors which contribute to the development of STS. Finally, Chapter Five a quantitative research project which explores whether social dominance orientation (SDO) can be identified as a moderating factor against the development of STS.

Chapter Two

Chapter Two is a systematic review examining the impact of secondary traumatisation upon professionals working with forensic populations. To the

author's knowledge, this is the first systematic review that has focused on semantically reviewing the literature that focuses on the impact of secondary traumatisation upon professionals working with forensic populations. The review highlight concepts from prevalence rates of secondary traumatisation amongst professionals', to protective factors which mediate the development of secondary traumatisation symptomology.

Chapter Three

Chapter Three critically evaluates a psychometric that is used to assess the development of STS. STSS (Bride et al., 2004) has been used within numerous studies (e.g., Choi, 2017; MacEachern et al., 2019). However, to the author's knowledge, no psychometric critique has been established to evaluate the properties of the psychometric. As a result, Chapter Three will focus on the use of the STSS amongst professionals that may be at risk of being secondarily traumatised because of their working environments. This chapter will provide an overview of the instrument and will explore the psychometric properties of the tool (e.g., validity concepts and reliability concepts). Limitations of the instrument and future research directions will additionally be considered throughout the critique.

Chapter Four

Chapter Four describes a quantitative research project which explores the various risk factors identified within Chapter Two, which contribute to the development of STS. The research notes that various risk factors including time spent with clients (Borjanić-Bolić, 2018), age of professionals (Baird & Jenkins, 2003), length of time in the role (Turgoose et al., 2017), previous exposure to

primary trauma (Choi, 2011) and the development of burnout (Adams et al., 2006) are risk factors for the development of STS. This research project aims to explore the development of STS by understanding the correlation between STS and several risk factors highlighted above.

Chapter Five

Chapter Five describes a quantitative research project which explores whether SDO can be identified as a protective factor against the development of STS. Within forensic settings, there are significant hierarchical differences amongst detained clients and professionals. Social dominance is defined as "the degree to which one endorses hierarchical distinctions" (Sidanius & Pratto, 1999). An individuals' SDO can influence their behaviour if they are motivated to increase or reinforce their status. Per the theory, this can lead to ingroup, outgroup discrimination and competition (Sidanius & Pratto, 1999). The research is yet to explore the relationship between SDO, workplace stress and secondary trauma. Therefore, the objective of this research project is to provide insight into whether professionals' personal ideations regarding societal status can moderate the effects of working with traumatised clients.

Chapter Six

Chapter Six will focus on synthesising the findings of the previous chapters, exploring the implications that were identified within this thesis and considering potential gaps that were identified within the literature. Recommendations will be made regarding the future directions for research, and how the focus upon professionals working with the forensic populations impacts the general literature. In addition to this, recommendations will be made regarding how services and

establishments can help to support professionals and can adapt recruitment processes which will assist in the protection of staff from the development of secondary traumatisation. Particular attention will be paid to the lack of a universal conceptualisation of secondary traumatisation and how this may benefit future research moving forward.

Chapter Two: A systematic review of the impact of secondary traumatisation on professionals working with forensic populations.

Abstract

Research has begun to explore whether there is a cost of caring for clients with mental health problems and traumatic histories. Secondary exposure to a traumatic event has been noted in the literature as having a similar impact on an individual as being exposed to the primary traumatic stimuli. "STS", "compassion fatigue" and "vicarious trauma" are terms used to describe an individual who is experiencing PTSD like symptoms following engaging in empathetic support for someone who has experienced a traumatic event/events. This systematic review synthesised the literature on professionals working with forensic clients and the potential impact of secondary exposure to traumatic events. A total of 20 papers met the inclusion criteria for the systematic review. A narrative synthesis revealed that professionals who work with forensic clients are at risk of being secondarily traumatised. More specifically, the synthesis revealed that professionals who have less face-to-face contact with clients, are younger and have been in the profession longer are more susceptible to being secondarily traumatised. Additionally, prior trauma has been identified as a risk factor for professionals. Lastly, psychological empowerment and compassion satisfaction have been identified as potential moderating factors for secondary traumatisation. The results suggest that services and establishments may benefit from a robust recruiting process which aims to explore the candidate's characteristics thoroughly. Additionally, ensuring that clinicians feel safe within their working environment is imperative. Clinical and research implications are discussed to inform future empirical research, particularly exploring the creation of a universal assessment tool for secondary traumatisation.

Key words: secondary traumatisation, PTSD, professionals

A systematic review of the impact of secondary traumatisation on professionals working with forensic populations.

Post-Traumatic Stress Disorder (PTSD) is a mental health condition that is triggered by a significant event (Fostick et al., 2012). PTSD is characterised by symptoms including intrusive memories, avoidance (e.g., avoiding places or activities), adverse changes in thinking and mood, and changes in physical and emotional reactions (Pacella et al., 2013). Over recent years the psychological research has explored the impact of being exposed to traumatic stimuli. However, the research has previously overlooked the impact that traumatic stressors can have beyond the individual that was initially affected by the event (Maercker & Hecker, 2016). Notably, the individuals who are indirectly impacted because of the proximity of their relationship with traumatised victims.

Secondary exposure to a traumatic event has been noted in the research as having a similar impact on an individual as being exposed to the primary traumatic stimuli (Choi, 2011). STS is a term used to describe an individual who is experiencing PTSD like symptoms following an individual engaging in empathetic support for someone who has experienced a traumatic event/events; this is alternatively referred to as "compassion fatigue" (Figley, 1995). STS is noted to differ from PTSD because it conceptualises the experiences of the caring individual who becomes secondarily traumatised due to their interactions with a traumatised individual because they were attempting to alleviate any stress experienced. Symptoms of STS include experiencing images of the primary individual's traumatic event, avoidance, increased arousal state and numbing in response to the traumatic event (Figley,1995). Similarly, the literature has explored and developed the construct of vicarious trauma (McCann & Pearlman,

1990). It has been proposed that an individual's internal well-being can be negatively impacted by a person verbally disclosing their traumas (Pearlman & Saakvitne, 1995). The main symptom of vicarious trauma is that the individual will experience a cognitive shift that may cause intrusive memories rather than a full range of PTSD like symptoms (McCann & Pearlman, 1990). These intrusive images associated with vicarious trauma are caused by changes to an individual's cognitive schema, which impacts an individual's feelings and thoughts (Trippany et al., 2004). Additionally, there are notable disruptions to an individual's assessment of safety, trust, self-esteem and control regarding oneself and others.

Thus, the research has begun to explore whether there is a cost of caring for clients with mental health problems and traumatic histories (Hensel et al., 2015). Secondary traumatisation can cause potential emotional distress to professionals and has been described as a potential hazard within the workplace for professionals working closely with clients who are struggling with trauma (MacRitchie & Leibowitz, 2010). The research exploring this area is currently growing, and researchers are beginning to conceptualise which professionals are more at risk of potential adverse effects. Occupations such as Medical Doctors (Huggard et al., 2013), Audiologists (Severn et al., 2012), Veterinarians (Huggard & Huggard, 2008), Psychologists (Pearlman & Saakvitne, 1995), Emergency Workers (Nimmo, 2011), Refugee Support Workers (Ismayilov, 2013) and Nurses (Vachon et al., 2015) have all been explored in the literature. However, forensic based occupations are often overlooked when examining the impact of working with traumatised clients.

The forensic research often focusses on the effects of professional characteristics (Bennett, Crewe & Wahidin, 2013). For example, Steiner and Wooldredge (2015) explored individual and environmental sources of work stress using prison officers. The study concluded that prison officers struggled with job burnout because of the environment and job demands. The study failed to consider whether prison officers struggled with the role because of therapeutic interactions with the residents in custody. This is despite the research suggesting that it is common for prison officers to encounter individuals with trauma histories (Maschi et al., 2015). Additionally, the forensic research often focuses on the well-being of the public and the recidivism rates of individuals released from custody (Olver et al., 2011). However, research is yet to consider the impact of repeatedly being exposed to verbal description of traumatic imagery on prison professionals. In addition, the research has not explicitly explored how front-line forensic professionals cope with exposure to traumatic imagery (Carter, 2018).

The research exploring forensic populations often does not focus on the well-being of the individuals, particularly when focussing on perpetrators of offences. Research will often explore the effectiveness of treatment programmes (Schmucker & Lösel, 2015), recidivism rates (Rettinger & Andrews, 2010) and reasons for offending behaviour (Snowden et al., 2011). However, Johnstone and Boyle (2018) have recently challenged the concept of focussing on what the individual has done and explained that it is essential to explore what has happened to the person. Researchers explained that although the literature often is seeking causal pathways between adversity and outcomes, the research fails to acknowledge that this may not always be the case concerning individuals' thoughts, feelings, and behaviours. Therefore, a more effective way of formulating about perpetrators of offences is to understand what has happened to them, which

has led to a behaviour rather than focussing solely on their offence. This has been supported by recent literature which has found a link between delinquency and trauma (Greenwald, 2014). Traumatised individuals within the custodial system have been found to have elevated levels of posttraumatic dissociation (Bennett et al., 2015) and emotional numbing (Bennett et al., 2014). Therefore, it can be suggested that individuals' engaging with forensic services are often more complex than their presenting problems; a concept that needs further exploration within the literature.

Alternatively, the research investigating the experiences of victims of offences often uses more exploratory approaches when investigating samples (Kasparian, 2014). Often the victim literatures' objective is to explore how individuals' experiences have shaped them. This will likely inform the clinician's formulations about behaviours and will inform clinical practices. This suggests that conclusions are not yet drawn; unlike the perpetrator literature, which highlights how these two groups are viewed differently. For example, Lang and Stover (2008) found that children who are exposed to intimate partner violence are more likely to suffer from mental health effects in later life. These effects include symptoms of PTSD, depression and anxiety. However, Heyman and Slep (2002) investigated both fathers and mothers and found an association between childhood exposure to violence and later abuse of their children. Therefore, despite the literatures' attempts to separate the two samples (victim and perpetrator), the outcomes are strongly associated. This supports the conclusions of Johnstone and Boyle (2018). Thus, it is evident that this population must be considered holistically rather than separately.

The objective of this systematic review is to provide a comprehensive overview/assessment of the way that research examines secondary traumatisation of professionals working with forensic populations. The primary aim will be to identify prevalence, risk factors and moderating factors of secondary traumatisation. The second aim is to assess the effectiveness of the tools used to explore these concepts. Additionally, the systematic review will assess any further themes that are established when reviewing the research.

Method

Review criteria

The objectives of the systematic review were conceptualised according to the Population, Exposure, Outcome (PEO). The PEO framework was deemed better suited to this systematic review as much of the research within the area utilised cross sectional design methodology. Thus, this framework would ensure that the appropriate information was captured ensuring that a sufficient overview of area was provided.

Population: Professionals that work with forensic populations. This included professionals that work with both perpetrators and victims. Professionals were not only included from criminal justice-oriented facilities for example, prisons and secure hospitals. They were also included from therapeutic settings including acute psychiatric wards and social services. Professionals have included Psychiatrists, Psychologists, Nurses, Detectives, and Social Workers. The forensic populations that professionals have worked with have included victims of violence, victims of sexual abuse, individuals being investigated for child abuse, and individuals charged or convicted of any offence. In addition, male and female professionals were both included in the systematic review. Studies that did not include any relevant information which differentiates professionals from working with clinical populations and forensic populations (e.g., studies stating professionals are affected because of working with individuals with eating disorders, rather than clients suffering from eating disorders attributed to previous sexual abuse) were excluded from the systematic review. Professionals who potentially could have been primarily traumatised by an event within their place of work were not included within the systematic review (e.g., Counsellors possibly

secondarily traumatised by working with first responders to the 9/11 terrorism attack who worked within a close proximity of the event).

Exposure: Professionals who have been exposed to any type of traumatic material from a primarily traumatised individual within any setting, including through a primary account or narrative of a traumatic event. This will include being exposed to the accounts of perpetrators and victims.

Outcome: Professionals who were suffering from STS, vicarious trauma, compassion fatigue or PTSD were included.

It is of note that this protocol was not registered on Prospero due to difficulties faced because of the Covid pandemic.

Search method

The following search terms below were entered to detect relevant studies for this review, while the appropriate truncations, adjacency and terms were adjusted depending upon the search database. The following search terms were used to detect the relevant studies for this review:

1. exp Compassion Fatigue/
2. "compassion fatigue".mp.
3. (compassion adj2 fatigue).mp.
4. secondary traumatic stress.mp.
5. "secondary traumatic stress".mp.
6. (secondary adj2 traumatic adj2 stress)
7. 4 OR 5 OR 6
8. "vicarious trauma" .mp.
9. exp posttraumatic stress disorder/

10. (PTSD or "post-traumatic stress disorder")

11. 9 OR 10

12. exp Nursing/

13. exp Prison personnel

14. health personnel

15. exp Psychologists/

16. exp Probation personnel

17. exp Police personnel

18. (nurse or psychologists or psychiatrist or police).mp.

19. ("prison staff" or "prison officer" or hcp or "healthcare worker" or "healthcare staff" or "healthcare workers").mp.

20. 1 OR 2 OR 3 OR 4 OR 5 OR 6 OR 8 OR 9 OR 10

21. 12 OR 13 OR 14 OR 15 OR 16 OR 17 OR 18 OR 19

22. 20 AND 21

The following search databases were explored for the review:

PsycINFO (OVID), Medline (OVID), Embase (OVID), CINAHL, National Criminal Justice (Proquest), and Campbell Collection Library.

Additionally, systematic review reference lists and articles exploring similar topics were explored for additional studies. Nottingham E-Thesis was explored for relevant studies and none were identified, and no authors had to be contacted to acquire relevant studies or to be directed towards further relevant studies.

Study selection

An initial screening of imported study titles and abstracts using the proposed inclusion and exclusion criteria for the systematic review was employed.

Study types: The review included cross-sectional and cohort studies; whilst solely qualitative studies were excluded. Qualitative studies were excluded from the review as it was concluded that they would not sufficient be able to offer insight into some key areas identified for the review. These areas included appropriate psychometrics and risk factors. In addition, studies from non-English speaking countries were not included within the review.

Studies were initially screened, then full text screened. Those that did not clearly meet the inclusion criteria for the review were not included in the synthesis. A second assessor independently reviewed the titles and abstracts of the imported studies in an attempt to increase the accuracy of the review and reduce the risk of bias. Please see Appendix A to see an adapted PRISMA flow diagram of the literature selection process for inclusion for the systematic review. Studies that met the inclusion criteria of the systematic review were included and can be seen in Table 2.

Risk of Bias

Each study was assessed for their level of potential bias and quality within this systematic review. The quality criterion used in Nimmo and Huggard (2013) systematic review was used during this review. A quality appraisal was conducted for each study selected for the systematic review (please see Table 1). Scores were allocated to each criterion identified in Appendix B. Each 'Y' accounted for one point, with the exception of criterion three, which is split into sub-questions

and was scored at 0.2 each. All of these points were added together for each study, and each study was given an overall score. The maximum score that can be provided in this assessment is six. This was then divided by the total number of criteria to provide a percentage in decimal form, the highest score being 1. A second assessor appraised 20% of the studies included in this review using the quality appraisal criterion in Table 1. The inter-rater reliability was calculated at .80, which suggests that there was excellent reliability based on Fleiss, Levin and Paik (1981) recommendations for inter-rater agreement.

Table 1

Criterion used to appraise quality among the traumatology literature reviewed.

Quality Criterion Y/N
1. The research question/aims/objectives is clearly __ explained
2. An appropriate study design has been used __
3. The study adequately describes the following:
(i) Sample/Participants __ (ii) Sample strategy __ (iii) Methods __ (iv) Data collection methods __ (v) Context of collection __
4. Construct description and definition __
5. Researcher reflexivity provided __
6. Ethical concerns mentioned __

Data Extraction

The data for this review was extracted from all the included articles by using a proforma which was designed specifically for this review. The following information was extracted: author (s), publication year, country of study, the

profession of the participant, population professional was working with, instruments used to identify secondary trauma, other instruments used and overall reporting. The data extracted were then analysed using descriptive statistics to establish the study type, the method used, the participants used, the types of exposures, and the noted outcomes for the participants. The results were then clustered into separate topics: instruments used, prevalent amongst different populations, risk factors and moderators of secondary traumatisation.

Data Synthesis

All the articles included in the systematic review were separately analysed using descriptive statistics. A meta-analysis was not feasible during this systematic review due to the heterogeneity of the studies selected and the various measures used for the selected studies. Therefore, a narrative synthesis approach was implemented to report the analysis findings of the review.

Table 2

Characteristics of the included studies.

Reference Information	Population	Aim(s)	Measures	Outcome	Significance
[1]Baird & Jenkins (2003)	N= 49 Dual domestic violence and sexual assault agency workers, 35 sexual assault Counsellors, 17 domestic violence Counsellors. (USA)	The study aimed to examine the prevalence of vicarious trauma and STS in professionals working with sexual assault and domestic violence victims	Compassion Satisfaction/Fatigue self-test for helpers (Figley & Stamm, 1996), TSI Belief Scale, Revision-L (Pearlman, 1996).	More educated counsellors and professionals seeing more clients reported less vicarious trauma. Younger counsellors and those with more counselling experience reported more mental exhaustion	$r(96)=-.26$, $p<.05$; $r(94)=-21$, $p<.05$. $r(88)=-.22$ and -23, $p<.05$; $r(96)=.22$ and $.24$, $p<.05$
[2]Baugerud et al. (2018)	N= 684 Child Welfare Workers. (Norway)	The study examined the prevalence of STS and compassion satisfaction in Child Welfare Workers.	Professional Quality of Life Scale-5 (Stamm, 2010).	36.9% of the sample fell within the moderate category for STS.	None
[3] Borjanić Bolić (2018)	N= 135 Child Welfare Workers. (Serbia)	The study aimed to examine the prevalence of vicarious trauma and	Professional Quality of Life Scale-5 (Stamm, 2010), Trauma and	20% of respondents had a higher-than-average score for STS.	

		STS in Child Welfare Workers	Attachment Belief Scale (Pearlman 2003).	17.8% had an higher than average score for vicarious trauma. The study found that professionals who had less exposure to clients had higher secondary traumatisation scores	 $t(133)=1.999$, $p < 0.5$
[4]Bridger et al. (2019)	N= 187 Foster Carers. (UK)	The study aimed to examine the prevalence of STS in Foster Carers.	Professional Quality of Life Scale 2nd ed (Stamm, 2010).	The mean scores of Foster Carers was considerably higher than norm scores for STS. STS was predicted by burnout, compassion satisfaction and primary trauma. Self-care had mediating effects on STS	 $\beta=0.74$, $p < 0.001$; $\beta=0.19$, $p < 0.01$; $\beta=0.20$, $p < 0.001$. 95% CI (-0.34, -0.14), $p = 0.04$)
[5]Choi (2011)	N= 154 Social Workers who provide services to family violence and	The study aimed to examine the influence	STSS (Bride et al., 2004)	Social workers who received more support from colleagues and	$b = -2.216$, $p < .05$; $b = 2.001$, $p < .05$

	sexual assault survivors. (USA)	of organisational characteristics on STS.		Social Workers who had more access to organisational strategic information demonstrated lower levels of STS.	
				Past traumas were a predictor of STS.	b = 1.367, p<.05
[6]Choi (2017)	N= 154 Child Welfare workers. (USA)	The study aimed to establish whether there was a link between psychological empowerment and lower levels of STS.	STSS (Bride et al., 2004)	Child Protection workers who had higher levels of psychological empowerment displayed lower levels of STS.	b = -2.63, p < .01
				Past trauma was predictive of STS.	b = .209, p < .01
[7]Conrad & Kellar-Guenther (2006)	N=363 Child Welfare Workers. (USA)	The study examined the relationship between Compassion Fatigue, Burnout and Compassion Satisfaction	Compassion Satisfaction/Fatigue Self-Test for Helpers (Figley & Stamm, 1996).	The sample was 64% more likely to be at risk to suffer from moderate to extremely high levels of compassion fatigue.	
				Participants that	p < 0.001

		with Child Welfare Workers.		displayed high levels of compassion satisfaction displayed lower levels of compassion fatigue	
[8]Creamer & Liddle (2005)	N= 30 Social Workers, 21 Counsellors, 18 Psychologist, 8 Marriage and Family Therapists, 6 Nurses, 1 Team Leader, 1 Assistant Psychologist and 1 Psychiatrist working with terrorist attack victims. (USA)	The study aimed to establish the relationship between STS and clinician characteristics	Impact of Events Scale (IES; Horowitz, Wilner, & Alvarez, 1979).	Higher levels of STS were associated with prior trauma, less professional experience and age. Clinicians who had discussed their own traumatic experiences in therapy displayed more STS	$r = 0.32$, $p < .05$; $r = -.28$, $p < .05$; $r = -0.23$, $p < .05$ $t(24.8) = 2.35$, $p < .05$
[9]Hurrell et al. (2018)	N=101 Child Abuse Investigator Unit Police Officers. (UK)	The study aimed to explore the prevalence of STS in police officers investigating childhood sexual abuse.	STSS (Bride et al., 2004).	A greater number of interviews conducted by professionals was associated with higher levels of STS.	$r = .24$, $p < .05$
[10]MacEachern et al. (2019)	N= 39 Family Protection Unit detectives, 9 Trainee Detectives, 7	The study aimed to establish whether there were gender differences	STSS (Bride et al., 2004).	Findings indicate that 49% of detectives experienced some STS	None.

	Supervisors, 4 DO general, 1 Seconded Police Officer. (UK)	amongst detectives who experienced STS.		symptoms with 11% experiencing symptoms that were noted as high or severe. No gender difference were established.	
[11]Maguire & Byrne (2017)	N= 36 Criminal Defence Lawyers, 21 Psychologists, and 9 Social Workers working in criminal defence legal aid. (Australia)	The study aimed to establish the impact of being exposed to verbal descriptions of trauma on legal practitioners.	VTS (Vrklevski and Franklin, 2008), IES-R (Weiss and Marmar, 1997).	The findings indicate that lawyers low on the emotional stability domain were significantly more susceptible to experiencing symptoms of vicarious trauma.	$t(64)=3.66$, $p < .01$
[12]Masson & Moodley (2020)	N=102 Forensic Social Workers employed by the police service and 20 Occupational Social Workers. (South Africa)	The study examined the prevalence of STS in Forensic Social Workers.	STSS (Bride et al., 2004).	There was a significant difference between the STS experienced based on the rank of the Social Work (Warrant Officers,	$F(2,125) = 7.47$, $p < 0.001$; $F(3, 124) = 8.16$, $p < 0.001$.

				Captains and Lieutenant officers) and Ethnicity.	
				Forensic Social Workers displayed high levels of intrusion, avoidance and arousal.	F(2,125) = 4.15, $p < .05$; F(2, 125) = 6.9, $p < 0.01$; F(2,125) = 8.9, $p < .001$
[13]Newman et al. (2019)	N=114 Nursing, 10 Medical, 6 Allied Health Professionals, 5 Administrators working with sexual violence survivors and domestic abuse victims. (Australia)	The study aimed to determine the prevalence of vicarious trauma in a sample of forensic mental health workers.	VTS (Vrklevski and Franklin, 2008), IES-R (Weiss and Marmar, 1997).	57.8% of respondents displayed moderate symptoms of vicarious trauma and 29% displayed high levels of vicarious trauma.	
				A higher-level vicarious trauma was associated with increased reports of avoidance, intrusion and hyperarousal.	$r = 0.382$, $p < 0.001$; $r = 0.489$, $p < 0.001$; $r = 0.440$, $p < 0.001$
[14]Perez et al. (2010)	N=28 Family Protection Unit Police Officers. (USA)	The study aimed to examine the impact of working on child pornography cases.	STSS (Bride et al., 2004).	18% of investigators experienced moderate levels of STS and a further 18%	

				experienced high levels of STS. Greater exposure to disturbing images, in addition, to interviews was related to higher levels of STS and cynicism.	 r =.40, p < .05; r =.40, p < .05;
[15]Samios et al. (2012)	N= 53 Psychologists, 5 Counsellors, 3 Social Workers working with sexual violence survivors. (Australia)	The study aimed to establish whether posttraumatic growth could act as a buffer between STS and negative effects associated with STS.	Professional Quality of Life Scale (Stamm, 2003).	Posttraumatic growth moderated the negative impact of clinician's depression and anxiety	β =.18, p =.322; β = -.17, p = .303.
[16]Steinkopf et al. (2018)	N=90 emergency dispatch call handlers. (USA)	The study aimed to review psychological stress, job-related stress, posttraumatic stress disorder, stress resiliency, and post traumatic growth	Posttraumatic Stress Disorder Symptom Chekcklist-Civillian (PCL-C; Weathers et al. 1991), Brief Symptom Inventory (BSI;	Between 13.34% and 15.56% of emergency dispatchers reported symptoms consistent of an PTSD diagnosis and 16.67% indicated sub	None.

		experienced by emergency dispatch call handlers.	Derogatis and Melisaratos, 1983).	threshold symptomology of PTSD.	
[17]Teel et al. (2019)	N=88 Psychiatrists working with sexual violence survivors and domestic abuse victims. (USA)	The study aimed to examine the relationship between STS and psychiatry.	STSS (Bride et al., 2004).	Moderate to severe levels of STS were found in 30% of respondents. 45% of Psychiatrists reported clinical levels of one symptom cluster STS. Higher resilience and extraversion were associated with significant lower levels of STS	$p < 0.05$
[18]Turgoose et al. (2017)	N= 142 Police officers working with sexual violence survivors. (UK)	The study aimed to establish whether Police Officers had developed compassion fatigue, STS and burnout and whether these variables were associated with	STSS (Bride et al., 2004), Professional Quality of Life Scale 2nd ed (Stamm, 2010).	Findings showed that longer serving officers showed greater levels of compassion fatigue, STS and burnout. These factors did not significantly impact	r =.26, p < .01; r =.40, p <.001; r =.39, p <.001

		situational and trait empathy.		situational and trait empathy.	
[19]Way et al. (2004)	N= 95 clinicians working with sexual violence survivors and 252 clinicians. (USA) working with sexual violence perpetrators	The study aimed to examine whether there was difference between clinicians who treat sexual abuse survivors and sexual abuse perpetrators in their experience of vicarious trauma.	Impact of Events Scale (IES; Horowitz, Wilner, & Alvarez, 1979).	Clinician groups did not differ in their levels of vicarious trauma. Professionals that worked with survivors were more likely to seek professional help. Length of time working with survivors mediated the severity of vicarious trauma symptoms. For clinicians working with perpetrators younger clinicians displayed higher intrusion trauma .	 $t(347) = 2.70$, $p < .01$ $F(2,95) = 4.01$, $p < .05$ $r = -.15$, $p < .05$

[20]Zarach (2014)	N= 147 Residential Child Care workers (RCW) working with children at risk and 74 Educational school workers working in boarding schools (BSW). (Israel)	The study examined the prevalence of Compassion Fatigue and Compassion Satisfaction in residential care workers in comparison to educational school workers.	Professional Quality of Life Scale 2nd ed (Stamm, 2010).	Findings indicate there was no significant difference between RCW and BSWs for compassion fatigue. Findings indicate there was a significant difference between RCW and BSWs for Compassion Satisfaction. Compassion satisfaction was additionally negatively associated with secondary traumatisation.	 $t(1,221) = 3.97, p < .05$ $r = -.13, p < .05$

Results

The search for the systematic review yielded 12,557 hits, from which 20 studies were selected for the review. Please see Appendix A for the selection process for the review. In total 3,278 professionals were included across the 20 studies, this included 1,654 Social Workers, 337 Police Officers, 221 Residential Care Workers, 183 Foster Carers, 93 Psychologists, 90 Emergency Dispatch Call-Handlers, 89 Psychiatrists, 86 Counsellors, 36 Lawyers, and 7 Nurses. Additionally, 482 participants professions were not disclosed. These professions were referred to as clinicians across two of the 20 studies. The mean for all professionals that engaged in the 20 studies is 164 participants. The general information for the studies included in the review is displayed in Table 3.

Table 3

General Information of Included Studies.

Country and the number of studies	**English-Speaking** USA: N= (9) 45% UK: N= (4) 20% Australia: N= (3) 15% **European** Norway and Serbia: N= (2) 10% **Asia** Israel: N= (1) 5% **Africa** South Africa: N= (1) 5%
Study Design	Cross Sectional: N= 18 (90%) Mix Model (Qualitative & Quantitative): N= 2 (10%)
Populations	**Medical Professionals** Psychiatrist: N= 1 (5%) **Allied Health Professionals** Social Workers: N= 6 (30%) **Legal Professionals** Police Officers: N= 4 (20%) Emergency Dispatchers: N= 1 (5%) **Supporting Professionals** Residential Care Workers: N= 1 (5%) Foster Carers: N=1 (5%) **Other** Multiple Professions investigated (e.g. Psychologists, Counsellors, Criminal Defence Lawyers and Nurses): N= 6 (30%)
Forensic client groups professional working with	**Client groups professionals working with** Victims of offences: N= 14 (70%) Perpetrators of offences: N= 1 (5%) Both victims and perpetrators of offences: N= 5 (25%) **Specific client groups identified** Child abuse victims: N= 7 (35%)

	Child Abuse victims and perpetrators: N= 4 (20%) Sexual violence victims: N= 3 (15%) Sexual violence and domestic violence victims: N= 3 (15%) Individuals charged with any offence: N= 1 (5%) Terrorist attack victims: N= 1 (5%) Individuals reporting an offence: N= 1 (5%)
Secondary traumatisation: Measurement tool(s) used	Brief Symptom Inventory (BSI; Derogatis & Melisaratos, 1983)[16]. Compassion Satisfaction/Fatigue Self-Test for Helpers (Figley & Stamm, 1996)[1,7]. Impact of Events Scale (Horowitz, Wilner, & Alvarez, 1979)[8,11,13,19]. Posttraumatic Stress Disorder Symptom Chekcklist-Civillian (Weathers et al., 1991)[16]. Professional Quality of Life Scale (Stamm, 2003)[15]. Professional Quality of Life Scale 2nd ed (Stamm, 2010a)[4,18,20]. Professional Quality of Life Scale-5 (Stamm, 2010b)[2,3]. STSS (Bride et al., 2004)[5,6,9,10,12,14,17,18]. Trauma and Attachment Belief Scale (Pearlman 2003)[3]. TSI Belief Scale, Revision L (Pearlman, 1996)[1]. VTS (Vrklevski & Franklin, 2008)[11,13].
Other: Measurement tool(s) used	Brief Cope Inventory (Carver, 1997)[10]. Connor-Davidson Resilience Scale (Campbell-Stills & Stein, 2007) [4, 17, 18]. Daily Spiritual Experience Scale (Underwood & Teresi, 2002)[20]. Dispositional Resilience Scale-15 (Bartone 1999)[16]. Experience in Close Relationships (Brennan, Clark, & Shaver, 1998)[20]. Hospital anxiety and Depression Scale (Zigmond & Saith, 1986)[9]. Job Stress Survey (Speilberger 1991)[16]. Life Events Checklist (Blake et al., 1998)[8]. Marlowe-Crown Social Desirability Scale (Cowne and Marlowe, 1991)[16]. Maslach Burnout Inventory- General Survey (Maslach et al., 1996)[1,14]. Positive and Negative Affect Scale (Watson et al., 1988)[16]. Posttraumatic Growth Inventory (Tedeshi & Calhoun, 1996)[15].

Professional Self-Care Scale (Dorociak et al., 2017)[4].

Satisaction with Life Scale (Diener et al., 1985)[15].

Self-Orientation to work Questionnaire (Spreitzer, 1995a)[6].

Sense of Coherence Scale (Antonovsky, 1987)[15, 20].

Social Structural Scale (Spreitzer, 1995b)[5].

The childhood trauma questionnaire (Bernstein & Fink, 1998)[19].

The Depression, Anxiety and Stress scale-21 (Lovibond & Lovibond, 1995)[11,15].

The Relationship Questionnaire (Batholomex & Horowitz,1991)[2].

The Symptom Checklist, Revised (Derogatis, 1983)[1].

The Ten Item Personality Inventory (Gosling, Rentfrow & Swann, 2003)[11,17].

The Toronto Empathy Questionnaire (Spreng et al., 2009)[4,18].

Trauma History Screen (Carlson et al., 2011)[4].

The articles that were reviewed were conducted across five different continents. These included Africa, Asia, Europe, North America and Oceania. Participants within the various articles worked within various environments including specialist policing teams, prisons and secure psychiatric hospitals. In total, 18 studies employed a cross-sectional design (Baird & Jenkins, 2003; Baugerud et al., 2018; Borjanić Bolić, 2018; Bridger et al., 2019; Choi, 2011; Choi, 2017; Conrad & Kellar-Guenther, 2006; Creamer & Liddle, 2005; Hurrell et al., 2018; Maguire & Byrne, 2017; Newman et al., 2019; Perez et al., 2018; Samios et al., 2012; Steinkopf et al., 2018; Teel et al., 2019; Turgoose et al., 2017; Way, 2004; Zarach, 2014), while the other two studies implemented a mixed model design (qualitative & quantitative; MacEachern et al., 2019; Masson & Moodley, 2020).

Several studies opted to use professionals that will often be attributed to sections of the criminal justice system to sample in their studies, four studies

(MacEachern et al., 2019; Hurrell et al., 2018; Perez et al., 2018; Turgoose et al., 2017) included Police Officers, one study (Steinkopf et al., 2018) included emergency dispatch call handlers. Alternatively, several studies opted to use non-traditional forensic professionals as their sample, six studies (Baugerud et al., 2018; Borjanić Bolić, 2018; Choi, 2011; Choi, 2017; Conrad & Kellar-Guenther, 2006; Masson & Moodley, 2020) used Social Workers. Additionally, one study included Psychiatrists (Teel et al., 2019), one study included Residential Care Workers (Zarach, 2014), and one study included Foster Carers (Bridger et al., 2019). Finally, six studies (Baird & Jenkins, 2003; Creamer & Liddle, 2005; Maguire & Byrne, 2017; Newman et al., 2019; Samios et al., 2012; Way, 2004) used several forensic and non-forensic professionals within their sample; this included: Psychologists, Counsellors, Nurses and Lawyers.

Most of the studies within the review explored the consequences of working with victims of criminal offences. Fourteen studies attempted to establish various outcomes of working with this client group which will be discussed further, later on in this review. More specifically, seven studies explored the impact of working with child abuse victims (Baird & Jenkins, 2003; Borjanić Bolić, 2018; Bridger et al., 2019; Conrad & Kellar-Guenther, 2006; MacEachern et al., 2019; Perez et al., 2010; Zarach, 2014). Three studies explored the impact of working with solely sexual violence victims (Samios et al., 2012, Teel et al., 2019; Turgoose et al., (2017). Three studies explored the impact of working with sexual violence and domestic violence victims (Choi, 2011; Choi, 2017; Newman et al., 2019). One study explored the impact of experiencing a terrorist attack (Creamer & Liddle, 2005). Five studies reviewed the consequences of working with both perpetrators and victims of offences. More specifically, four studies explored the impact of working with child abuse victims and perpetrators (Baugerud et al., 2018; Hurrell

et al., 2018; Masson & Moodley, 2020; Way, 2004). One study explored the impact of speaking with individuals reporting an offence (Steinkopf et al., 2018). Finally, one study explored the impact of working with perpetrators of criminal offences (Maguire & Byrne, 2017).

Secondary traumatisation

Assessment Tools for secondary traumatisation

A diverse range of instruments were used to measure and detect the presence of STS, compassion fatigue, vicarious trauma and PTSD (Please see Table 3). The most widely used tool to detect STS was the STSS (Bride et al., 2004). Eight studies utilised this tool which is a self-reporting tool which assesses the frequency of secondary traumatic symptoms experienced over the last week for professionals caring for traumatised individuals. The most widely used tool to detect compassion fatigue was the Professional Quality of Life Scale 2nd edition (Stamm, 2010), four studies utilised this tool which is a 30-item used measure of the negative and positive effects of helping others who experience suffering and trauma. The most used tool to detect and measure vicarious trauma was the VTS (Vrklevski & Franklin, 2008), two studies used this tool which is a validated screening tool for vicarious trauma used for clinical purposes. Finally, the instrument which was used to detect PTSD symptoms was Posttraumatic Stress Disorder Symptom Checklist-Civilian (Weathers et al. 1991) which is a 20-item self-report questionnaire which explores participants experiences of PTSD.

Prevalence rates for secondary traumatisation`

In total, 14 studies explored STS (Baird & Jenkins, 2003; Baugerud et al., 2018, Borjanić Bolić, 2018; Bridger et al., 2019; Choi, 2011; Choi, 2017; Creamer & Liddle, 2005; MacEachern et al., 2019; Hurrell et al., 2018; Masson & Moodley,

2020; Perez et al., 2010; Samios et al., 2012; Teel et al., 2019; Turgoose et al., 2017). Five studies explored vicarious trauma (Baird & Jenkins, 2003; Borjanić Bolić, 2018; Maguire & Byrne, 2017; Newman et al., 2019; Zarach, 2014). Three studies explored compassion fatigue (Conrad & Kellar-Guenther, 2006; Turgoose et al., 2017; Zarach, 2014). One study examined PTSD (Steinkopf et al., 2018).

Across all articles within the review, it was revealed that participants reported to be suffering difficulties ranging from mild to severe symptomology of PTSD because of working with forensic populations. To offer context within the articles exploring STS that highlighted prevalence, it was revealed that on average 37% of the participants within the studies explored reported moderate to severe symptomology as a consequence of their role which would be indicative of PTSD according to Bride (2007). Additionally, within studies exploring vicarious trauma that highlighted the prevalence, on average 65% of respondents reported difficulties attributed to their roles including cognitive and affect problems. Steinkopf et al. (2018) also reported that 16.67% of emergency dispatch call handlers were subthreshold for a diagnosis of PTSD. Authors found that greater overall scores for diagnoses yielded more intense symptomology for intrusion, avoidance and arousal (Masson & Moodley, 2020). Similarly, Newman et al. (2019) established that those individuals with noted higher levels of vicarious trauma reported higher levels of avoidance, intrusion and hyperarousal.

Risk Factors and predictors for secondary traumatisation `

The articles within this review have established that professionals are at risk of secondary traumatisation following engaging with forensic populations. Additionally, studies have identified potential differences amongst professionals, which highlight that certain characteristics increases vulnerability to becoming

secondarily traumatised. Baird and Jenkins (2003) found that professionals who spent more time with clients were less likely to experience symptomology associated with vicarious trauma. Borjanić Bolić (2018) further supported these findings by establishing that professionals who spent less than half their time with clients disclosed significant higher scores of STS when compared to professionals who spent more than half their time with clients. Additionally, Borjanić Bolić did not find any significant difference between the two groups and their experience of vicarious trauma. These findings are supported by Hurrell et al. (2018), who found that professionals who conducted shorter interviews with clients, noted there was a correlation with more STS symptoms. Alternatively, several studies did not find any difference between time spent with clients and experience of secondary traumatisation (e.g., Teel et al., 2019; MacEachern et al., 2019).

Additionally, the age of the professional has been identified amongst the studies as a demographic characteristic that can influence secondary traumatisation. Researchers found that younger professionals were more likely to be negatively impacted by working with forensic populations and displayed more secondary traumatisation symptomology when compared to older professionals (Creamer & Liddle, 2005; Baird & Jenkins, 2003). For example, Way et al. (2004), reported that younger clinicians working with sexual violence perpetrators reported high levels of intrusion associated with vicarious trauma. However, these findings do not entirely correlate with the articles that have assessed the impact of the amount of time a professional has been working with forensic populations. For example, Turgoose et al. (2017) found that professionals who worked in a sexual offending investigation team for longer displayed significantly higher scores on measures for compassion fatigue, STS and burnout when compared to fellow professionals with shorter experience. Baird and Jenkins (2003) further support

these findings, researchers found that professionals with more experience of working with traumatised clients reported greater levels of emotional exhaustion, but more personal accomplishment. Several additional studies also established that length of time working with child abuse victims and perpetrators could significantly impact professionals developing secondarily traumatisation symptoms (Perez et al., 2010; Way et al., 2004). However alternatively, Creamer and Liddle (2005) found that professionals with greater experience had less reported STS. Additionally, several studies did not establish a difference between longer serving clinician's and novice clinician's and their reporting of secondary traumatisation (Hurrell et al., 2018; Teel et al., 2019).

Furthermore, Baird and Jenkins (2003) found that higher educated counsellors reported less vicarious trauma symptomology during a comparative study. Moreover, Masson and Moodley (2020) established significant differences between white and black Social Workers in South Africa in their reporting of STS symptomology. However, several studies within this review found that ethnicity did not significantly contribute to whether an individual experienced secondary traumatisation which may mean that culture requires more exploration (Choi, 2011; Choi 2017). Maguire and Byrne (2017) found a significant difference between Lawyers and Mental Health Professionals (e.g., Psychologists and Social Workers) and their reporting of vicarious trauma symptomology. Additionally, Choi (2011) found that there were marginal differences amongst gender in their experience of secondary traumatisation. However, several studies within this review were unable to find any significant differences amongst gender (MacEachern et al., 2019). Researchers found whether professionals had dependants (MacEachern et al., 2019), or the type of population the professional

was working with (victim or perpetrator; Way et al., 2004) did not influence secondary traumatisation.

Several studies focused on variables that could act as predictors for secondary traumatisation. Choi (2011) found that professionals who had experienced more personal traumas were more likely to suffer more severe symptoms of STS when using a sample of Social Workers who were working with sexual abuse victims. This was supported by Choi (2017), who found that past traumas significantly contribute to the explanation of STS amongst professionals. Bridger et al. (2019) strengthened this argument by establishing that past traumas and burnout positively predicted the onset of STS amongst a sample of Foster Carers. Furthermore, Maguire and Byrne (2017) found that specific personality characteristics significantly correlated with the symptomology of vicarious trauma. Additionally, researchers found that the identification of emotional instability amongst professionals also predicted the development of PTSD.

Moderating factors for secondary traumatisation

Several studies within the review explored whether there were variables that could prevent professionals from suffering from secondary traumatisation or could buffer the impact of secondary traumatisation on the professional. Conrad and Kellar-Guenther (2006) found that professionals who displayed higher levels of compassion satisfaction showed lower levels of compassion fatigue and burnout. Research conducted by Baugerud et al. (2018) further supported the findings regarding compassion satisfaction being able to buffer the effects of compassion fatigue. However, their results suggest that compassion satisfaction is a strong predictor of burnout. Remarkably, Bridger et al. (2019) also found that

compassion satisfaction is a strong predictor of the development of STS (burnout is a strong predictor of STS).

Samios et al. (2012) found that posttraumatic growth could moderate the negative impact of STS upon professionals. More specifically, self-care has been identified by researchers as a variable which can have an indirect effect on secondary traumatisation (Bridger et al., 2019). Choi (2017) found that professionals who demonstrated higher levels of psychological empowerment displayed lower levels of STS during the comparative study. This is a finding which is supported by Maguire and Byrne (2017) who highlighted that Psychologists have more awareness of the impact of working with demanding clients and are regularly taught ways to cope with their environment in comparison to other professionals. Moreover, several personality characteristics have been noted as having moderating effects on both STS and vicarious trauma. These characteristics include emotional stability, resilience, extraversion, agreeableness, conscientiousness and openness to experience (Maguire & Byrne, 2017; Steinkopf et al., 2018; Teel et al., 2019). Also, Choi (2011) found that professionals who had an awareness of the organisation strategy and felt supported by colleagues displayed lower levels of STS. These findings have been endorsed by Bridger et al. (2019), who also found that colleague support could be a moderator for secondary traumatisation.

Risk of bias of the included studies

The methodological quality was assessed for all 20 studies included within the systematic review (see Table 1; Appendix B). The scores for each criterion listed in Table 1 are shown below in Appendix B. As stated above each 'Y' counts as a 1 point for the article, with the exception of criterion three which was split

into subsections and therefore a 'Y' counted as a 0.2. It has been suggested that articles with a summary score of 0.80 or more, indicates a 'high-level' paper (Nimmo & Huggard, 2013). In contrast, articles with scores of less than 0.50 are considered 'low- level' papers (Nimmo & Huggard, 2013). Three articles met all the quality appraisal criteria listed in Table 1 (Borjanić Bolić, 2018; Choi, 2017; MacEachern et al., 2019).

Discussion

the objective of the review is to provide a comprehensive overview and assessment of the way that research examines the secondary traumatisation of professionals working with forensic populations. The narrative synthesis revealed several gaps within the literature; the synthesis also revealed several methodological issues within the reviewed articles. Studies within the review were mostly cross-sectional and utilised self-report measurements. Methodological flaws such as a lack of comparable groups and inconsistencies amongst the research have made it more difficult to conclude the accuracy of the findings. However, it must be noted that this is also a likely consequence of excluding qualitative studies. However, the findings of the review suggest that professionals that work with forensic populations are at risk of suffering from secondary traumatisation. Elevated levels of STS, vicarious trauma and compassion fatigue were established within several studies within this review (Bauground et al., 2018; MacEachern et al., 2019; Masson & Moodley 2020). This suggests there is a relationship between working with this client group and the risk of becoming secondarily traumatised.

Additionally, the measurement tools used for the diagnosis and identification of secondary traumatisation symptomology differed and were all initially designed for varying populations (Meadors et al., 2010). This has clinical implications as some professionals may perform differently depending on the assessment administered. The inaccurate diagnosis of secondary traumatisation may contribute to adjustments being made for professionals based on erroneous information. This distinction amongst measures was identified by MacEachern et al. (2019). Researchers acknowledged that numerous instruments could be used

to identify secondary traumatisation. MacEacern et al. (2018) note that the most accurate and comprehensive tool to use when assessing police officers when they present as secondarily traumatised is the STSS (Bride et al., 2004). Despite this endorsement, the development and validation of the STSS (Bride et al., 2004) was conducted using a sample of Social Workers. Therefore, it is difficult to establish how accurate the tool is when assessing STS amongst different professionals. As demonstrated in the above, a universal tool for the sample group would be appropriate and would allow for greater understanding of the concept of secondary traumatisation.

Despite the methodological flaws noted, several studies within this review have identified characteristics which highlight that some professionals may be more susceptible to being secondarily traumatised following exposure to forensic clients. The studies within the review noted that professionals who spent more time with clients experienced less symptomology of secondary traumatisation. It was suggested that because professionals spent more time with clients, they were able to have more detailed and quality conversations and did not have to concentrate solely on the client's traumatic experience. Unlike professionals who spent less time with clients who likely needed essential information fairly quickly `(Borjanić Bolić, 2018). This conclusion was also demonstrated by Hurrell et al. (2018) who established a correlation between a reduced time of interviews and secondary stress symptomology. Additionally, the findings from the studies within the review suggested that the length of time in the role and professionals age influenced how susceptible an individual was to becoming secondarily traumatised. Therefore, it can be suggested that it is crucial for individuals to understand the profession they are going into and whether it is the right time.

Noting the relevant interaction styles necessary for the role to be effective but safe.

Furthermore, previous experience of a primary trauma was noted within the studies of this review as being a risk factor for secondary traumatisation amongst professionals. Studies indicated that more experiences of personal trauma increased the severity of the STS symptoms highlighted by professionals. However, the studies did not note what types of primary trauma made professionals more susceptible to being secondarily traumatised. Moreover, individuals will likely be noted as secondarily traumatised on a measurement tool because several of the criteria for the diagnosis overlap with PTSD. However, this was not acknowledged in the research. Additionally, the studies within the review noted that the types of occupation an individual has increases their risk of potentially being secondarily traumatised. It has been suggested that this is likely because some professionals focus on ensuring that they have skills that help them with their well-being which can potentially act as a buffer against the effects of secondary traumatisation (Samios et al., 2012).

Unsurprisingly, articles within the review noted that the more a professional felt supported, the less likely they were to suffer from secondary traumatisation. More specifically, it was found that professionals who were more aware of the organisational strategies and felt supported by their colleagues displayed significantly lower scores on the STSS (Bride et al., 2004; Choi, 2011). This suggests that services that work with forensic populations need to prioritise, creating an environment where staff members feel safe to make mistakes and have an understanding of what the organisation’s aims are. Additionally, the research highlighted the importance of understating the psychological impact of

working with this client group and psychological self-care methods. These are skills that take time to acquire and are often not offered as part of the training process for certain professions. Finally, the research noted several personality characteristics that professionals may pertain which will likely help moderate the impact of secondary traumatisation. These include emotional stability, resilience, extraversion, agreeableness, conscientiousness, and openness to experiences (Maguire & Byrne, 2017).

This review highlights the importance of considering the psychological impact of working with forensic populations for professionals. The current review demonstrates an association between the exposure to forensic clients and the prevalence of secondary traumatisation. Therefore, professionals working with this client group are at increased risk of being secondarily traumatised, which warrants an assessment of how services help professionals who are working with this client group. Services should consider revising recruitment processes and need to carefully consider how appropriate an individual is for a role. Services should aim to emphasise the importance of supervision and the creation of a supportive environment for professionals. Additionally, regular training sessions focused on secondary traumatisation and coping required when dealing with demanding clients has been found to be beneficial (Turgoose et al., 2017). Professionals who are aware of what is going on within their organisation and feel safe within their working environment are more likely to be enthusiastic and positive about their development which will impact their ability to moderate the impact of secondary traumatisation.

As with any study, this systematic review is not without its limitations. There is a possibility that within the review, appropriate studies were missed.

However, this review attempted to minimise the likelihood of this occurring by searching numerous databases and creating a robust search strategy which hopefully reduced the possibility of this occurring. Also, the presence of STS, vicarious trauma, compassion fatigue and PTSD for professionals as a consequence of working with forensic clients seems to be substantiated within the literature. However, the majority of the studies employ a cross-sectional research design. Thus, it cannot be determined whether the behavioural or psychological characteristics noted within the review were present before employment or whether they were caused by being employed. Therefore, following the findings, the review cannot determine conclusively whether there is a need to identify further training needs or whether the findings can assist with the recruitment process. Lastly, the studies within the systematic review used numerous different measurement tools to assess the impact of working with forensic populations. Therefore, it was difficult for the systematic review to synthesise accurately the effect of working with this client group. Thus, a single reliable measurement needs to be developed, which addresses the concept of secondary traumatisation comprehensively. The STSS (Bride et al., 2004) has been noted as being concise and comprehensive when identifying symptomology of secondary traumatisation. However, this tool would require some adaptation to consider several of the components of vicarious trauma and compassion fatigue. Nonetheless, despite the above limitations, this systematic review is the first to synthesise the impact of working with forensic populations and has identified some interesting findings and gaps within the academic literature.

Future research is still required to understand the further impacts of working with forensic populations. Much of the research focused on the effects of working with victims of offences; however, the understanding of the concept of

secondary traumatisation would be strengthened by the exploration of the consequences of working with perpetrators in depth. Additionally, future research should consider the experiences of frontline forensic professionals such as Healthcare Assistants and Prison Officers whose experiences would considerably add to the research and the understanding of the concept. As many studies within the review focused on Social Workers who work with a niche client group. Furthermore, future research should attempt to strengthen the knowledge about some of the moderating variables for secondary traumatisation. Not enough studies within this review explored moderating factors and establishing the strength of these factors will strengthen suggestions for changes and recommendations. Lastly, a high percentage of the studies within the review used a cross-sectional design, which does not establish causation. Therefore, it would be useful for future studies to adopt a longitudinal cohort design.

In summary, this review has illustrated the impact on professionals who work with forensic clients. The systematic review identified that the professionals who choose to work with forensic clients are at a risk of developing secondary traumatisation as a result of their efforts to make a difference. Additionally, the research has identified trends for risk factors and potential moderating factors for secondary traumatisation. Furthermore, the review found that these findings were consistent across countries. Despite this, the use of standardised screening tools would be helpful for meta-analysis and comparison studies. Given the impact that secondary traumatisation can have on professionals, further research is required which will support professionals and services to prepare for the psychological, emotional and organisational burden of a professional being secondary traumatised. The studies within the review heavily relied on self-report data. Thus,

there is a need for a controlled cohort study which identifies the effects and moderating factors of secondary traumatisation.

Chapter Three: Critical review of The Secondary Traumatic Stress Scale

Critical review of Secondary Traumatic Stress Scale

Introduction

Background

Traditionally, the traumatisation research (Friedman, 2006; Wilson, 1989; Wilson, Friedman & Lindy, 2001) has explored the responses of individuals who have experienced primary trauma. However, within the recent decades, the focus of the literature has shifted, and authors are now exploring the secondary effects of traumatisation on professionals who work with clients who have been primarily traumatised (Bride, 2007; Killian, 2008; Robinson-Keilig, 2014). Authors explain that secondary trauma is a consequence of the exposure to repeated or extreme exposure to details of individual's experiences of severe physical harm, sexual violence and threats of death (Beck, 2011). Secondary exposure to traumatic material has been found to have comparable effects on professionals to those effects experienced by the individual who was exposed to the primary stimuli (Meadors et al., 2010). Secondary Traumatic Stress (STS) is noted within the literature as being a separate concept from PTSD; this is because STS focuses on understanding the experiences of the caring individual rather than concentrating on the individual who has been exposed to the primary stimuli (Jenkins & Baird, 2002). Symptoms of STS identified within the literature include experiencing images of the primary individual's traumatic event, avoidance, an increased arousal state and numbing in response to the traumatic event (Figley, 1995).

Sabo (2006) concluded that there is likely a consequence of caring for traumatised clients. Recently, STS has been noted as an additional occupational hazard, and authors have noted that employers need to be aware of the ramifications on both professionals and clients if secondary traumatisation continues to remain a significant issue (Sprang et al., 2011). STS has been

reported in mental health professionals (Bell, 2003), child protection workers (Conrad & Kellar-Guenther, 2006), and workplace lay trauma counsellors (Beck, 2011). The research continues to grow when exploring this area, researchers are beginning to conceptualise which professionals are at risk of potential adverse effects. Thus, there is an emphasis to explore this concept further throughout the thesis.

Objectives

Despite the Secondary Traumatic Stress Scale (STSS; Bride et al., 2004) being used within numerous studies (e.g., Choi, 2017; MacEachern et al., 2019) no psychometric critique has been established to evaluate the properties of the psychometric. Thus, this chapter will focus on the use of the STSS amongst professionals that may be at risk of being secondarily traumatised because of their working environments. This chapter will provide an overview of the instrument and will explore the psychometric properties of the tool (e.g., validity concepts and reliability concepts). Limitations of the instrument and future research directions will additionally be considered throughout the critique.

Secondary Traumatic Stress Scale overview

Bride and colleagues developed the STSS because the literature noted that there was not an instrument that was sensitive enough to detect the symptomology of secondary traumatisation (Kassam-Adams, 1999). It was noted within the literature that instruments that were often used to explore secondary traumatisation symptomology were often being designed and validated using samples of primarily traumatised individuals rather than individuals who potentially were secondarily traumatised (Bride et al., 2004).

As noted within this thesis, services and establishments must be aware of the impact that working therapeutically with traumatised clients can have on professionals. This awareness can ensure that necessary adaptations to services or individuals' workloads can be considered. These considerations can and will ensure that all professionals can keep themselves safe and seek appropriate assistance if required. This instrument has been translated into different languages and has been administered across different countries (Jacobs et al., 2019). It has additionally been noted as being standardised to enable appropriate use amongst various professionals, including Psychologists, and Nurses despite concerns being raised that it was originally validated using Social Workers (Jacobs et al., 2019).

Development of Secondary Traumatic Stress Scale

The STSS was operationalised initially during the design to detect avoidance, arousal and intrusion symptomology resulting from the secondary exposure to a traumatic experience because of the professional relationship with an individual. Bride and colleagues wanted to ensure that there was congruence with the Diagnostic and Statistical Manual of Mental Disorder's (DSM-IV; American Psychiatric Association, 1994) assessment of the characterisation of PTSD. However, functional impairment and emotional distress were removed from the original item pool. Researchers noted that there was a possibility that when explored together, emotional distress and functional impairment properties would likely create the construct burnout, which is a distinct construct (Pearlman & Saakvitne, 1995). The original pool of items for the STSS was based on the DSM-IV Criteria B (intrusion), C (avoidance), and D (arousal) for PTSD.

The first 65-item version of the STSS was originally tested using 37 service providers. Researchers used this sample to pilot the assessment in an attempt to reduce the number of items in the scale. Bride and colleagues then completed the following steps to reduce the number of items within the instrument. Authors conducted a reliability analysis for each item; within each subscale, it was ensured that all items corresponded to an individual DSM-IV symptom quantitatively; items were then qualitatively examined to assess readability, clarity, relevance, and length; based on the findings of the steps beforehand items were deleted if they performed poorly; the remaining items within the pool were then assessed for content and construct validity. Bride and colleagues noted that they were conservative in their removal of items during this pilot because of the small sample size. Thus, only 15 items were removed, resulting in a 50-item instrument with an alpha of .97. Additionally, alpha scores of .92, .82 and .94 were established for the intrusion, avoidance and arousal subscales.

Next, the 50-item version of the STSS was completed by 200 social work graduates from a University in the United States. Researchers used this sample to identify which items would be included in the final version of the instrument. The statistical analysis noted above was implemented with the brief to reduce the pool so that one item remained for each of the 17 individual DSM-IV symptoms identified. In addition to this, a confirmatory factor analysis was conducted using the methodology of structural equation modelling. This analysis revealed that two items loaded on more than one factor, and this resulted in them being removed and replaced.

Finally, the 17-item version of the STSS was completed using a convenience sample of 294 masters-level Social Workers from south-eastern United States.

Bride and colleagues found good coefficient alphas for the full 17-item STSS (.93) and good alphas were established for intrusion (.80), avoidance (.87), and arousal (.83). In addition to this, findings suggested the scale had good convergent, discriminant and factorial validity. Bride and colleagues did note that further studies were required to assess the properties of the tool. Particularly establishing whether it could discriminate the symptomology experienced from an individual that was experiencing depression in comparison to STS as individuals present similarly. Despite this, researchers note that the tool would be beneficial for all clinicians working with traumatised clients.

Psychometric properties

Validity concepts

Face validity

Holden (2010) has explained that the face validity of an instrument is characterised by an association with a particular psychological measurement and the individual items presented within the measure. Holden further explains that face validity is distinct from any technical form of validity testing because the role of face validity is to confirm the appropriateness, sensibility or relevance of the instrument and items within the tool as it appears to the individuals engaging with the instrument. Thus, this form of validity is purely subjective, which can lead to variations in the assessment of how clear the items are concluded to be. Two components have been identified as necessary for the evaluation of the face validity of an instrument to be successful. Firstly, the face validity of the instrument is not based on the judgements of professionals or experts within the field, but judgements are made by individuals engaging with the tool and therefore

may be naïve to the concept being measured. Secondly, face validity is dependent on the apparent nature of the items within the measure.

The items and instructions within the STSS are clear for all using the instrument in that it is exploring the effects of working with a traumatised client on the professional. Therefore, individuals using the instrument can infer what types of effects specifically the scale is attempting to explore, which helps with the face validity of the scale. However, because there has been no attention paid to this fundamental concept within the research. It cannot be fundamentally concluded that this scale is appropriate for use with all populations. Consequently, because this concept has not been explored relevant adaptations which would assist with the administration of the tool have possibly not been made which would impact the accuracy of the psychometric. Although, the rationale of asking a large sample of respondents to rate whether they believe the scale presents as though it is exploring the construct it is purposely made for seems easy. Bride and colleagues sought the opinion of five experts to assess whether the items within the scale were appropriate for the client group rather than the clients that would be taking the instrument. Thus, despite the STSS' appropriateness for examining STS being conclusive within the literature (Bonach & Heckert, 2012). It is recommended that the face validity of the scale is explored within the research at the earliest opportunity.

In addition to this, it has been noted within the research that solely administering the scale does not give a comprehensive overview of the symptomology of the presenting individual (Colombo et al., 2019). Therefore, it was suggested by Colombo et al. (2019) that creating a semi-structured interview schedule for respondents could give assessors greater insight into the individuals

and could help understand any trends within the data. Masson and Moodley (2020) noted that respondents during the recall phase of discussing their secondary trauma were more likely to describe their intrusion and arousal symptomology rather than their avoidance symptoms. Furthermore, MacEachern et al. (2019) found following a semi-structured interview after the completion of the STSS that professionals felt they had a duty to overcome any emotional distress they were dealing with following an interaction with traumatised clients. Rousseau and Maesham (2007) conclude that it is clinically naïve for assessors to evaluate the health of professionals working with traumatised clients by the absence of symptomology or the return to their functioning state. They suggest that instead of conceptualising the health of professionals in a dichotomised manner, it is imperative to use a more polarised view during the assessment.

From the findings above, it seems plausible to conclude that suffering from STS is associated with professionals feeling vulnerable about how effective they can perform in their role. Therefore, it can be assumed that this can impact how honest a professional is when completing the STSS. Based on this rationale, it could be appropriate to administer a social desirability scale alongside the STSS. This may reduce the possibility of professionals answering items in a perceived socially desirable manner and would lead to more accurate assessments. With the addition of social desirability scales administered alongside the instrument and semi-structured interviews added also, this will likely lead to a more robust assessment of whether an individual is suffering from STS.

Content validity

The extent to which an instrument displays content validity is dependent on the extent to which the critical elements of the tool are representative and relevant to the phenomenon being explored (e.g., the items, response formats and instructions; Sireci, 1998). Bums and Grove (1993) explained that content validity is obtained through the assessment of literature representatives of populations and experts. Researchers additionally state that content validity can be established in the development and judgement stage. With reference to the STSS, the concept of content validity is about how well the items within the scale assesses the construct of STS amongst professionals. STS is not an official mental health disorder defined within the DSM-V, and its properties are operationalised using features of the diagnosis of PTSD. Thus, it can be suggested that STS can be interpreted subjectively, and this is displayed in the synonymous use of compassion fatigue alongside STS and thus makes it hard to implement adequate comparative studies exploring the concept (Melvin, 2015).

Despite the ambiguities of the definition of STS, during the initial development of the STSS, Bride and colleagues approached five experts in the field of STS to review the initial 36 suggested items to establish the content validity of the measure. Researchers have not disseminated the outcome of this assessment, however, proceeded with the development of the scale. It is noted within the research that content validity is an essential factor in identifying that a tool is measuring a specific construct. However, is not a sufficient indicator that a measuring instrument is measuring phenomena that it is purposely designed to measure (Robins & Wiersema, 2003). As noted above, STS is closely related to both compassion fatigue and PTSD as constructs. Thus, it should have been

imperative for Bride and colleagues to document the process of how content validity was established for the STSS, however they failed to do this during the dissemination of validation of their scale.

Predictive validity

Predictive validity is determined by establishing how accurate a scale outcome is associated with a subsequent target behaviour (Vickery et al., 1994). The stronger the association between the data within the assessment and the target behaviours, the higher the degree of the predictive validity of the instrument (Hack et al., 2005). Not much of the research has explored the prediction of outcome behaviours as a result of high scores on the STSS. However, studies have recently begun to examine indirect predictors of STS by assessing the associations of outcomes of the STSS and potential moderators of the construct. For example, Bonach and Heckert (2012), found that internal and external peers support was negatively associated with STS. In addition to this, it has been found that concepts such as compassion satisfaction and psychological empowerment can be indirect predictors of STS (Baugerud et al., 2018). A review of the literature suggests that the objectives of the majority of the research are to establish the prevalence of STS. Thus, studies have been able to conclude that different professionals are more at risk of suffering from STS, while additionally identifying risk factors such as age, tenure and primary trauma exposure (Choi, 2011). Furthermore, research has also explored the intensity of the symptomology of STS (Masson & Moodley, 2020).

The research has not however established any outcome behaviours because of suffering from STS. This is likely because the items within the scale are focused on establishing the presence of symptomology. Therefore, when using the scale

alone, prevalence and comparison of demographic characteristics are the only components that can be assessed and evaluated successfully. Thus, there is a lack of data, and therefore a lack of understanding as predictions cannot be assumed regarding likely behaviours displayed by professionals. Thus, it is recommended that future research examines potential outcome behaviours or changes in attitudes of professionals suffering from STS. Based on the findings within this section, future research is needed to establish the predictive validity of the STSS when establishing outcome behaviours and attitudes of professionals suffering from STS.

Concurrent validity

Concurrent validity refers to how well two-measures exploring a similar topic perform in comparison to one another (Shapiro et al., 1999). This validity can be established by testing two separate groups at the same time with two separate measures (Hintze, Ryan, & Stoner, 2003). No studies within the literature have explored and commented on the concurrent validity of the STSS. As noted above, compassion fatigue and STS have been used interchangeably of one another within the secondary traumatisation empirical research (Larsen et al., 2002). Despite this, when exploring compassion fatigue amongst professionals, authors often do not use the STSS and opt to use the Professional Quality of Life Scale (ProQOL; Stamm, 2010). The ProQOL aims to explore the negatives and positives of professionals who work with individuals who have experienced stressful events. Within this instrument, there are four subscales which give you an overall score; these items include compassion satisfaction, compassion fatigue, burnout and STS. Stamm explains that the compassion fatigue scale is distinct but displays 2% shared variance ($r=-.23$; co-σ = 5%; $n=1187$) with STS and 5%

shared variance (r=.-.14; co-σ = 2%; n=1187) with burnout. Additionally, Stamm states that over 100,000 studies have explored secondary traumatisation within research using this tool; therefore, Stamm concludes it displays good construct validity, thus further highlighting the strengths of the instrument. Due to the similarities of the instruments and the support within the literature for both, it would be interesting to explore and compare both the STSS and ProQOL.

Construct validity

Construct validity refers to the degree to which an instrument measures what it claims or purports to be measuring. The research supports the conclusion that the items within the STSS do measure STS (Cieslak et al., 2014). However, Ting, et al. (2005) conducted a confirmatory factor analysis which highlighted that although the items fit into the presented three-factor (intrusion, avoidance and arousal) model adequately, there was high factor correlation between the three factors. This suggests that there is not a distinct differentiation between the construct's intrusion, avoidance and arousal. However, Bride and colleagues argue that this is likely to be a cause of the theoretical nature of STS. Therefore, high correlations are to be expected. Despite this, because of the high intra-correlations between the different factors, Ting, et al. (2005) explored whether there was a possibility of STS being measured as a unidimensional construct using a single-factor model. The findings from this analysis suggest that it is unclear whether there are three distinct constructs or one single construct of the STSS. However, the findings do indicate that the items within scale appropriately measure the symptomology of STS. Also, it is essential to note that the STSS is not a diagnostic tool.

Reliability

Reliability within the psychological literature for a psychometric tool refers to the consistency of the scores of a measure (Li et al., 1996). A measure will be noted as being reliable if the results identified are consistent over time, across items and using different researchers (Shmueli-Goetz et al., 2008).

Internal reliability

A scale can be judged to have good internal reliability if when examined the scale notes an alpha coefficient of .70 or above, while acceptable internal reliability varies between .60 and .70 (Van Craenendonck, & Blockeel, 2015). Within the literature, the STSS has achieved consistent and high levels of internal reliability within empirical articles. Choi (2017) reported alpha reliability of .86 for the use of the STSS with a sample of 154 Social Workers working with children who are at risk of being abused. Additionally, Perron and Hiltz (2006) reported alpha reliability of .96 for the use of the STSS with a sample of 58 interviewers of abused children. In further support of these findings, an alpha of .91 was established for the STSS in the study of 101 police officers working on child abuse investigations (Dominguez- Gomez & Rutledge's, 2009). In addition to this, Dominguez- Gomez and Rutledge (2009) found that the STSS achieved alpha coefficient of .92 for intrusion, .92 for avoidance and .91 for arousal. In summary, the research suggests that the scale has good internal reliability; however, further research examining this concept should be considered.

Test re-test reliability

Bride and colleagues do not discuss the test re-test reliability of the STSS during the initial validation of the scale. Nor is the test re-test reliability discussed

in the broader literature. It can be suggested that this may be due to the overall structure of the measure. The STSS is designed to measure the frequency of STS symptomology over a week period. However, it is plausible to argue that any professional could experience different symptoms during any week period; these could be due to age, time in the role, or perceived support. Perceived support from colleagues and others is noted within the research as having a significant moderating effect on the symptomology of STS (Choi, 2011). Thus, any changes with responses by professionals may be due to genuine changes in their symptomology rather than poor test re-test reliability. Additionally, it is noted within the research that one of the strengths of the STSS is that it is a short measure which captures the symptomology of STS adequately (Newell & MacNeil, 2010). However, it can be argued that because the STSS only has one format, re-administering the scale in a short period may be confounded by carryover effects.

Discussion

The research has suggested that the STSS has become an essential tool for the measurement of STS amongst professionals (Beck, 2011). It was developed due to there not being an adequate measure that evaluated the STS symptomology of professionals - this further highlights the strengths of the assessment. To understand traumatised clients further, it is crucial to understand the effects that working with this client group has upon them. Thus, this information can inform the adaptation of services and establishments which will help both professionals and clients. In addition to this, the STSS has been translated successfully into French (Jacobs et al., 2019) and Korean (Park, 2011), and the 17-item assessment has been noted as being very easy to administer and

being the most accurate tool when detecting STS symptomology (Craun et al., 2014).

The STSS does present with a variety of weaknesses. There is a risk that professionals will engage in socially desirable responses because of the core belief that their symptomology will impact their ability to successfully do their job (Kellogg et al., 2018). There are implications of respondents having this bias; this is likely to skew the conclusions drawn within the research. Therefore, one can rationalise that possible false conclusions can be drawn within the research using this scale having significant implications of organisations and clients. Thus, to reduce the possibility of obtaining biased results, it is advised to use multiple sources to gather information about professionals suffering from STS.

In addition to this, there does still seem to be a lack of clarity regarding the appropriateness of the construction of STS as a concept e.g., the interchangeable use of compassion fatigue and STS. Therefore, this impacts the validity of the scale. It was highlighted within the review that there is often overlap between STS and other similar terms. This was again noted within the research when authors detailed the correlation rates between the subscales of the STSS and considered whether the scale was a single factor model rather than three distinct factors. Due to STS not being a distinct formal diagnosis as of yet, this further reinforces the need to utilise multiple methods when exploring a professional's wellbeing. Thus, currently the STSS is not an appropriate assessment to use on its own, particularly within clinical settings.

This psychometric critique provides a robust overview of the STSS and suggests that further research will be required to strengthen the conclusions drawn about the validity and reliability of the scale. In addition to this, new

research should focus on the conceptualisation of secondary traumatisation terms such as compassion fatigue and STS as they are defined as two separate concepts, however, are used synonymously of one another.

Conclusion

In summary, the research must continue to explore what impact working with traumatised clients can have on professionals assigned to alleviate the distress of individuals. In addition, further understanding of the effects of secondary exposure to trauma will help services and establishments gain insight into what changes are plausible and should take place within organisations to help both clients and professionals. To adequately inform organisations, further research is required to be conducted which focuses on the psychometric properties of the STSS and the distinct nature of the development of STS in comparison to other terms. Based on the findings within this critique, it can be concluded that the STSS is an appropriate assessment tool, however, it is recommended that multiple sources should be used alongside the STSS to gain a sensible picture of the effects of STS upon professionals.

Chapter four: Exploration of risk factors linked to the development of Secondary Traumatic Stress amongst professionals working with forensic clients.

Abstract

Within the literature there is an acknowledgement regarding the impact of secondary exposure to traumatic stimuli. Professionals who work with traumatised clients will often display symptomology which is similar to that displayed to clients that had initially been exposed to the traumatic stimuli. There is now a general acceptance that there is a cost for caring within the healthcare profession (Culver et al., 2011). Research has demonstrated that a number of factors are linked to STS, this study set out to explore a number of these, including workplace burnout, professional's age, exposure time to client groups, time in the profession and experience of trauma. The current study aimed to identify whether professionals who were younger, had greater victimisation experiences, spent less time with clients, had longer careers within the forensic field or were suffering from burnout displayed more symptoms associated with STS. One hundred and three participants completed a 112-item questionnaire which explored their experiences of victimisation, STS, and workplace burnout. It was found that 21% of the participants indicated higher levels of STS which would be indicative of PTSD. In addition, it was found that experiences of workplace burnout and physical abuse were significant predictors of the development of STS.

Exploration of Risk factors linked to the development of Secondary Traumatic Stress amongst professionals working with forensic clients.

individuals who engage with forensic services are often identified as people who have struggled with unmet emotional needs, trauma, disempowerment at some point in their life (Helverschou et al., 2018). Through the engagement with services within the criminal justice system it is believed that professionals can assist clients with regaining a sense of empowerment regardless of their experiences (Theriot, 2003). Exposure to the difficulties noted above can significantly impact an individual's health and well-being (Coles et al., 2015). More specifically, within the literature, it has been noted that exposure to traumatic experiences such as sexual abuse, physical abuse or emotional neglect can cause the onset of mental health difficulties that can be categorised as post-traumatic stress disorder (PTSD; Fostick et al., 2012). PTSD has been identified as a serious mental health condition that is caused by exposure to a traumatic event (Friedman et al., 2011).

The symptomology of PTSD has been characterised by the identified individual experiencing intrusive memories, changes to thinking styles, fluctuations in mood, and changes in emotional and physical reactions when in distress (La Bash, & Papa, 2014). There is a rich body of research that examines the impact upon professionals following exposure to primary traumatic material (Pacella et al., 2013). Context includes professionals being exposed to death, threat of assaults, actual physical or sexual assaults, homicide or 'body handling' (Wolf et al., 2014). However, the empirical research has overlooked to an extent the impact that a traumatic experience can have on a professional beyond being exposed to the initial stimuli (Maercker & Hecker, 2016). The literature has most

notably failed to appropriately conceptualise the impact upon professionals who work within close proximity of traumatised clients particularly within forensic settings.

Despite this, there is some acknowledgement within the research regarding the impact of secondary exposure to traumatic stimuli. Bride (2007) noted that professionals who work with traumatised clients will often display symptomology which is similar to that displayed by the individuals that had initially been exposed to the traumatic stimuli. Some researchers have noted that secondary traumatisation can be categorised as a hazard (Ellis, & Knight, 2021; Please see Chapter One for full overview of secondary traumatisation). Within the secondary traumatisation literature, one of the most common concepts is STS (Kelly, 2020). It has been conceptualised within several studies that professionals may be at risk of the development of STS because of their job role (Hinderer et al., 2014). Professionals such as Nurses, Police Officers and Psychologist have all been found to display symptomology of STS which has been attributed to the difficulty of their role (Craun et al, 2014; Beck, 2011; Makadia, Sabin-Farrell & Turpin, 2017).

Figley (1983) first acknowledged the impact that STS was having on professionals when he examined the difficulties that were being displayed by counsellors working with traumatised clients. Professionals who develop STS are noted as displaying similar symptomology as the clients that they are treating (Hensel et al., 2015). However, what has become apparent is that STS is not viewed as distinct enough to be currently classified as a diagnoseable disorder (Naturale, 2015). Despite this view being held by the relevant health bodies the symptomology displayed by suffering professionals can be severe and individuals will display several adverse indicators following the development of STS (Lee,

Gottfried, & Bride, 2018). Symptoms of STS include experiencing images of the primary individual's traumatic event, avoidance, increased arousal state and numbing in response to the traumatic event (Figley, 1995). Additionally, the research has noted that the development of STS can be difficult to treat due to its complexities Figley (1995). Additionally, it has been further noted within the research that the treatment of STS is complex because it develops slowly without warning and therefore professionals find it difficult to identify symptomology (Yassen, 1995).

Additionally, the literature notes that the development of STS can have significant implications on a professional's well-being and ability to appropriately conduct their role (Ting et al., 2005). It has been conceptualised that developing STS can contribute to poor job performance, increased sickness, decreases in morale and reductions in empathy (Bourke & Craun, 2014). These findings regarding the adverse effects of STS were supported by Acquadro et al. (2020). Researchers found that STS was significantly correlated with a reduction in police officer's resilience and therefore it was suggested that this contributed to reductions within performance. The body of research has begun to conceptualise risk factors that are linked to the development of STS. Variables such as age, length of time within a profession, time spent with clients and previous traumatic experiences have all been identified within the research as having an association with the development of STS (Hensel et al., 2015).

Theoretical framework

Research exploring risk factors of STS amongst professionals has provided a mixture of findings. However, Stamm (2002) has argued that workplace burnout and STS are heavily linked, and it can be suggested that the concepts overlap with

one another. However, the research does not appropriately identify which direction these concepts interact. Therefore, clarity is required regarding the understanding of the relationship between workplace burnout and STS (Severn et al., 2012). Research conducted by Sodeke-Gregson et al. (2013) found evidence to suggest that burnout predicts the development of STS when researchers explored the development of STS amongst UK therapists working with traumatised clients. Additionally, these findings have been supported by Craig and Sprang (2010) who also found that burnout predicts the development of STS when using a similar sample of UK therapists.

Additionally, previous exposure to traumatic experiences has been identified within the research as a clear risk factor for the development of STS amongst professionals. It has been noted within the research that professional's personal history of victimisation often makes it more difficult for them to conceptualise a client's history of trauma as it reminds them of their own experiences which often triggers their feelings of when they were traumatised (Figley, 1995; McCann & Pearlman, 1990; Pearlman & Saakvitne, 1995). Pearlman and MacIan (1995), supported this finding by highlighting in their study that 60% of trauma therapists who noted that they had been subject to previous trauma were negatively impacted by their professional role. However, it is of note that these participants were self-claimed trauma therapists and therefore the findings should be taken with caution. Nevertheless, Choi (2011) further strengthened these findings. Choi found within their study that more experiences of personal trauma was positively correlated with more severe symptomology of STS identified by Social Workers working with sexual abuse victims.

Despite these findings, several studies have disputed these conclusions and have found that personal trauma is not a predictor of the development of STS. For example, Schauben and Frazier (1995) noted that female counsellors who reported to have personal histories of trauma did not display greater symptomology of STS when compared to counsellors who did not report a history of trauma. Moreover, Bober and Regehr (2006) also found that there was not a correlation between STS symptomology and personal histories of victimisation in adulthood and childhood noted by therapist's working with victimised clients. However, it has been suggested by authors that contradictory findings are likely a result of the various instruments used within the research to explore trauma. Furthermore, different definitions of 'personal trauma' disseminated by researchers could also impact the findings across the various studies (Slattery & Goodman, 2009).

In addition to personal trauma, the age of professionals has provided interesting findings. Age has been identified within the research as a risk factor for the development of STS. For example, Ghahramanlou and Brodbeck (2000) explored psychological distress, secondary trauma intensity, and specific components of secondary trauma in 89 20–63-year-old sexual assault trauma counsellors. The findings from the study highlighted that youthful counsellors were more impacted by their roles and were more likely to develop STS. In addition to this, Creamer and Liddle (2005) supported these findings when exploring the development of STS upon disaster mental health workers following the September 11th terrorist attacks. Researchers similarly found that the age of the professional was a significant predictor of the development of STS. However, it has been noted that these findings have not always been replicated leading to challenge regarding

the strength of the association between the development of STS and the age of the professional (Meldrum et al., 2002).

Additionally, the length of time spent with clients has also provided some interesting findings. Borjanić Bolić (2018) noted that professionals who spent less than half their time with clients reported greater STS symptomology in comparison to professionals who spent most of their time with clients. These findings were also supported by Baird and Jenkins (2003) who found that professionals who spent more time with clients were less likely to experience the adverse effect of working with traumatised clients when researchers were exploring vicarious trauma, although these findings are linked to vicarious trauma, they strengthen Borjanić Bolić findings. The findings regarding the time spent with clients have been conceptualised using Pearlman's (2012) thesis. Pearlman noted that the development of STS symptomology does not lie merely within the length of time a professional spends with a client. Rather Pearlman highlights the quality of the therapeutic relationship, the discussions that are held within sessions and the methods that are implemented by the professional to mediate the development of STS. Therefore, due to the adaptations of forensic services and the pressure upon staff to adopt a more trauma-informed stance a greater number of staff may be at risk of the development of STS.

Finally, the length of an individual's career has been identified within the research as a risk factor for the development of STS. For example, Turgoose et al. (2017) reported that professionals who had worked within a sexual offending team for a greater length of time reported greater STS symptomology in comparison to professionals who had shorter experiences. In addition to this, Baird and Jenkins (2003) conducted a study that supported these findings. Researchers

concluded that various professionals with longer careers of working with sexual assault victims displayed more emotional exhaustion in comparison to professionals with less experience. Similar to the risk factors noted above these finding have been challenged within several studies. For example, Creamer and Liddle (2005) noted that more experienced professionals working with victims of the 9/11 terrorist attacks displayed less STS symptomology. Additionally, several studies did not establish a difference between longer serving clinician's and novice clinician's and their reporting of secondary traumatisation (Hurrell et al., 2018; Teel et al., 2018). However, it can be argued that the findings that are being established within these studies are confounded by factors such as age. This has not been highlighted explicitly within the literature, and therefore makes conceptualising this factors more difficult.

The Study

This research study aims to progress the knowledge that is already established within the STS literature. This study aims to fill the gaps within the literature by exploring a wide range of professionals that are working with forensic clients. More specifically, the study will include frontline professionals including Healthcare Care Assistants and Nurses who are professionals that are often overlooked particularly within the forensic research exploring the risk of developing STS. The research has noted that several factors including workplace burnout, age, length of career, exposure to previous trauma and length of time spent with clients are variables that have been identified as predictors for the development of STS (Hensel et al., 2015). Based on the findings within the research the study will aim to identify the relationship to and predictive nature of

the identified variables relative to STS. Five hypotheses will be explored within this research project:

1) Younger professionals will display more symptomology of STS.
2) Professionals with more victimisation experiences will display greater symptomology of STS.
3) Professionals that spend less time in hours with clients will display greater symptomology of STS.
4) Professionals who have worked within the forensic field for more years will display more symptomology of STS.
5) Professionals who have greater levels of workplace burnout will display more symptomology of STS.

Method

Participants/Design

Participants were recruited from a single forensic directorate within a London NHS trust. A total of 103 professionals were recruited and engaged with this study across both a single prison (n=20, 19%) and single medium secure hospitals (n=83, 81%). A multiple regression power calculation was conducted and indicated that for 80% power at a 5% level of significance, assuming a 2 tailed test with a moderate effect size and six predictor variables, a sample of 97 was required therefore this study met that standard (Pallant, 2013). The mean age of the sample for this study was 36.42 (SD = 11.73, range = 20-65). 69 individuals within the sample identified as a female (67%), in comparison 34 individuals within the sample identified as males (33%). Regarding the ethnicity of individuals within the sample the majority of the sample identified as White British (n=47, 46%), the remainder of the sample indicated they were Black African (n=28, 27%), Black Caribbean (n=8, 8%), Irish (n=4, 4%), Asian (n=4, 4%), Mixed Ethnicity (n=3, 3%), and not indicated on the questionnaire (n=8, 8%). Within the sample individuals occupied various occupations, the majority of individuals identified as Psychologists (n=33, 32%), additionally the sample included Healthcare Assistants (n=29, 28%), Mental Health Nurses (n=24, 23%), Occupational Therapists (n=8, 8%), Psychiatrists (n=7, 7%) and Forensic Social Workers (n=2, 2%). The mean time spent in the presence of clients was 25 hours per week (SD = 13.78, range = 2-50). The inclusion criteria for the proposed study are as follows, all professionals must be over the age of 18, individuals have to be English speakers and professionals selected have to have face to face client contact. Finally, the study implemented a cross-sectional design.

Measures

A 112-item questionnaire was distributed to participants. However, only the scales highlighted within this section were relevant for this study and the remaining scales will be highlighted in chapter five.

Secondary Traumatic Stress (Secondary Traumatic Stress Scale; Bride et al., 2004). This scale was used to establish whether individuals' have been significantly impacted by their exposure to individuals who have experienced significant traumatic events. This scale consists of 17 items and three subscales, and individuals responded on a five–point Likert scale ranging from 'never' to 'very often'. Example items include 'My heart started pounding when I thought about my work with patients.', 'It seemed as if I was reliving the trauma(s) experienced by my patient(s).', 'I felt discouraged about the future.'. This overall scale demonstrated a good internal consistency in the current study (a =.89). The intrusion subscale demonstrated an acceptable internal consistency in the current study (a =.70). The avoidance subscale demonstrated a good/acceptable internal consistency in the current study (a =.73). The arousal subscale demonstrated a good/acceptable internal consistency in the current study (a =.79).

Job Burnout (The Compassion Fatigue Scale; Adams et al., 2008). This scale will be used to establish whether individuals' jobs are affecting them in a significant manner. This scale consists of eight items. Questions 1 to 8 were rated on a 10-point Likert scale ranging from 'Never/rarely' to 'Yes often'. Example items include 'I have felt trapped by my work', 'I feel that I am a failure at work', 'I have felt depressed as a result of my work'. This scale demonstrated good internal consistency in the current study (a =.88).

Victimisation experiences (The California Correctional Officer Survey; Lerman & Harney, 2017). This scale will be used to establish whether individuals' have been subject to any form of victimisation in their life. This scale consists of five items. Questions 1, 2, and 3 were rated on a four-point Likert scale ranging from 'yes both' to 'no'. Questions 4 and 5 were rated on a seven-point Likert scale ranging from 'never' to 'always'. Example items include 'Have you ever been physically assaulted at work by resident or client or outside of work by a member of the public?', 'Have you ever been verbally abused at work by resident or client or outside of work by a member of the public?', 'When a staff member has been assaulted at the place where you work, how often has any action been taken by the institution to discipline the inmate or inmates involved?'.

Procedure

Before data collection commenced, the study was approved by the Faculty of Medicine and Health Sciences Research Ethics Committee at the University of Nottingham. All professionals were recruited from a single forensic directorate within a London NHS trust. Initially, a global email was sent via internal email domains to all professionals on the sites selected to participate in the study. The email contained the information sheet for the study, instructions about the researchers' presence on-site (i.e., dates) and the details of the opt-out procedure if staff members did not wish to be considered for the study. Staff members had two weeks to contact the researcher and state that they did not wish to be considered for the study. Professionals who returned the opt out letter were not considered for the study. Prior to the researcher approaching professionals, the researcher discussed with line managers possible risks of participating in the study and discussed themes that may arise during formal or informal discussions

following participation. Some of the risk's included frustration, anger and potentially re-traumatisation. Some of themes we discussed included people talking about how uncomfortable they may have felt or needing some time to reflect following completing the questionnaire. Candidates who met the inclusion criteria were identified via internal rostering systems within the establishments. Potential participants were then approached by the researcher and asked whether they wished to participate in the study. If participants agreed to participate, they were taken to a private room and were given an information sheet and were given further verbal information about the study if required. Before participants began filling in the questionnaire, they were informed that they could withdraw, and they would not be penalised for doing so. Questionnaires were filled out in person and took participants approximately 30 minutes to complete. Participants were then given a written debrief and verbal debrief following their participation depending upon what they believed to be necessary.

Analysis

A significance level of <.05 was used to analyse all the data. The data was entered, cleaned, and analysed using SPSS 24. Initially, relevant statistical analyses (ANOVA's, T-Test and Chi-Squared) were conducted to identify relevant relationships amongst the demographic information that was provided by the participants. However, differences that were observed were a consequence of unequal groups and therefore outcomes were consequently omitted from the study.

The distribution of data was initially examined by applying the bell-shaped curve to each variable's frequency distribution and 'eye-balling' the data. The distribution of observations was then converted into Z-scores to check if the

distribution of scores was normal. Because of the STS data not being normally distributed non-parametric tests were utilised (Pallant, 2013).

The first stage of analysis involved basic descriptive data analysis exploring frequencies to establish prevalence rates for STS amongst the participants within the study. A Spearman Rho correlational analysis was then conducted to establish the relationship between STS and workplace burnout, age, length of career, exposure to previous trauma and length of time spent. In addition to this, A Point-Biserial correlation was conducted to establish the relationship between the dichotomous risk factors and STS.

In the second stage of the analysis, a multiple regression analysis was performed to identify which factors would predict the development of STS. Variables found to be correlated formed the predictive model as independent variables. These included relationships identified within the literature and significant correlations established within the current study. The appropriate considerations and assumptions were assessed for the multiple regression final model. The data was explored for multicollinearity. VIF statistics and tolerances were explored using recommendations from Pallant (2013). Additionally, Cook's Distance values assessment was completed to explore potential outliers. An inspection of the residual scatterplots and the p-p plot of regression were conducted to identify potential violations of homoscedasticity, normality or linearity.

Results

Prevalence Rates of Secondary Traumatic Stress

Table 4 highlights the prevalence of STS amongst the sample of professionals being explored within this study. The scores highlighted within Table 4 have been calculated using Bride (2007) criteria of levels of STS (little, mild, moderate, high and severe). Within the current sample 21% (moderate and above) of the participant's would meet the threshold of developing symptomology of STS.

Table 4

STSS score using the Bride (2007) criteria for levels of STS.

Level of STS (Score Range on STSS)	N (%)
Little or no STS (27 or less)	32 (33)
Mild STS (28-37)	38 (40)
Moderate STS (38-43)	21 (15)
High STS (44-48)	5 (3)
Severe (49 and above)	7 (3)

Table 5 highlights the subscales within the STSS. Table 5 identifies that avoidance is the most frequently endorsed subscale by participants within this study. In addition to this, intrusion and arousal were endorsed similarly by the sample.

Table 5

Mean scores, standard deviation, and score ranges for each subscale.

Subscale of STSS	Mean	Std. Deviation	Score Range
Intrusion	9.58	3.21	5-19
Avoidance	13.04	4.05	7-27
Arousal	10.30	3.59	5-20
Total STSS	32.92	9.71	17-66

Correlations

A Spearman Rho correlation was conducted to establish the relationship between the continuous risk factors and STS. Due to the STSS scores not being normally distributed it was conceptualised that a non-parametric test should be used as an appropriate alternative (Pallant, 2013).

Table 6

Spearman rho correlations between continuous risk factors and STSS.

	Total STSS Score	p value
Time in the presence of forensic client	-.16	.104
Age	-.10	.313
Time in profession	.06	.557
Workplace Burnout	.66***	.000

*Spearman rho correlations - ***correlation is significant at 0.001,* **0.01 and *0.05

Table 6 indicates that there is a significant relationship between workplace burnout and STS $r(101) = .66$, $p < .001$. This strong, positive relationship suggests that participants who display greater levels of workplace burnout will display greater levels of STS. Moreover Table 6 indicates there is no relationship between age,

time working with forensic clients or time in the presence of forensic clients and STS. However, there were slightly higher scores of STS for younger professionals. Additionally, professionals who had worked with forensic clients longer had slightly higher scores on the STS. Finally, a negative correlation coefficient suggested that there was a greater level of STS amongst professionals who spent less time with clients face to face.

A Point-Biserial correlation was conducted to establish the relationship between the dichotomous risk factors and STS.

Table 7

Point-Biserial Correlation between dichotomous risk factors and STSS.

	Total STSS Score	**p value**
Physical assault (no assault relative to being assaulted)	.30**	.002
Sexual assault (no assault relative to being assaulted)	.10	.311
Verbally Abuse (no verbal abuse relative to verbally abused)	-14	.149

Point-Biserial Correlation - ****correlation is significant at 0.001,* **0.01 and *0.05

Table 7 indicates a significant relationship between being physically assaulted and levels on the STS $r(101) = .30$, $p < .01$. The correlation coefficient suggests that being physically assaulted contributed to higher levels on the STS. No significant association was found between being sexually assaulted in comparison to not being sexually assaulted and being verbally abused in comparison to not being verbally abused.

Regression

Assumptions for Multiple Regression

The appropriate considerations and assumptions were assessed for the multiple regression final model. The final model included the following variables, time in the presence of forensic clients, time in the forensic profession, sexual assault experiences, verbal abuse experiences despite non-significant correlations being established. Additionally, workplace burnout and being physically assaulted were included in the final model. The data was explored for multicollinearity and none of the variables identified for the final model correlated with one another above .07. In addition to this, VIF statistics and tolerances was explored using recommendations from Pallant (2013) which revealed no violations and that scores were in normal range. Moreover, no problematic outliers were identified for the statistical test using Cook's Distance values assessment. Finally, through inspections of the residual scatterplots and the p-p plot of regression there was not a suggestion that there had been any violations of homoscedasticity, normality or linearity.

Regression results

Table 8 displays the findings from the multiple regression analysis. Despite time spent in the presence of forensic clients and time working forensic clients not correlating with STS. Both variables were included in the analysis based on the literature supporting their role in the development of STS. In addition to this, sexual assault experiences and verbal abuse experiences were included because of their close relationship to physical assault experiences which did correlate with STS. All the variables that significantly correlated with STS during the current

study were included in the analysis. Following inspection of the analysis it was established that that 63% of the variance was explained by the model, F (6, 96) = 10.91, p < .001. When all variables are appropriately controlled for only workplace burnout and physical assault experiences make a unique contribute to explaining STS.

Table 8

Results of multiple regression model for predictor variables for total STSS score.

	R^2	*Adjusted* R^2	Beta	P value
Whole model	.63	.36		.000***
Workplace Burnout			.56	.000***
Time in the presence of forensic clients			-.04	.662
Time in profession			-.04	.663
Physical assault			-.20	.021*
Sexual assault			.00	.967
Verbal abuse			.01	.892

*p<.05, ***p<.001

Discussion

This study aimed to explore the predictive nature and relational strength of workplace burnout, age, length of career, exposures to previous trauma and length of time spent with clients relative to the development of STS.

Findings

This study found that exposure to physical assault within work and outside of work in a professional's life was associated with higher levels of STS which was measured by the STSS (Bride et al., 2004). In addition to this, the current study found that there was an association between greater experiences of workplace burnout and greater levels of STS. Both relationships remained constant following relevant variables being controlled. Furthermore, the professional's age, length of time working with forensic clients and time spent in the presence of forensic clients was not significantly associated with STS.

Within the current study prevalence rates of STS which would be indicative of PTSD as indicated by Bride (2007) highlighted 21% for the current sample. 15% of participants fell within the 'moderate' range, 3% of participants fell within the 'high' range and 3% of the participants fell within the 'severe' range. Within the STSS, the avoidance subscale was the most frequently endorsed by participants in this study. The intrusion and Arousal subscale was endorsed slightly less than the avoidance subscale; however, these scores were similar to one another.

Comparisons with existing theory and research

Prevalence of Secondary Traumatic Stress. This current study is the first known to the author's knowledge which considers the impact of STS with such a wide range of professionals working with forensic clients in the UK. Therefore, it is difficult to make a direct comparison regarding the prevalence rates with the participants within this study. Particularly with professionals that have not been explored within the literature before such as Healthcare Assistants. The current study found similar levels of STS compared with the Dominguez-Gomez and Rutledge's (2009) study which explored 67 Emergency Nurses; those researchers found that 33% of the sample indicated moderate to severe levels of STS measured by STSS.

In addition to this, the current study obtained slightly higher reported STSS scores when compared to the Turgoose et al. (2017) study of 142 Police Officers working with sexual violence survivors (M = 32.50; SD = 10.60). Additionally, the study established higher scores of STS when compared to the Teel et al. (2019) study of 88 Psychiatrists working with sexual violence survivors and domestic abuse victims (M = 31.00; SD = 5.30). However, the current study established lower levels when compared to Perron and Hiltz's (2006) study which explored 66 Forensic Investigators (M = 34.20; SD = 10.60). Also, the current study established lower scores when compared to Bonach and Heckert's (2012) study of 257 Children's Centre Forensic Interviewers (M = 36.70; SD = 12.10).

Workplace Burnout. As previously identified within the literature there is a strong relationship between workplace burnout and STS (Adams et al., 2006; Galek et al., 2011). The findings within the current study support the research and are in line with the findings established within Cieslak et al. (2014) meta-

analyses which explored the relationship between workplace burnout and STS. Within the review, it was established that there was a largely positive relationship between workplace burnout and STS (weighted r =.69). This finding was similar to the observed coefficient obtained within the current study. Therefore, this study strengthens the conceptualisation within the research regarding the positive relationship between workplace burnout and STS.

Furthermore, this study established that the development of workplace burnout could be identified as a predictive factor for the development of STS. This has been supported within the literature; for example, Shoji et al. (2015) explored the impact of working with traumatised clients with various professionals in Poland. Researchers aimed to establish whether it could be identified whether burnout predicted STS or STS predicted burnout. It was concluded that workplace burnout often occurs first and does increase the risk of developing STS. However, it was challenged whether workplace burnout contributes to the maintenance of symptomology of STS amongst professionals once STS has developed.

Additional factors impacting the development of Secondary Traumatic Stress. The current study found that exposure to physical assault outside or within work was significantly related to levels of STS. This observation was consistent with the current literature; for example, Slattery and Goodman (2009) found that personal trauma significantly contributed to levels of STS when exploring the experiences of domestic violence advocates working in community health centres, courts and other legal settings, crisis and counselling centres, domestic violence service agencies, hospitals, shelters, and social service organizations in the USA. Additionally, these findings have been supported by Pearlman and Mac Ian (1995) who found a link between the experience of personal

trauma and elevated levels of STS amongst therapists working with traumatised clients.

However, within the current study, experiences of sexual abuse and being verbally abused were found to not have a significant relationship with STS. These findings support the conclusion of the literature that the research exploring the impact of personal trauma is inconclusive (Elwood et al., 2011). In addition to this, the findings within the current study further highlight that the development of STS may be due to the type of direct personal trauma individuals experience. There are suggestions that this is not appropriately measured within the research (Michalopoulos & Aparicio, 2012). Thus, rather than conceptualising personal trauma as one concept, the research should explore whether it is more important to identify whether there is a particular type of trauma that is related to the development of STS (Ludick, & Figley, 2017).

In addition, the current study found that neither age, time spent with clients, nor years of working with forensic clients were significant predictors of the development of STS. It has been noted within the research that the relationship between these factors and STS is inconclusive. These inconsistencies have been noted within the literature when exploring various professionals working with forensic clients (Hensel et al., 2015). Beck and Gable (2012) noted following finding no correlation between age, time in the profession and STS that this may be due to professionals leaving the profession who are significantly impacted by STS and therefore samples are not appropriately representative. In addition to this, Choi, (2017) highlighted that the impact of age upon STS may be influenced by the country that the sample is taken from. Choi (2017) noted that when using the same professionals in research conducted in the USA in comparison to the UK,

within the USA study age was significantly related to STS whereas in the UK it was not. Therefore, it can be argued that when exploring risk factors studies need to consider the region that participants are taken from and how these factors may influence findings.

Limitations

Despite the various findings within the current study the methodological limitations must be acknowledged. The study was conducted in the UK; therefore, we cannot determine whether these findings will be replicated across all cultures. This is something that has been highlighted within the literature. Baum (2016) noted that various risk factors that were identified as important when considering the development of STS often are not replicated cross-culturally. Therefore, this limitation may require appropriate conceptualisation moving forward within the research. Following this, accurate conclusions can be drawn regarding the impact of culture and the risk of developing STS. Additionally, the current study used various professionals from a single forensic directorate within an NHS Trust in London. It can be argued that the findings within the current study may not be replicated in other settings. Additionally, the current study sampled various professional groups selected in different settings; it can therefore be suggested that this may have acted as a confound to the study. Furthermore, the various professionals used within this study may contribute to difficulties replicating these findings in future studies, as several studies have explored a single profession when exploring the development of STS.

In addition to this, the study adopted a cross-sectional study design to ensure that adequate findings could be obtained. This study design did not allow for any interpretation of how the participants within the study were feeling and

therefore makes it difficult to complete any follow-up studies with this sample. Additionally, it can be argued that this study design cannot determine whether the participants developed STS because of their role, or they were experiencing these elevated levels before they began working in their professions. Furthermore, the opt-in nature of the study meant that it could potentially bias the self-selection nature of which professionals engaged with the process. It can also be argued that professionals that were able to complete the study were individuals who had appropriate time and the study did not capture those professionals who were not at work for long periods due to various reasons including STS. Additionally, no social desirability scales were included within the questionnaire which would have been useful given the participants relationship to the researcher. Also, the study did not utilise any interview methods which would have contributed to a more robust understanding of the experiences for these professionals.

Finally, it was established that the total STSS score was not normally distributed and therefore non-parametric tests should be used as an alternative where appropriate (Pallant, 2013). The use of non-parametric testing would mean that the statistical tests used for the current study may be less powerful and sensitive which may fail to detect differences between groups (Pallant, 2013). Therefore, the research may have benefited from a larger sample size which would have likely meant the study could detect relatively smaller differences. Lastly, the current study did not use a recognised scale to explore experiences of trauma which could have contributed to the findings observed. Future research should take this into consideration as it may become difficult to engage in comparisons for future findings if a recognised tool is not acknowledged for identifying trauma in these types of studies.

Future Research Areas

Much of the literature has focused on identifying the risk factors for the development of STS. However, what is clear within the literature is that there are several risk factors concerning the development of STS that cannot be avoided due to them being personal characteristics (e.g., age or personality traits). It would be helpful for future research to explore whether there are specific moderators that can have an indirect effect upon STS. Alternatively, the research can explore whether factors significantly impact the relationship between relevant identified factors and STS (Hensel et al., 2015).

Although the current study has highlighted the prevalence of STS amongst professionals working with forensic clients; this is still an under-researched area within psychology. Additionally, it is important to explore the development of STS in different settings and the impact that different cultures have on professionals. Additionally, future research should explore particular professions working with forensic clients as this will assist with the conceptualisation of how to better support particular professions and professionals working with this difficult client group.

Conclusion

This current study contributes to the relatively small research base exploring the development of STS for professionals working with forensic clients. The study identifies that professionals who work with forensic clients are at risk of developing STS. In addition to this, the study has highlighted the relevance of workplace burnout and experiences of physical assault when predicting the onset of STS.

The field remains under-researched and would benefit from further attention and support in the future. Future research should continue to explore the various risk factors associated with STS with professionals working with forensic clients. In addition to this, research should also explore appropriate moderating factors. From the findings of the study there are several suggestions for possible implementation within services. Moving forward there needs to be an emphasis on creating safe spaces for professionals to express how their roles are impacting them. Often professionals working with forensic clients are finding themselves in situations where they are continuing in their roles despite it being overwhelming for them and impacting adversely on their wellbeing. Adapting support offered to professions and their members and ensuring that regular clinical supervision is being offered and is a priority is something that needs to be seriously considered as a result of findings such as these.

Chapter five: Exploration of risk factors and moderating factors linked to the development of Secondary Traumatic Stress amongst professionals working with forensic clients.

Abstract

Within Forensic settings, professionals are often subject to violence and emotive situations within the workplace. The literature has noted that professionals who work with traumatised clients will often display trauma symptomology which is like that displayed by their client. There is now a consensus that there is a cost for caring within the healthcare profession (Culver et al., 2011). Within forensic settings, there are significant hierarchical differences amongst detained clients and professionals. Social dominance is defined as the degree to which one endorses hierarchical distinctions (Sidanius & Pratto, 1999). The objective of the current study is to provide insight regarding whether professionals' personal ideations regarding societal status can buffer the effects of working with traumatised clients. Three hypotheses are tested within this research project. Professionals endorsing stronger hierarchical views will be less impacted by burnout and STS. Professionals endorsing stronger hierarchical views will experience higher levels of victimisation. Professionals endorsing stronger hierarchical views will hold greater punitive views and have greater endorsement of violence. One hundred and three participants completed a 112-item questionnaire. Within the current study it was found that SDO was not a moderator of STS. However, it was established that positive ideations regarding violence were a significant moderator of STS. In addition to this, it was established that endorsement of violence was associated with the development of STS.

Exploration of risk factors and moderating factors linked to the development of Secondary Traumatic Stress amongst professionals working with forensic clients.

Within Forensic settings, professionals are often subject to violence and emotive situations within the workplace (Fazel & Wolf, 2015). For example, it has been noted that in the course of their career 70% of nurses will experience some form of violence or aggression against them (Pich & Roche, 2020). In addition to this, the research has noted that professionals can find it difficult to work within forensic services as there is an expectation that they manage extremely risky clients (Specker et al., 2018). It has been highlighted that this expectation can evoke anxiety and feelings of distress amongst the workforce (Lauvrud et al., 2009). Dickinson and Wright (2008) have noted that stress-related absences cost the NHS on average £45,000 a year per NHS trust which suggests that this is an area of concern for executives. Working with forensic clients whose lives have often been characterised by unmet emotional needs, trauma, disempowerment, and criminality can put professionals at risk of being primarily and secondarily traumatised (Trippany et al., 2004). It has been described within the research that working with traumatised clients can be identified as an occupational hazard (Branson et al., 2014). The ramifications of working in a consistently volatile environment, whilst encountering aggression or violence can lead to professional's experiencing several difficulties including fatigue, anxiety and low self-worth (Rowe & Sherlock, 2005). Additionally, aftereffects can range from professionals being somewhat shaken, through to being distressed for some time, through to post-traumatic stress disorder (PTSD; Bonner et al., 2002).

In addition to professionals being asked to work within very difficult environments, professionals within forensic services are expected to be curious regarding individuals' traumatic pasts. However, recently It has been noted within the research that secondary exposure to traumatic events may have the same impact upon professionals as those observed for individuals who have experienced the primary trauma (Bride, 2007). Authors have begun to explore whether there is a cost for caring for clients with traumatic histories (Tehrani, 2007). Within the research, STS, compassion fatigue and vicarious trauma seems to be significantly impacting professionals (Nimmo & Huggard, 2013). Research exploring secondary traumatisation has highlighted elevated levels of distress in Medical Doctors (Huggard et al., 2013), Audiologists (Severn et al., 2012), Psychologists (Pearlman & Saakvitne, 1995) and Nurses (Vachon et al., 2015) following regular exposure to traumatised clients. This research further strengthens the conclusion that working with forensic clients can potentially be noted as an occupational hazard (Boscarino et al., 2004). However, more recent research has highlighted the relevance of STS in comparison to compassion fatigue and vicarious trauma (Kelly, 2020).

The literature first highlighted the impact of STS when exploring the difficulties faced by counsellors (Figley, 1983). Within the research, it was noted that professionals would express experiencing similar symptomology that was described by clients (MacEachern et al., 2019). Although, STS has not been identified as a diagnosable disorder. It has been described within the literature as the natural bodily consequence, behaviours and emotions resulting from interacting with a traumatised individual (Figley, 1995). The development of STS has been noted as complex and difficult to treat by clinicians (Figley, 1995). Dominguez-Gomez and Rutledge (2009) explained during their conceptualisation

of STS that this phenomenon will often occur without warning which means that it will likely be difficult for professionals to identify symptomology. In addition to this, the literature has highlighted that often professionals will suffer burnout prior to them suffering STS (Adams et al., 2006).

Within the literature, it notes that there is a significant impact upon professionals following the development of STS (Pearlman, & Saakvitne, 1995). It has been documented that professionals that suffer from STS will likely display poor job performance, increased sickness, decreases in morale among staff and reductions in empathy (Bourke & Craun, 2014). Furthermore, the research has identified various risk factors which are associated with the development of STS. For example, Choi (2011) noted that professionals who had experienced previous trauma would be at increased risk of developing STS. In addition to this, Maguire and Byrne (2017) noted that professionals who displayed specific personality characteristics could be at risk. Whilst Borjanić-Bolić (2018) noted that the amount of time spent with clients could be a significant risk factor that would contribute to the development of STS. However, it is highlighted that despite the acknowledgement of the systemic difficulties within forensic services and their impact upon professionals there has been no exploration regarding whether these factors contribute to or help to moderate the development of STS.

Summary of Research

There have been several attempts to identify the specific psychological difficulties that professionals within forensic settings may experience. However, theoretical and empirical knowledge on the extent to which professionals are psychologically impacted by their role is rather limited. In addition to this, the research has often examined the effects of professionals' characteristics (e.g.,

age, gender, tenure, job-related attitudes). However, these studies and others focused on other outcome variables such as work-related attitudes (e.g., Tewksbury & Mustaine, 2008). In addition to this, the forensic research has explored client's perceptions of their conditions, for example perceived autonomy or safety (Molleman & Leeuw, 2012), or client's behaviours (Bierie, 2012). Therefore, there is a gap within the research regarding the knowledge of how belonging to a specific professional group whilst working within forensic environments or with forensic clients may impact individuals.

Social identity theory and conformity

For years, the research has conceptualised the process of why individuals join or endorse groups. For example, Vigil (1988) explained that individuals often joined groups as it gave them a clearer outlook of the world and reduced confusion. These findings have been further supported by Viki et al. (2013) who found that individuals will often associate and seek out groups with individuals who hold similar attitudes, values and beliefs to them. Also, Individuals who receive support from group members which are concurrent with the group ideations (e.g., ways of working with clients) are likely to further endorse the group to a greater extent which will likely reinforce attitudes held (Liang, 2020). For example, Frewin & Tuffin (1998) highlighted the importance of conformity when exploring engaging new recruits with police officers. Interviewees discussed conformity through the lens of social consequences when highlighting police standards. Several theories and models conceptualise the systemic factors which rationalise group conformity (Kuczynski, & Hildebrandt, 1997). For example, Tajfel and Turner (2001) developed social identity theory which explores the competitive and often discriminatory behaviours displayed by groups often strengthened by

the presence of an outgroup. Social identity theory is an adaptation of Sidanius and Pratto (1999) social dominance theory. Within this framework, researchers highlight the importance of 'status' as a motivating factor for outgroup discrimination. Researchers note that systemically within society we often endorse group-based hierarchies. Thus, during each interaction, there is a group that is acknowledged as the dominant, higher-status group and a subordinate, lower status group.

Social Dominance Orientation

Within forensic settings there are significant hierarchical differences amongst detained clients and professionals (Penrod et al., 2016). Social dominance theory was first defined as the degree to which an individual endorses societal hierarchy (Sidanius & Pratto, 1999). This theory was first conceptualised to assist in the understanding of why individuals behave in a manner that reinforces or increases their groups' status within a society. The framework notes that hierarchies are often socially assembled regarding the social context. Therefore, the findings within the literature suggest that an individual's Social Dominance Orientation (SDO) will likely influence the behaviours that they engage with or the compassion that individuals are able to offer to an outgroup member if there is motivation to improve or reinforce their status. Thus, this will often lead to ingroup, outgroup discrimination and increased competitiveness (Sidanius & Pratto, 1999).

Within the literature, there has been research that has explored social dominance theory, particularly examining endorsement from professionals working with forensic clients. For example, Iniguez-Conrique (2016) noted that professionals who are more social dominance orientated preferred jobs within

services which maintain the existing social hierarchy like prison officers or police officers. On the other hand, Iniguez-Conrique noted that those who were less social dominance orientated would likely prefer roles that would assist in the reduction of inequitable conditions within society. Therefore, professionals' ideations regarding criminality are likely moderated by the SDO spectrum. It has been found that professionals who display high SDO may compare clients to their standards in comparison to appropriate societal variables (Iniguez-Conrique, 2016). Thus, this conceptualisation may cause professionals to place these clients in lower social hierarchies. In comparison, professionals who display lower SDO are more likely to hold the position that engagement in criminality is driven by environmental and situational factors for example marginalisation or previous trauma (Furnham & Alison, 1994). However, it is of note that the research has not explored whether there is a link between the attitudes held by professionals regarding criminality and their SDO. However, it can be inferred that professionals' views on criminality and their view of working with forensic clients may act as a function of enhancing or maintaining their position within today's society and whilst ensuring that clients feel suppressed in some manner.

Professional's conceptualisation of the forensic population (criminality)

Ortet-Fabregat and Perez (1992) initially explored the ways that individuals conceptualised criminality, the authors concluded that people often conceptualise crime using two pathways: individual/hereditary or social/environmental causes. Carroll et al. (1987) initially explored how attitudes towards criminality manifest within the criminal justice system by highlighting how professionals' attitudes can impact the sentencing of convicted individuals. It was found within the study that professionals who held hereditary views (conservative) were more likely to be punitive in regard to their sentencing of offenders. In comparison, individuals who

held social views (liberal) were more likely to be lenient with their sentencing. Additionally, Chen and Einat (2015) sampled law enforcement trainees and correctional officer trainees and compared attitudes towards individuals who commit offences. The key findings of the study were a) law enforcement trainees overall held more punitive attitudes than correctional officers; b) belief in more hereditary causes of criminality was the strongest predictor of punitive attitudes. Based on the findings within the research it can be proposed that individuals who hold more hereditary views regarding criminality may go into forensic professions that they deem as more oppressive or engage in more oppressive behaviours in their forensic role. In comparison, individuals who have more situational views regarding criminality may go into roles that allow them to assist with oppression. Therefore, it can be argued that professionals who hold more oppressive views regarding offenders are less likely to be impacted by their experiences with clients due to their conceptualisation of them being innately bad people.

The research has highlighted that individuals who are noted as being high in SDO are likely to endorse hierarchy enhancing behaviours if necessary, for example, violence, aggression and humiliation behaviours (Berke & Zeichner, 2016). It has also been noted that clients within forensic mental health services are more likely to be behaviourally managed using restrictive practice's (e.g., restraint and seclusion) when compared to general psychiatric hospitals (Tomlin et al., 2020). Flammer, Frank, and Steinert (2020) further confirmed this when researchers found that one in four clients within forensic mental health hospitals were likely to be placed within seclusion within a year of detention, also researchers found that one in 25 clients were likely to be restrained in the first year of detention. When compared to individuals in general mental health settings forensic clients were eight times more likely to be secluded than general mental

health clients. In addition to this, it has been suggested that although there is not a direct link between victimisation and punitive attitudes held by professionals', victims can struggle with working in these environments (Iniguez-Conrique, 2016). For example, Ellrich (2018) found that victimised police officers with low self-efficacy were more likely to hold punitive attitudes towards offenders when compared to non-victimised police officers.

The Study

The literature has noted that professionals can be significantly impacted by working with forensic clients and more specifically working with traumatised clients. However, forensic settings are significantly hierarchically driven and differences amongst detained clients and professionals are consistently highlighted. Therefore, professionals may be motivated to reinforce or increase their status within these settings as per the SDO literature (Sidanius & Pratto, 1999). In addition to this, the research suggests that professionals who are high in their SDO are more likely to hold punitive attitudes towards criminality and therefore are more likely to engage in oppressive behaviours (Iniguez-Conrique, 2016). However, the empirical research is yet to explore whether these attitudes put professionals at risk of being victimised whilst at work. Based on the findings within the literature the study will aim to establish whether professionals working within forensic settings who believe hierarchy is important within society are affected by their experiences with clients. Additionally, the research study will aim to establish whether professional's within forensic settings who believe hierarchy is important within society are more likely to experience being victimised at work by clients (i.e., being verbally abused or physically assaulted). In addition to this, the study will explore whether there is a link between staff who believe hierarchy

is important, punitive attitudes and endorsement of violence (Sidanius & Pratto, 1999). Three hypotheses will be explored within this research project:

1) Professionals endorsing stronger hierarchical views will be less impacted by burnout and STS.
2) Professionals endorsing stronger hierarchical views will experience higher levels of victimisation.
3) Professionals endorsing stronger hierarchical views will hold greater punitive views and have greater endorsement of violence.

Method

Participants/Design

Please refer to Chapter Four for an in-depth overview of this information as the same participants and design was utilised in the current study.

Measures

A 112-item questionnaire was distributed to participants for the purpose of study one and two. However, the scales highlighted within this section were relevant for this study and the remaining scales were highlighted in chapter four.

Punitive attitudes (The California Correctional Officer Survey; Lerman & Harney, 2019). This scale will be used to understand an individuals' attitude towards individuals convicted of offences. Questions 2, 3, 5, 6, and 7 were rated on a five-point Likert scale ranging from 'strongly disagree' to 'strongly agree'. Question 1 was rated on a five-point Likert scale ranging from 'Totally rehabilitation' to 'Totally punishment'. Also, question 4 was rated on a on a five-point Likert scale ranging from 'Totally lack of advantages' to 'Totally personal failure'. This scale consists of seven items. Example items include 'residents who want it should be given access to vocational training?', 'Do you feel that the purpose of a secure setting (e.g., prison or hospital) is rehabilitation, punishment, or both?', 'The job of a secure setting (e.g., prison or hospital) is to keep the public safe, not to help inmates?'. This scale demonstrated acceptable internal consistency in the current study (a =.79).

The Social Dominance Orientation Scale (Sidanius & Pratto, 1999). This scale will be used to identify individuals' endorsement of hierarchy.

The scale consists of 16 items, and individuals responded on a seven–point Likert scale ranging from 'strongly disagree' to 'strongly agree'. However, the final eight question are reverse coded. Example items includes 'Some groups of people are simply inferior to other groups?', 'In getting what you want, it is sometimes necessary to use force against other groups?', 'Inferior groups should stay in their place' and 'It would be good if groups could be equal'. This scale demonstrated good internal consistency in the current study (a =.85).

Ideations about violence (Maudsley Violence Questionnaire; Walker, 2005). This scale will be used to identify whether individuals endorse the use of violence. This scale consists of 54 items, the instrument was dichotomously scaled (agree, disagree). Example items include 'It is OK to hit someone if they make you look stupid?', 'Being violent shows that you can assert yourself?', 'People who irritate you deserve to be hit?'. This scale demonstrated good/acceptable internal consistency in the current study (a =.74). The machismo subscale demonstrated an acceptable internal consistency in the current study (a =.63). The acceptance subscale demonstrated a good/acceptable internal consistency in the current study (a =.77).

Self-Efficacy (Occupational Self-Efficacy Scale; Short, et al., 2008). This scale will be used to establish an individual's belief in their capacity to execute behaviours of their job role. This scale consists of six items, and individuals responded on a five–point Likert scale ranging from 'never' to 'always'. An example item included 'When I am confronted with a problem in my job, I can usually find several solutions.' 'I can remain calm when facing difficulty in my job because I can rely on my ability.' 'I meet the goals I set myself in my job.'. This scale demonstrated good internal consistency in the current study (a =.81).

Procedure

Please refer to Chapter Four for an in-depth overview of this information as the same procedure was used in the current study.

Analysis

A significance level of <.05 was used to analyse all the data. The data was entered, cleaned, and analysed using SPSS 24. The distribution of data was initially examined by applying the bell-shaped curve to each variable's frequency distribution and 'eye-balling' the data. The distribution of observations was then converted into Z-scores to check if the distribution of scores was normal. As a consequence of the data non-parametric tests were used.

The first stage of analysis involved basic descriptive data analysis exploring frequencies for SDO and burnout. A Spearman Rho analysis was then conducted to establish the relationship between SDO and STS. Following this, a series of Spearman Rho correlations were conducted between SDO, STS and workplace burnout and punitive attitudes, workplace satisfaction, self-efficacy, and violent ideations. Additionally, a Point-Biserial correlations was then conducted to establish whether there was a relationship between endorsement of SDO amd workplace burnout and individuals being verbally abused, physically assaulted or being sexual assaulted. Being verbally abused, physically assaulted or being sexual assaulted were all dichotomised for the purpose of this study.

In the second stage of the analysis, using Andy Fields Process script (Hayes, 2017) a series moderation analyses were conducted to identify whether variables could moderate the relationship between workplace burnout and STS. Variables that were identified within the literature initially for the purpose of the study aims

were included in this analysis. Additionally, variables that were identified as has having a relationship with workplace burnout or STS were included within the analysis.

Results

Prevalence Rates

Table 8 highlights the descriptive statistics for SDO and workplace burnout. Table 8 identifies that the mean scores for both SDO and workplace burnout were fairly low amongst the sample. This is also evidenced by the standard deviation which is highlighted within Table 8.

Table 8

Mean scores, standard deviation and score ranges for SDO and Workplace Burnout.

	Mean	Std. Deviation	Score Range
SDO	31.60	12.29	16-77
Workplace Burnout	30.57	14.61	8-80

Correlation between STS and SDO

To conceptualise the relationship between SDO and STS a correlation was conducted which can be found in Table 9.

Table 9

Spearman rho correlations between STSS and SDO.

Subscale of STSS	SDO	p value
Intrusion	-.04	.709
Avoidance	.13	.190
Arousal	-.03	.742
Total STSS	.02	.809

Spearman rho correlations

Table 9 indicates no significant relationship between the subscales of STS and SDO. However, the small negative correlation coefficient established for the intrusion and arousal subscale does suggest that there is a greater level of SDO amongst professionals who suffer less intrusive and arousal symptomology within the STS scale. In addition, the positive correlation coefficient established between the avoidance subscale and SDO indicates that professionals with greater levels of SDO are likely to develop greater arousal symptomology.

Correlation between variables explored in study

Further correlations were conducted between SDO, STS and workplace burnout with psychological (punitive attitudes, violent ideations, job self-efficacy and job satisfaction) and behavioural characteristics (experiences of being a victim whilst at work or outside of work). These correlations can be seen in Table 10 and Table 10.

Table 10

Spearman rho correlations factors explored within study two.

	Total SDO Score		**Total STS Score**		**Burnout**	
	r	p value	r	p value	r	p value
Punitive attitudes	-.41***	.000	-.11	.329	.14	.149
Violent ideation (Sum)	.16	.099	.28**	.005	.24*	.015
Violent ideation (Machismo)	.29**	.004	.01	.887	.06	.583
Violent ideation (Acceptance)	.54	.587	.36***	.000	.25*	.012
Self-efficacy	.04	.666	-.18	.065	-.03	.777
Job satisfaction	-.22*	.027	-.12	.244	-.16	.103

*Spearman rho correlations - ***correlation is significant at 0.001, ** correlation is significant at 0.01, * correlation is significant at 0.05*

Table 10 indicates that there is a significant relationship between SDO, and punitive attitudes held by participants $r(101) = -.41$, $p < .001$. In addition, Table 10 indicates there is a significant relationship between SDO and the machismo subscale exploring violent ideation $r(101) = .29$, $p < .01$. As highlighted within Table 10 no significant relationships were established between the remaining variables and SDO. The strong, negative relationship between SDO and punitive attitudes indicates that participants who endorse SDO to a lesser extent hold less punitive attitudes towards those within custody. In addition, the strong, positive relationship between SDO and the machismo subscale exploring violent ideation indicates participants who endorse SDO to a greater extent will endorse the use of violence as an appropriate response to embarrassment, humiliation or perceived threat.

Table 10 indicates that there is a significant relationship between STS $r(101) = .28$, $p < .01$ and burnout $r(101) = .24$, $p < .05$ and violent ideations held by participants. In addition, Table 13 indicates there is a significant relationship between STS $r(101) = .36$, $p < .001$, burnout $r(101) = .25$, $p < .05$ and the acceptance subscale exploring violent ideation. As highlighted within Table 13 no significant relationships were established between the remaining variables with burnout and STS. The strong, positive relationship between STS and burnout with the violent ideations indicates that participants with greater levels of STS and burnout will endorse the use of violence to a greater extent. Additionally, the correlation highlighted that participant with greater levels of STS and burnout find the use of violence more acceptable.

Table 11

Correlations between victimisation experiences and SDO, STS and burnout.

	Total SDO Score		Burnout	
	r	p value	r	p value
Physical assault (no assault relative to being assaulted)	.14	.175	-.22*	.026
Sexual assault (no assault relative to being assaulted)	.11	.250	-.16	.117
Verbally Abuse (no verbal abuse relative to verbally abused)	-.04	.714	-.19	.050

*Point-Biserial correlation - ***correlation is significant at 0.001, ** correlation is significant at 0.005, * correlation is significant at 0.05*

Table 11 indicates no significant relationship between SDO, and the variables explored. However, there were slightly higher scores of SDO amongst participants who had not been physically assaulted, who had not been sexually assaulted and those had been verbally abused. Table 14 indicates that there is a significant relationship between burnout and experiencing physical assault.

Moderation analysis

A moderation analysis was conducted to explore whether SDO or violent ideations moderated the relationship between workplace burnout and STS. Using Andy Fields Process script (Hayes, 2017) a moderation analysis was conducted for violent ideations (Machismo), the overall model for the moderation was found to be significant R^2=.43, $F(3,99) = 24.9990$, $p < .001$. However, the study established non-significant violent ideation (Machismo) main effect B = .82, p= .197. However, a significant interactional effect was established B= -.05, $p < .001$. Simple main effects (workplace burnout, Machismo 1.2, B =.44, $p < .001$,

workplace burnout, Machismo 5.4, B =.22, p< .05, workplace burnout, Machismo 9.6, B =-.002, p= .992) indicate that burnout shows a significant relationship with STS, specifically for individuals who endorse violent ideations (Machismo) less. No significant moderation effects were established when exploring SDO, violent ideations (overall) and violent ideations (Acceptance).

Discussion

The research highlights that professional can be significantly impacted by working with forensic clients and more specifically working with traumatised clients (Gowensmith, 2019). In addition to this, the literature concludes that individuals can be influenced by their social views and this can in turn impact how they interact with clients particularly within forensic services (Iniguez-Conrique, 2016). The current study assessed whether professionals who endorse hierarchical views were less impacted by STS, experienced more victimisation experiences and hold greater punitive views and endorsement of violence. Based on the findings within the study the first hypothesis exploring the endorsement of SDO impacting the development of STS was not established. Additionally, it was hypothesised that endorsement of SDO would contribute to greater victimisation experiences. All analyses exploring the link between SDO and victimisation experiences revealed a non-significant relationship. Finally, it was hypothesised that endorsement of SDO would be linked to greater punitive attitudes and violent ideations. The current study revealed a strong negative correlation between the strength of punitive attitudes held by professionals and their endorsement of SDO. Additionally, there was an association established between the acceptance of the use of violence to solve conflict and the endorsement of SDO. The current study revealed a positive correlation between violent ideation (machismo) and SDO. However, the analysis did not reveal a relationship between violent ideation (acceptance) and violent ideation (overall).

In addition to the hypotheses, the current study found that there was an association between endorsement and acceptance of the use of violence and higher levels of STS. Also, within the current study, it was established that the

more a participant endorsed the use of violence as an appropriate response to feeling embarrassed or threatened, this acted as a moderator concerning the impact of workplace burnout upon STS. Within the study, it was also explored whether SDO could potentially act as a moderator impacting workplace burnout and STS. However, findings were non-significant suggesting that participants endorsement of SDO does not have an impact upon their well-being as a professional. In addition to this, professional's self-efficacy regarding their role was not found to be a moderating factor for the development of STS. Also, there was no relationship established between professional's victimisation experiences and SDO.

Comparisons with existing theory and research

Factors impacting the development of STS. The current study found that holding overall greater violent ideations was associated with the higher scores of STS. Within forensic establishments, it has been mandated that the least restrictive practices are implemented to safely manage patient's risk, even though a notable difference has been highlighted when compared to general mental health services (World Health Organization, 1996). It has been noted that the implementation of the least restrictive practices is difficult as it requires balancing risks, freedoms, rights and responsibilities (McCullough et al., 2020). Therefore, it can be suggested that it is difficult for professionals within forensic environments who accept the use of violence as an appropriate problem-solving strategy. It can be suggested that they will likely struggle to implement strategies that are identified within establishment policies as they differ from their own core beliefs. This may be more difficult within forensic settings as these environments can be volatile. Thus, these environments can be more stressful for professionals who are

required to implement strategies that they do not agree with to manage difficult clients.

This current study is the first known to the authors' knowledge which considers the association of professional's ideations regarding violence and its association with STS in the UK. Therefore, it is difficult to make a direct comparison regarding the findings within the current study and the literature within this field. However, Lambert and Paoline (2008) noted within their study which explored the experiences of prison professionals that there was an association between professionals being frustrated with their working environment and them feeling stressed. It can be suggested that these findings support the associations established within the current study. Specifically, participants may become frustrated with their environments particularly because they feel as though they cannot implement strategies that they believe are appropriate. As established within study one workplace burnout is a predictor of STS, therefore because professionals are functioning within the constraints of establishments codes of conduct it may be leading to them becoming burnt-out. In addition to this, Husum et al., (2010), found that clients clinical presentations were a significant predictor of professional's behaviours towards them. For example, Husum and colleagues noted that clients who are aggressive or present with symptoms of schizophrenia are more likely to be restrained or secluded. Thus, it can be suggested that if professionals do endorse the use of violence, their environments can become overwhelming and stressful if they are restricted in terms of their expression of their core beliefs which may lead to burnout and consequently to STS.

Moderating factors. The current study did not establish that SDO had an indirect effect on STS. Also, the study's findings did not establish that SDO moderated significant predictors of STS. However, whilst conducting an exploratory moderation analysis within the current study it was established that violent ideations held by professionals could moderate the development of workplace burnout which consequentially would reduce the likelihood of a professional developing STS. This current study is the first known to the authors' knowledge which considers violent ideations held by professionals acting as a moderating factor for the development of workplace burnout and consequentially STS. Therefore, it is difficult to make a direct comparison regarding the findings within the current study and the research within this field. However, research exploring humour has explored this concept's ability to reduce stress amongst professionals working within a stressful environment (Van Wormer & Boes,1997). Therefore, it can be suggested that violent ideations held by professionals help with their ability to manage difficult feelings and emotions that are attributed to working within these environments

Social Dominance Orientation and punitive attitudes. The findings within the current study are in line with the research within this area (Pratto et al., 1994). Within the current study, it was found that there was a correlation between lesser endorsement of SDO and less punitive attitudes towards those within custody. The current study is the first known to the authors' knowledge which considers punitive attitudes held by forensic mental health professionals and its link to SDO. People high in SDO are motivated to achieve power and dominance. They have been argued to favour punitive policies because punishment is an unequal institution and can help maintain dominance over criminal offenders (Gerber, 2012). It is likely that the current study established

findings in the opposite direction due to the utilisation of mental health professionals. These professionals despite working in a difficult environment do care about the clients that they work with. Additionally, they more than likely do not want these individuals to be subjected to unfair harsh punishments to facilitate dominance over them. Previous studies have often explored the correlation of right-wing ideologies and punitive views. Often the research concerning these concepts have revealed that there is a positive relationship between the two concepts. Researchers have found positive relationships between SDO and harsh punishment goals (Tam et al., 2008), punitive responses in fictional transgressions (Lerner et al., 1998) and retribution (McKee & Feather, 2008).

Limitations

Please refer to Chapter Four for an overview of the general limitation that this study would have experienced because overlap with the participants, design, and procedure. Within the current study qualitative methods were not used, which would have offered greater insight regarding the relationship between the different variables. Also, the there was no social desirability scale inputted into the questionnaire which would have ensured that there was detection of individuals providing desirable answers. This oversight is particularly important because within this study the concepts that were explored were highly emotive and controversial. Given that the researcher was colleagues with the participants they likely did not want to be viewed in a negative manner which would have contributed to the answers given and consequential conclusions.

Moreover, it can be argued that the assessments that were utilised within this study were not entirely appropriate. This may have been the case as many of the assessments have not been utilised in conjunction with one another and have

not been used with this participant group before which may have impacted reliability and validity the scales. Thus, more thought may have been required when conceptualising the study particularly regarding what assessments were most appropriate to be used to explore the identified concepts. Additionally, given that the consideration of hierarchy was so important within the conceptualisation of this study. A limitation of this study was the lack of consideration regarding individuals cultural understanding of hierarchy. No adaptations were made to assessments or to the design to ensure that these views were appropriately communicated. Thus, it can be argued that the study was unable to get an accurate understanding of all the participants views that engaged.

Future Research Areas

Much of the literature has focused on identifying the risk factors for the development of STS. However, what is clear within the research is that there are several risk factors concerning the development of STS that cannot be avoided due to them being personal characteristics. The literature can explore whether factors significantly impact the relationship between relevant identified factors and STS (Hensel et al., 2015).

The current study has explored the impact of moderators on STS. Despite the current study exploring the impact of moderators, this is still an under-researched concept within this area within psychology. A concept that was linked to the reduction of workplace burnout has been gallows humour. As highlighted within the current study this concept may assist in understanding the developing of STS. Therefore, it will be beneficial to the literature if future research explores the impact of humour on the development of STS. Moving forward, if favourable findings are established within the research exploring humour this can potentially

contribute to the adaptations of supervision models for example. Additionally, it is important to explore different settings and the impact that different cultures have on professionals. Finally, future research should explore particular professions working with forensic clients as this will assist with the conceptualisation of how to better support particular professionals working with this difficult client group.

Conclusion

In summary, the current study builds upon the findings established in study one and contributes to the literature which explores the development of STS associated with professionals working with forensic clients. In addition to this, the current study has explored various concepts and has identified that violent ideations held by professionals working with forensic clients can moderate workplace burnout amongst professionals which contributes to the development of STS. Despite the findings established within the study, several limitations were identified which includes the research design and the sample that was used. It should be noted that the field of STS remains under-researched and would benefit from further attention in the future. Future research should continue to explore the various risk factors associated with STS with professionals working with forensic clients. Furthermore, research should explore appropriate moderating factors. Within this study, it was established that exploring the relationship between humour and STS is a direction that the literature could take in the future.

Chapter Six: Discussion

Summary of findings

This thesis successfully explores various components within the applicable research, whilst highlighting appropriate adaptations. The various articles within this thesis document the skewed direction of the literature when exploring prevalence rates, symptomology, risk factors and protective factors of secondary traumatisation (Foley & Massey, 2020). In particular, this thesis established the lack of focus on the impact of secondary traumatisation on professionals within the forensic research, thus emphasising the need to understand this phenomenon further and the impact on professionals working with forensic clients. By ignoring the difficulties that professionals can experience within forensic settings, it was concluded that there is an unconscious suggestion that professionals are expected to manage the distress that can derive from these environments without adequate organisational support. With the above in mind, it was felt that professionals' wellbeing was a neglected concept within the forensic research, and therefore the objective of this thesis was to provide a thorough conceptualisation of this area. By providing a comprehensive overview and assessment in-depth recommendations have been identified which can contribute to adaptations being made in several areas. These adaptations include appropriate adjustments being made to training, recruitment and supervision which will be beneficial to professionals moving forward.

Many of the key findings within the thesis suggest that working with forensic populations can put professionals at risk of being secondarily traumatised. For example, within Chapter Four it was revealed that prevalence rates of Secondary Traumatic Stress (STS) which would be indicative of PTSD as indicated by Bride (2007) was 21% for the professionals who engaged with the study. 15% of

participants fell within the 'moderate' range, 3% of participants fell within the 'high' range and 3% of the participants fell within the 'severe' range.

Throughout the thesis the process of understanding various components of secondary traumatisation was the priority. Chapter Two initially identified that professionals who have less face-to-face contact with clients, are younger and have been in a profession longer are more susceptible to being secondarily traumatised. Additionally, previous traumatic experiences were identified as a risk factor for professionals. Chapter Four supported these findings with the empirical study finding that exposure to physical assault within the workplace and outside of work was correlated with higher levels of STS. In addition to this, the study found that there was a correlation between experiences of workplace burnout and greater levels of STS. Also, within Chapter Five the empirical study found that there was a correlation between endorsement and acceptance of the use of violence and higher levels of STS. Chapter Four built on these findings by establishing that workplace burnout and being physically assaulted could successfully predict the development of STS

Additionally, Chapter Two revealed psychological empowerment and compassion satisfaction were identified as potential moderating factors for secondary traumatisation. Although the thesis did not explore these factors in depth. Within Chapter Five it was established that the more a participant endorsed the use of violence as an appropriate response when feeling embarrassed or threatened, the less they felt burnout which acted as a moderator regarding the development of STS. These findings significantly contribute to the research which explore the development and moderation of STS amongst professionals working with forensic clients.

Moreover, the Secondary Traumatic Stress Scale (STSS) has been highlighted and utilised throughout the thesis due to its accuracy in identifying STS. Initially, Chapter Two suggested that the STSS had become an essential tool for the measurement of STS amongst professionals (Beck, 2011). Consequentially, the STSS was utilised within the empirical studies in Chapter Four and Five. Chapter Three revealed that assessment has been highlighted as being very easy to administer and the most accurate tool when detecting STS (Craun et al., 2014). However, several weaknesses were identified within the critique. The critique noted that there is a risk that professionals will engage in socially desirable responses when using the scale because of the core belief that highlighting symptomology of STS will impact their ability to successfully do their role (Kellogg et al., 2018). Therefore, it is recommended that multiple resources are used to gather information about professionals suffering from STS before conclusions are drawn regarding their well-being.

Theoretical and professional implications

The negative impact of secondary traumatisation upon professionals is a distinct topic that has been explored within the literature to an extent. Several consequences of this phenomenon have been identified which include poor job performance, increased sickness, decreases in morale among staff and reductions in empathy (Bourke & Craun, 2014). In addition to this, several risk factors have been noted which contribute to the development of secondary traumatisation diagnoses. Risk factors identified in the wider research include previous personal experiences of trauma (Choi, 2011) and personality characteristics (Maguire & Byrne, 2017). Therefore, it has become clear that secondary traumatisation is a phenomenon that should not be ignored as it has significant ramifications for

professionals that come into contact with traumatised clients. Additionally, the adaptation of services and models to become trauma-informed, which requires professionals to become more comfortable understanding client's trauma, could leave professionals vulnerable to complications that they are not fully aware off. By conceptualising the impact of secondary traumatisation amongst professionals that work with forensic clients within this thesis, several shortfalls within the wider research have been addressed. The findings and conclusions drawn within this thesis have highlighted prevalence rates, risk factors, moderating factors and has also highlighted shortfalls that may occur when identifying symptomology amongst professionals.

Prevalence

Chapter Two's findings suggested that professionals that work with forensic populations are at risk of suffering from secondary traumatisation. Elevated levels of secondary traumatisation symptomology were established for STS, vicarious trauma and compassion fatigue in several studies within the review (Bauground et al., 2018; MacEachern et al., 2019; Masson & Moodley 2020). Based on the findings within Chapter Two, it was concluded that there is a relationship between working with forensic clients and the risk of becoming secondarily traumatised. These findings were further supported by the empirical research studies within Chapters Four and Five. Within Chapters Four and Five professional's displaying symptoms of STS which would be indicative of PTSD as indicated by Bride (2007) criterion for the sample was 21% of the overall sample. 15% of participants fell within the 'moderate' range, 3% of participants fell within the 'high' range and 3% of the participants fell within the 'severe' range. It was noted within Chapter Four that it is difficult to make a direct comparison regarding the prevalence rates with

the participants within the empirical study. Particularly with regards to professionals that have not been explored within the literature previously. However, based on the findings established throughout this thesis it can be suggested that professionals that come into contact with forensic clients are at risk of developing symptomology which would suggest secondary traumatisation. Based on the research available it can be rationalised that professionals who work with traumatised clients will be at risk of secondary traumatisation also. The research has noted that some professionals will experience trauma following their engagement with traumatised clients (Figley, 1995). In addition to this, it has been noted that working with clients who have experienced trauma can put professionals at risk of being primarily and secondarily traumatised (Trippany et al., 2004) and the findings throughout this thesis further support these conclusions. However, based on the findings established throughout this thesis it cannot be determined whether working with forensic clients puts professional's at greater risk of being secondarily traumatised when compared with different client groups. Therefore, further exploration within the literature is required to determine conclusively if there is a significant difference.

Risk factors

Chapter Two, Chapter Four and Chapter Five have all identified several risk factors which highlight characteristics that may contribute to professional's being more susceptible to being secondarily traumatised following exposure to forensic clients. However, it is clear from the findings within the wider literature and within this thesis that few factors can be identified as certain risk factors or predictors when conceptualising the development of secondary traumatisation. For example, in Chapter Two it was suggested that spending less time with clients could

contribute to developing STS. It was rationalised that professionals who spend more time with clients can have more detailed and quality conversations. Whereas professionals that do not have to concentrate solely on the client's traumatic experiences and obtain essential information for interviews or assessments (Borjanić-Bolić, 2018). This rationale was demonstrated by Hurrell et al. (2018) who established a correlation between a reduced time of clinical interviews and severity of secondary stress symptomology. However, within Chapter Four within the empirical study, it was found that there was no significant difference regarding the time professionals spent with clients and the development of STS which may be due the selection of certain professionals.

However, despite the lack of clarity regarding risk factors and predictors of the development of STS the standout finding regarding predictive factors was established when exploring workplace burnout in Chapter Four. The research exploring workplace burnout and the findings within this thesis does suggest that it is a difficulty that should be monitored amongst professionals. Within the research, a strong relationship between workplace burnout and STS has been established (Adams et al., 2006; Galek et al., 2011). The findings within Chapter Four support the research and are in line with the findings established. One of the key findings within this chapter is that professionals likely become burnt out before the development of secondary traumatisation. Therefore, it was concluded that workplace burnout often occurs first and does increase the risk of developing STS. This is a key finding and significantly contributes to the literature because of how closely secondary traumatisation and burnout had been conceptualised within the research previously.

Moderating factors

Chapter Two highlights within the systematic review several factors that could be conceptualised as moderating factors of secondary traumatisation. The systematic review noted that the more a professional felt supported, the less likely they were to suffer from secondary traumatisation. More specifically, it was found that professionals who were more aware of the organisational strategies and felt supported by their colleagues displayed significantly lower scores on the STSS (Bride et al., 2004; Choi, 2011). This suggests that services that work with forensic populations need to prioritise, creating an environment where staff members feel safe to make mistakes and have an understanding of what the organisation's aims are. Additionally, the research highlighted the importance of understating the psychological impact of working with this client group and psychological self-care methods. These are skills that take time to acquire and are often not offered as part of the training process for certain professions. Finally, the research noted several personality characteristics that professionals may have which will likely help moderate the impact of secondary traumatisation. These include emotional stability, resilience, extraversion, agreeableness, conscientiousness and openness to experience (Maguire & Byrne, 2017).

In addition to this, Chapter Five also adds to the findings established within Chapter Two. Within the empirical study, it was established that violent ideations held by professionals could moderate the development of workplace burnout which consequentially would reduce the likelihood of professionals developing STS. It is highlighted within Chapter Four that it is difficult to make a direct comparison to the wider research regarding the findings. However, within Chapter Five research exploring humour was used to conceptualise the findings and link the findings to

the wider literature (Van Wormer & Boes, 1997). Within Chapter Five, it is suggested that the research exploring gallows humour support the findings established within the empirical study (Shelton, 2009). It is rationalised within this chapter that violent ideations held by professionals help with their ability to manage difficult feelings and emotions similar to what is observed when professional's engage with gallows humour. Although controversial it may be beneficial to explore models of supervision and how lessons can be learnt from the use of gallows humour and its impact on professional's wellbeing.

Assessing secondary traumatisation

Within Chapter Two it was highlighted that one of the weaknesses of the area was that within the research several different measurement tools were used to assess secondary traumatisation. Therefore, it was highlighted that one single reliable measurement tool needed to be developed, which addresses the concept of secondary traumatisation comprehensively. Within Chapter Two it was highlighted that the STSS (Bride et al., 2004) had been identified as being the most concise and comprehensive assessment tool when identifying symptomology of secondary traumatisation within the literature. However, this tool would require some adaptation to consider several of the components of vicarious trauma and compassion fatigue. Based on the findings in Chapter Two the STSS' properties was explored in-depth within Chapter Three. Chapter Three consisted of a robust psychometric critique that explored various aspects of the STSS' reliability and validity. It was concluded that the STSS had become an essential tool for the measurement of STS amongst professionals (Beck, 2011). However, it was advised that multiple sources of information regarding professionals would be necessary for this tool to be considered entirely accurate. In addition to this, it

was rationalised that further research would be required to strengthen the conclusions drawn about the validity and reliability of the scale. Within Chapter Three it is highlighted that new research should focus on the conceptualisation of secondary traumatisation terms such as compassion fatigue and STS as they are defined as two separate concepts, however, are used synonymously of one another. This thesis has significantly added to the research when considering the assessment of professionals potentially suffering from secondary traumatisation. It is rationalised within Chapter Two and Chapter Three that a more comprehensive and accurate tool is required. Moving forward researchers should explore the possibility of creating a universal tool that considers all secondary traumatisation terms particularly because these terms are often used synonymously of one another. By constructing a tool like this it will assist with the rationalisation of the literature within this area contributing to the strength of conclusions drawn regarding the topic area.

Adaptations to services

Throughout this thesis, each chapter demonstrates an association between the exposure to forensic clients and the prevalence of secondary traumatisation. Therefore, it can be argued that professionals working with this client group are at risk of being secondarily traumatised, which warrants an assessment of how services help professionals who are working with this client group. Services should consider revising recruitment processes and should consider how appropriate individuals are for roles carefully. Services should aim to emphasise the importance of supervision and the creation of a supportive environment for professionals. Additionally, regular training sessions focused on secondary traumatisation and coping strategies required when dealing with demanding

clients may be beneficial (Turgoose et al., 2017). Professionals who are aware of what is going on within their organisation and feel safe within their working environment are more likely to be enthusiastic and positive about their development which will impact their ability to moderate the impact of secondary traumatisation. With the adaptation of services to ensure that they are more trauma-informed this thesis has highlighted that services and establishments may be neglecting staff which is potentially impacting their well-being. Ethically this is something that services and professional bodies need to consider moving forward as professionals working with this client group are clearly at risk of psychological distress.

Limitations of thesis

As with all studies, methods conducted within this thesis are not without limitations, however, it has also been highlighted throughout the methods used to reduce these limitations. For example, within Chapter Two it was highlighted that there was a possibility that within the systematic review, appropriate studies were missed. However, in an attempt to minimise the likelihood of this occurring numerous databases were searched and a robust search strategy was implemented which likely reduced the possibility of this occurring.

However, it was noted that although the presence of STS, vicarious trauma, compassion fatigue and PTSD for professionals as a consequence of working with forensic clients seemed to be substantiated within the systematic review and empirical studies. The majority of the research employed a cross-sectional research design. Therefore, it cannot be determined whether the behavioural or psychological characteristics noted within the review and empirical studies were

present before employment or whether they were caused by being employed. Thus, this thesis cannot determine conclusively following the findings whether there is a need to identify further training needs or whether the findings can assist with the recruitment process.

In addition to this, Chapters Four and Five also highlight several limitations within the empirical studies. Both studies were conducted in the UK; therefore, it cannot be determined whether these findings will be replicated across different countries. This is something that has been highlighted within the research as a problematic limitation. For example, Baum (2016) noted that various risk factors that were identified as important when considering the development of STS often were not replicated cross-culturally. Therefore, this limitation may require appropriate exploration moving forward within the research. Following this, accurate conclusions can be drawn regarding the impact of culture on the risk of developing STS. Additionally, the empirical studies used various professionals from a single forensic directorate within an NHS trust in London. Therefore, it can be suggested that the findings within Chapter Four and Chapter Five may not be replicated in other settings.

Finally, in Chapters Four and Five the opt-in nature of the studies meant that it could potentially bias the self-selection nature of which professionals engaged with both studies. It can be argued that professionals that were able to complete the studies were individuals who had appropriate time. Also, it can be argued that some professionals struggled with the nature of the items within the empirical studies particularly those exploring personal difficulties and therefore they completed the questionnaire in a socially desirable manner. In Chapter Three, it was highlighted that there was a risk that professionals would engage in socially

desirable responses when completing the STSS and when considering the onset of STS multiple sources should be implemented. It can be argued that in Chapters Four and Five socially desirable responses to the items were not appropriately considered and this may have impacted the finding.

Future research directions

Despite the breadth of research that has been highlighted within this thesis there are several areas that could be explored that would assist with future understanding of the highlighted area. Within Chapter Two and Three it was highlighted that secondary traumatisation was researched using various instruments and using several different terms (Tehrani, 2007). Moving forward the research could explore the properties and accuracy of the creation of an assessment tool which investigates secondary traumatisation holistically. By the creation of this assessment tool, it would assist with secondary traumatisation being viewed as a formal diagnosis within the DSM-IV (American Psychiatric Association, 1994). If secondary traumatisation could become a formalised term it would likely assist with the support that various establishments and services offered professionals. In addition to this, the treatment that would likely be offered would improve and treating clinicians would likely have a greater understand of secondary traumatisation as a concept due to the research being more focused.

Furthermore, it was noted within this thesis that further insight regarding cultural differences in relation to trauma could offer further understanding within the research regarding secondary traumatisation. As highlighted within Chapter Four and Five the workforce is diverse and therefore greater understanding is required. More knowledge of this concept will assist with the treatment of the development of secondary traumatisation within individuals. Additionally,

institutions can make the necessary adaptation to ensure that these individuals are appropriately considered throughout their employment. Gaining an understanding of the importance of culture is vital as it is often an overlooked area within the psychological literature. However, this is extremely relevant in the case of secondary traumatisation and forensic services because many of the staff members working directly with clients are from minority groups.

Additionally, Chapter Five highlights the role of humour and its link in helping to reduce stress amongst professionals working within a stressful environment (Van Wormer & Boes,1997). Humour has been highlighted as an important concept within relationships and has a significant role in individuals personal and social lives (Ertel, 2002). Models and theories exploring the impact of humour have derived from various areas including sociological, psychological and theatrical perspectives (Haig, 1986). Gallows humour is a type of humour that has been identified as deriving from difficult incidents including life-threatening and traumatic experiences (Moran & Massam, 1997). It has been noted within the literature that this type of humour can act as a form of tension release for professionals (Martin & Lefcourt, 1983). In addition to this, gallows humour has been identified as an appropriate and effective strategy for professionals who encounter unpleasant and traumatic experiences in their everyday life (Schwab, 2002). It can be suggested that the research exploring gallows humour support the finding within Chapter Five as it has been noted within the literature that forensic establishments can be difficult environments for healthcare professionals to work within (Shelton, 2009). Therefore, humours moderating abilities regarding STS could be identified as a future direction for research.

Conclusion

In summary, throughout this thesis it is illustrated that there is an impact on professionals as a consequence of working with forensic clients. Based on the findings presented throughout, it Is clear that this is an under-researched area, and a greater understanding of the literature is required. The objective of each chapter was to highlight factors that could influence the understanding of the complexities that arise for professionals. As a result, the development of secondary traumatisation amongst professionals was explored significantly within most chapters, aiming to provide clarity regarding risk and moderating factors related to secondary traumatisation.

Additionally, this thesis explored the appropriateness of measurement tools that assess secondary traumatisation. Findings highlight the need to explore this concept further with future research. The conceptualisation of a single term and consequential accredited assessment would provide a clear direction for future research and treatment. Currently, there seems to be no clear direction. This is demonstrated by the fact that terms are noted as overlapping with one another, and there is a lack of clarity regarding the best instruments to use when understanding difficulties. The lack of cohesion within the literature can significantly influence how seriously these difficulties are understood by organisations.

In addition to the research areas already highlighted, future studies can also explore the cultural links to the development of secondary traumatisation. Within healthcare services there are a diverse range of individuals that work with clients. As a result, it is therefore important to understand whether culture is a factor that impacts the development of secondary traumatisation.

Currently, it is clear that secondary traumatisation is a concept that is not properly understood within professions and organisations. As services continue to emphasise the importance of adapting the methods that professionals utilise when engaging therapeutically with clients, pressure needs to be equally applied to organisations. This is to ensure that appropriate adaptations are made to adequately protect the welfare of professionals working with their clients. The need to consider strategies and policies associated with recruitment, supervision and training is clearly documented within this thesis. Particularly, services that identify themselves as trauma informed need to ensure that this is a priority. Further exploration is required to ensure that support is provided to professionals and services to prepare for potential psychological, emotional and organisational burdens if professionals do become secondarily traumatised. This thesis, through the investigation of its subject matter from various perspectives has not only highlighted the needs of clients; additionally, but it has also moved towards the advancement of the current knowledge and understanding of the impact upon professionals who work with forensic clients.

References

Acquadro Maran, D., Zito, M., & Colombo, L. (2020). Secondary traumatic stress in Italian police officers: the role of job demands and job resources. *Frontiers in psychology*, *11*, 14-35. https://doi.org/10.3389/fpsyg.2020.01435

Adams, R. E., Boscarino, J., & Figley, C. R. (2006). Compassion fatigue and psychological distress among social workers: A validation study. *American Journal of Orthopsychiatry, 76,* 103–108. https://doi.org/10.1037/0002-9432.76.1.103

Adams, S. A., & Riggs, S. A. (2008). An exploratory study of vicarious trauma among therapist trainees. *Training and Education in Professional Psychology*, *2*(1), 26. https://doi.org/10.1037/1931-3918.2.1.26

Alrutz, S., Buetow, S., Huggard, P., & Cameron, L. (2015). *What happens at work goes home.* Poster presented at the Australasian Trauma Society Conference, Gold Coast, Queensland, Australia. https://doi.org/10.3390/healthcare8030350

American Psychiatric Association, & American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders: DSM-5.

Antonovsky, A. (1987). Unravelling the mystery of health: How people manage stress and stay well. San Francisco, CA: Jossey-Bass.

Baetz, C. L., Surko, M., Moaveni, M., McNair, F., Bart, A., Workman, S., ... & Horwitz, S. M. (2019). Impact of a trauma-informed intervention for youth and staff on rates of violence in juvenile detention settings. *Journal of interpersonal violence*, *36*, 17-18. https://doi.org/10.1177/0886260519857163

Baird, K., & Kracen, A. C. (2006). Vicarious traumatization and secondary traumatic stress: A research synthesis. *Counselling Psychology Quarterly*, *19*(2), 181-188. https://doi.org/10.1080/09515070600811899

Baird, S., & Jenkins, S. R. (2003). Vicarious traumatization, secondary traumatic stress, and burnout in sexual assault and domestic violence agency staff. *Violence and victims*, *18*(1), 71-86. https://doi.org/10.1891/vivi.2003.18.1.71

Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: a test of a four-category model. *Journal of personality and social psychology*, *61*(2), 226. https://doi.org/10.1037/0022-3514.61.2.226

Bartone, P. T. (1999). Hardiness protects against war-related stress in Army Reserve forces. *Consulting Psychology Journal: Practice and Research*, *51*(2), 72. https://doi.org/10.1037/1061-4087.51.2.72

Bath, H. (2008). The three pillars of trauma-informed care. *Reclaiming children and youth*, *17*(3), 17-21.

Baugerud, G. A., Vangbæk, S., & Melinder, A. (2018). Secondary traumatic stress, burnout and compassion satisfaction among Norwegian child protection workers: Protective and risk factors. *British Journal of Social Work, 48*(1), 215-235. https://doi.org/10.1093/bjsw/bcx002

Baum, N. (2016). Secondary traumatization in mental health professionals: A systematic review of gender findings. *Trauma, Violence, & Abuse*, *17*(2), 221-235. https://doi.org/10.1177/1524838015584357

Beck, C. T. (2011). Secondary traumatic stress in nurses: A systematic review. *Archives of psychiatric nursing*, *25*(1), 1-10. https://doi.org/10.1016/j.apnu.2010.05.005

Beck, C. T., & Gable, R. K. (2012). A mixed methods study of secondary traumatic stress in labor and delivery nurses. *Journal of Obstetric, Gynecologic & Neonatal Nursing*, *41*(6), 747-760. https://doi.org/10.1111/j.1552-6909.2012.01386.x

Bennett, D. C., Kerig, P. K., Chaplo, S. D., McGee, A. B., & Baucom, B. R. (2014). Validation of the five-factor model of PTSD symptom structure among delinquent youth. *Psychological Trauma: Theory, Research, Practice, and Policy*, *6*(4), 438. https://doi.org/10.1037/a0035303

Bennett, D. C., Modrowski, C. A., Kerig, P. K., & Chaplo, S. D. (2015). Investigating the dissociative subtype of posttraumatic stress disorder in a sample of traumatized detained youth. *Psychological Trauma: Theory, Research, Practice, and Policy*, *7*(5), 465. https://doi.org/10.1037/tra0000057

Bennett, J., Crewe, B., & Wahidin, A. (Eds.). (2013). *Understanding prison staff*. Willan. https://doi.org/10.4324/9781843925491

Bernstein, D. P., & Fink, L. (1998). Childhood Trauma Questionnaire: A retrospective self-report. San Antonio, TX: The Psychological Corporation.

Bierie, D. M. (2012). Is tougher better? The impact of physical prison conditions on inmate violence. *International Journal of Offender Therapy and Comparative Criminology*, *56*(3), 338-355. https://doi.org/10.1177/0306624X11405157

Blake, D. D., Weathers, E W., Nagy, L. M., Kaloupek, D. G., Gusman, F. D., Charney, D. S., et al. (1995). The development of a Clinician Administered PTSD Scale. *Journal of Traumatatic Stress*, 8, 75-90. https://doi.org/10.1007/BF02105408

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

Bonach, K., & Heckert, A. (2012). Predictors of secondary traumatic stress among children's advocacy centre forensic interviewers. *Journal of Child Sexual Abuse*, *21*(3), 295-314. https://doi.org/10.1080/10538712.2012.647263

Bonner, G., & McLaughlin, S. (2007). The psychological impact of aggression on nursing staff. *British journal of nursing*, *16*(13), 810-814. https://doi.org/10.12968/bjon.2007.16.13.24248

Bonner, G., Lowe, T., Rawcliffe, D., & Wellman, N. (2002). Trauma for all: a pilot study of the subjective experience of physical restraint for mental health inpatients and staff in the UK. *Journal of psychiatric and mental health nursing*, *9*(4), 465-473. https://doi.org/10.1046/j.1365-2850.2002.00504.x

Borjanić Bolić, E. (2019). Secondary traumatic stress and vicarious traumatization in child welfare professionals in Serbia. *Journal of Public Child Welfare, 13*(2), 214-233. https://doi.org/10.1080/15548732.2018.1502117

Borjanić-Bolić, E. (2018). Addressing vicarious trauma at child welfare professionals. *Temida*, *21*(3), 411-428. https://doi.org/10.2298/TEM1803411B

Boscarino, J. A., Figley, C. R., & Adams, R. E. (2004). Compassion fatigue following the September 11 terrorist attacks: A study of secondary trauma among New York City social workers. *International journal of emergency mental health*, *6*(2), 57.

Bourke, M. L., & Craun, S. W. (2014). Secondary traumatic stress among internet crimes against children task force personnel: Impact, risk factors, and coping strategies. *Sexual Abuse*, *26*(6), 586-609. https://doi.org/10.1177/1079063213509411

Bowman, S., Alvarez-Jimenez, M., Wade, D., McGorry, P., & Howie, L. (2014). Forgotten family members: the importance of siblings in early psychosis. *Early intervention in psychiatry*, *8*(3), 269-275. https://doi.org/10.1111/eip.12068 ·

Boyle, M. (2020). Power in the power threat meaning framework. *Journal of Constructivist Psychology*, 1-14. https://doi.org/10.1080/10720537.2020.1773357

Branson, D. C., Weigand, D. A., & Keller, J. E. (2014). Vicarious trauma and decreased sexual desire: A hidden hazard of helping others. *Psychological Trauma: Theory, Research, Practice, and Policy*, *6*(4), 398. https://doi.org/10.1037/a0033113

Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult attachment: An integrative overview. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 46–76). The Guilford Press.

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

Bride, B. E., Robinson, M. M., Yegidis, B., & Figley, C. R. (2004). Development and validation of the secondary traumatic stress scale. *Research on social work practice*, *14*(1), 27-35. https://doi.org/10.1177/1049731503254106

Bridger, K. M., Binder, J. F., & Kellezi, B. (2020). Secondary Traumatic Stress in Foster Carers: Risk Factors and Implications for Intervention. *Journal of Child and Family Studies, 29*(2), 482-492. https://doi.org/10.1007/s10826-019-01668-2

Brunero, S., & Stein-Parbury, J. (2008). The effectiveness of clinical supervision in nursing: an evidenced based literature review. *Australian journal of advanced nursing*.

Bundock, L., Howard, L. M., Trevillion, K., Malcolm, E., Feder, G., & Oram, S. (2013). Prevalence and risk of experiences of intimate partner violence among people with eating disorders: A systematic review. *Journal of psychiatric research*, *47*(9), 1134-1142. https://doi.org/10.1016/j.jpsychires.2013.04.014

Burnett, M. E., Sheard, I., & St Clair-Thompson, H. (2020). The prevalence of compassion fatigue, compassion satisfaction and perceived stress, and their relationships with mental toughness, individual differences and number of self-care actions in a UK police force. *Police Practice and Research*, *21*(4), 383-400. https://doi.org/10.1080/15614263.2019.1617144

Burns, N., & Groves, K. (1993). *Practice of nursing research*. Philadelphia, PA: WB Saunders company.

Butler, L. D., Critelli, F. M., & Rinfrette, E. S. (2011). Trauma-informed care and mental health. *Directions in Psychiatry*, *31*(3), 197-212.

Campbell‐Sills, L., & Stein, M. B. (2007). Psychometric analysis and refinement of the connor–davidson resilience scale (CD‐RISC): Validation of a 10‐item measure of resilience. *Journal of Traumatic Stress: Official Publication of The International Society for Traumatic Stress Studies, 20*(6), 1019-1028. 10.1002/jts.20271

Carlson, E. B., Smith, S. R., Palmieri, P. A., Dalenberg, C., Ruzek, J. I., & Kimerling, R. (2011). Development and validation of a brief self-report measure of trauma exposure: the trauma history screen. *Psychological Assessment,* 23, 463–477. https://doi.org/10.1037/a0022294

Carroll, J. S., Perkowitz, W. T., Lurigio, A. J., & Weaver, F. M. (1987). Sentencing goals, causal attributions, ideology, and personality. *Journal of personality and social psychology*, *52*(1), 107. https://doi.org/10.1037/0022-3514.52.1.107

Carter, K. (2018). Prison officers and their survival strategies. In *Occupational Socialization and Working Lives (1994)* (pp. 41-57). Routledge.

Carver, C. S. (1997). You want to measure coping but your protocol's too long: Consider the brief cope. *International journal of behavioural medicine*, *4*(1), 92-100. https://doi.org/10. 1207/s15327558ijbm0401_6

Chen, G., & Einat, T. (2015). The relationship between criminology studies and punitive attitudes. *European Journal of Criminology*, *12*(2), 169-187. https://doi.org/10.1177/1477370814551211

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

Choi, G. Y. (2011). Secondary traumatic stress of service providers who practice with survivors of family or sexual violence: A national survey of social workers. *Smith College Studies in Social Work*, *81*(1), 101-119. https://doi.org/10.1080/00377317.2011.543044

Choi, G. Y. (2017). Secondary traumatic stress and empowerment among social workers working with family violence or sexual assault survivors. *Journal of Social Work, 17*(3), 358-378. https://doi.org/10.1177/1468017316640194

Cieslak, R., Shoji, K., Douglas, A., Melville, E., Luszczynska, A., & Benight, C. C. (2014). A meta-analysis of the relationship between job burnout and secondary traumatic stress among workers with indirect exposure to trauma. *Psychological services, 11*(1), 75. https://doi.org/10.1037/a0033798

Cole, S. F., Eisner, A., Gregory, M., & Ristuccia, J. (2013). *Creating and advocating for trauma-sensitive schools*. Massachusetts Advocates for Children. Retrieved from http://www.traumasensitiveschools.com

Coles, J., Lee, A., Taft, A., Mazza, D., & Loxton, D. (2015). Childhood sexual abuse and its association with adult physical and mental health: results from a national cohort of young Australian women. *Journal of interpersonal violence*, *30*(11), 1929-1944. https://doi.org/10.1177/0886260514555270

Colombo, Lara, Federica Emanuel, and Margherita Zito. "Secondary Traumatic Stress: relationship with symptoms, exhaustion and emotions among cemetery workers." *Frontiers in Psychology* 10 (2019): 633. https://doi.org/10.3389/fpsyg.2019.00633

Conrad, D., & Kellar-Guenther, Y. (2006). Compassion fatigue, burnout, and compassion satisfaction among Colorado child protection workers. *Child abuse & neglect, 30*(10), 1071-1080. https://doi.org/10.1016/j.chiabu.2006.03.009

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

Craun, S. W., Bourke, M. L., Bierie, D. M., & Williams, K. S. (2014). A longitudinal examination of secondary traumatic stress among law enforcement. *Victims & Offenders*, *9*(3), 299-316. https://doi.org/10.1080/15564886.2013.848828

Creamer, T. L., & Liddle, B. J. (2005). Secondary traumatic stress among disaster mental health workers responding to the September 11 attacks. *Journal of Traumatic Stress: Official Publication of the International Society for Traumatic Stress Studies, 18*(1), 89-96. https://doi.org/10.1002/jts.20008

Cromby, J. (2020). Meaning in the power threat meaning framework. *Journal of Constructivist Psychology*, 1-13. https://doi.org/10.1080/10720537.2020.1773355

Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology, 24*(4) 349-354. https://doi.org/10.1037/h0047358.

Culver, L. M., McKinney, B. L., & Paradise, L. V. (2011). Mental health professionals' experiences of vicarious traumatization in post–Hurricane Katrina New Orleans. *Journal of Loss and Trauma*, *16*(1), 33-42. https://doi.org/10.1080/15325024.2010.519279

Derogatis, L. R. (1983). SCL-90-R administration, scoring & procedures manual-II for the revised version and other instruments of the psychopathology rating scale series. Towson, MD:Clinical Psychometric Research.

Derogatis, L. R., & Melisaratos, N. (1983). The brief symptom inventory: an introductory report. *Psychological medicine, 13*(3), 595-605. https://doi.org/10.1017/S0033291700048017

Dickinson, T., & Wright, K. M. (2008). Stress and burnout in forensic mental health nursing: a literature review. *British Journal of Nursing*, *17*(2), 82-87. https://doi.org/10.12968/bjon.2008.17.2.28133

Diener, E., Emmons, R.A., Larsen, R.J., & Griffin, S. (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment,* 49, 71 75. https://doi.org/10.1207/s15327752jpa4901_13

Dolezal, T., McCollum, D., & Callahan, M. (2009). Hidden costs in health care: The economic impact of violence and abuse.

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

Dorociak, K. E., Rupert, P. A., Bryant, F. B., & Zahniser, E. (2017). Development of the Professional Self-Care Scale. *Journal of Counseling Psychology*, 64, 325–334. https://doi.org/10.1037/cou0000206

Edward, K. L., Ousey, K., Warelow, P., & Lui, S. (2014). Nursing and aggression in the workplace: a systematic review. *British Journal of Nursing*, *23*(12), 653-659. https://doi.org/10.12968/bjon.2014.23.12.653

Ellis, C., & Knight, K. E. (2021). Advancing a model of secondary trauma: Consequences for victim service providers. *Journal of interpersonal violence*, *36*(7-8), 3557-3583. https://doi.org/10.1177/0886260518775161

Ellrich, K. (2018). Violent victimisation, professional self-esteem, and punitivity of German police officers. *Policing and society*, *28*(7), 787-805. https://doi.org/10.1080/10439463.2016.1262363

Ertel M (2002) Sociology of Humor. www.sociology.ccsu.edu/ertel/SocHumorSy102.htm (accessed 26 July 2021)

Esaki, N., & Larkin, H. (2013). Prevalence of adverse childhood experiences (ACEs) among child service providers. *Families in society*, *94*(1), 31-37. https://doi.org/10.1606/1044-3894.4257

Fazel, S., & Wolf, A. (2015). A systematic review of criminal recidivism rates worldwide: current difficulties and recommendations for best practice. *PloS one*, *10*(6), e0130390. https://doi.org/10.1371/journal.pone.0130390

Figley, C. R. (1983). *Traumatic stress and the role of the family and social support system*. Serco Marketing.

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

Figley, C. R., & Stamm, B. H. (1996). Psychometric review of compassion fatigue self-test. Measurement of stress, trauma, and adaptation, 127-130.

Flammer, E., Frank, U., & Steinert, T. (2020). Freedom restrictive coercive measures in forensic psychiatry. *Frontiers in psychiatry*, *11*, 146. https://doi.org/10.3389/fpsyt.2020.00146

Fleiss, J. L., Levin, B., & Paik, M. C. (1981). The measurement of interrater agreement. *Statistical methods for rates and proportions*, *2*(212-236), 22-23.

Foley, J., & Massey, K. L. D. (2020). The 'cost'of caring in policing: From burnout to PTSD in police officers in England and Wales. *The Police Journal*, *93*(3), 298-315. https://doi.org/10.1177/0032258X20917442

Folope, V., Chapelle, C., Grigioni, S., Coëffier, M., & Déchelotte, P. (2012). Impact of eating disorders and psychological distress on the quality of life

of obese people. *Nutrition*, *28,* 7-8. https://doi.org/10.1016/j.nut.2011.12.005https://doi.org/10.1016/j.nut.2011.12.005

Fostick, L., Nacasch, N., & Zohar, J. (2012). Acute obsessive-compulsive disorder (OCD) in veterans with posttraumatic stress disorder (PTSD). *The World Journal of Biological Psychiatry*, *13*(4), 312-315. https://doi.org/10.3109/15622975.2011.607848

Frewin, K., & Tuffin, K. (1998). Police status, conformity and internal pressure: A discursive analysis of police culture. *Discourse & society*, *9*(2), 173-185. https://doi.org/10.1177/0957926598009002003

Friedman, M. J. (2006). *Posttraumatic and acute stress disorders*. Springer.

Friedman, M. J., Resick, P. A., Bryant, R. A., & Brewin, C. R. (2011). Considering PTSD for DSM-5. *Depression and anxiety*, *28*(9), 750-769. https://doi.org/10.1002/da.20767

Furnham, A., & Alison, L. (1994). Theories of crime, attitudes to punishment and juror bias amongst police, offenders and the general public. *Personality and individual differences*, *17*(1), 35-48. https://doi.org/10.1016/0191-8869(94)90259-3

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

Gerber, M. (2012). *A dual-process motivational model of punitive attitudes: the effects of right-wing authoritarianism and social dominance orientation on public punitiveness* (Doctoral dissertation, The London School of Economics and Political Science LSE).

Ghahramanlou, M., & Brodbeck, C. (2000). Predictors of secondary trauma in sexual assault trauma counselors. *International journal of emergency mental health*, *2(*4), 229–240.

Gosling, S. D., Rentfrow, P. J., & Swann, W. B., Jr. (2003). A very brief measure of the Big- Five personality domains. *Journal of Research in Personality*, *37*, 504–528. https://doi.org/10.1016/S0092-6566(03)00046-1

Gowensmith, W. N. (2019). Resolution or resignation: The role of forensic mental health professionals amidst the competency services crisis. *Psychology, Public Policy, and Law*, *25*(1), 1. https://doi.org/10.1037/law0000190

Grant, A., & Gadsby, J. (2018). The power threat meaning framework and international mental health nurse education: A welcome revolution in human rights. *Nurse education today*, *68*, 1-3. https://doi.org/10.1016/j.nedt.2018.05.007

Grealish, A., Tai, S., Hunter, A., & Morrison, A. P. (2013). Qualitative exploration of empowerment from the perspective of young people with psychosis. *Clinical psychology & psychotherapy*, *20*(2), 136-148. https://doi.org/10.1002/cpp.785

Greenwald, R. (2014). *Trauma and juvenile delinquency: Theory, research, and interventions*. Routledge.

Griffiths, A. (2019, January). Reflections on using the Power Threat Meaning Framework in peer-led systems. In *Clinical Psychology Forum* (Vol. 313, pp. 9-14).

Griner, P. F. (2013). Burnout in health care providers. *Integrative Medicine*, *12*(1), 22. https://doi.org/10.3402/ljm.v9.23556

Hack, M., Taylor, H. G., Drotar, D., Schluchter, M., Cartar, L., Wilson-Costello, D., ... & Morrow, M. (2005). Poor predictive validity of the Bayley Scales of Infant Development for cognitive function of extremely low birth weight children at school age. *Pediatrics*, *116*(2), 333-341. https://doi.org/10.1542/peds.2005-0173

Haig, R. A. (1986). Therapeutic uses of humor. *American Journal of Psychotherapy*, *40*(4), 543-553. https://doi.org/10.1176/appi.psychotherapy.1986.40.4.543

Hales, T. W., Nochajski, T. H., Green, S. A., Hitzel, H. K., & Woike-Ganga, E. (2017). An association between implementing trauma-informed care and staff satisfaction. *Advances in Social Work*, *18*(1), 300-312. https://doi.org/10.18060/21299

Hamberger, L. K., Barry, C., & Franco, Z. (2019). Implementing trauma-informed care in primary medical settings: evidence-based rationale and approaches. *Journal of Aggression, Maltreatment & Trauma*, *28*(4), 425-444. https://doi.org/10.1080/10926771.2019.1572399

Harper, D. J., & Cromby, J. (2020). From 'What's Wrong with You?'to 'What's Happened to You?': an Introduction to the Special Issue on the Power Threat Meaning Framework. *Journal of Constructivist Psychology*, 1-6. https://doi.org/10.1080/10720537.2020.1773362

Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford publications.

Helverschou, S. B., Steindal, K., Nøttestad, J. A., & Howlin, P. (2018). Personal experiences of the criminal justice system by individuals with autism spectrum disorders. *Autism*, *22*(4), 460-468. https://doi.org/10.1177/1362361316685554

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

Heyman, R. E., & Slep, A. M. S. (2002). Do child abuse and interparental violence lead to adulthood family violence. *Journal of Marriage and Family, 64*(4), 864-870. https://doi.org/10.1111/j.1741-3737.2002.00864.x

Hinderer, K. A., VonRueden, K. T., Friedmann, E., McQuillan, K. A., Gilmore, R., Kramer, B., & Murray, M. (2014). Burnout, compassion fatigue, compassion satisfaction, and secondary traumatic stress in trauma nurses. *Journal of Trauma Nursing| JTN*, *21*(4), 160-169. https://doi.org/10.1097/JTN.0000000000000055

Hintze, J. M., Ryan, A. L., & Stoner, G. (2003). Concurrent validity and diagnostic accuracy of the dynamic indicators of basic early literacy skills and the comprehensive test of phonological processing. *School Psychology Review*, *32*(4), 541-556. https://doi.org/10.1080/02796015.2003.12086220

Holden, R. R. (2010). Face validity. *The corsini encyclopedia of psychology*, 1-2.

Horowitz, M., Wilner, N., & Alvarez, W. (1979). Impact of Event Scale: A measure of subjective stress. *Psychosomatic medicine, 41*(3), 209-218. https://doi.org/10.1097/00006842-197905000-00004

Huckshorn, K., & LeBel, J. L. (2013). Trauma-informed care. In K. R. Yeager, D. L. Cutler, D. Svendsen, & G. M. Sills (Eds.), *Modern community mental health: An interdisciplinary approach* (pp. 62–83). Oxford University Press.

Huggard, P. K., Huggard, J. 2008: Compassion fatigue and veterinary care. *Vetscript 5*: 14-16.

Huggard, P., Stamm, B. H., & Pearlman, L. A. (2013). Physician stress: Compassion satisfaction, compassion fatigue and vicarious traumatization. *First do no self-harm: Understanding and promoting physician stress resilience*, 127-145. https://doi.org/10.1093/acprof:oso/9780195383263.003.0007

Hurrell, A.-K., Draycott, S. and Andrews, L. (2018), "Secondary traumatic stress in police officers investigating childhood sexual abuse". *Policing: An International Journal, 41*(5), 636-650. https://doi.org/10.1108/PIJPSM-08-2016-0131

Husum, T. L., Bjørngaard, J. H., Finset, A., & Ruud, T. (2010). A cross-sectional prospective study of seclusion, restraint, and involuntary medication in acute psychiatric wards: patient, staff and ward characteristics. *BMC Health Services Research*, *10*(1), 1-9. https://doi.org/10.1186/1472-6963-10-89

Iniguez-Conrique, B. (2016). *Social Dominance Orientation's Effects on Attitudes Towards Crime, Prisoners and Prison Reform* (Doctoral dissertation, University of California, Santa Cruz).

Ismayilov, E. (2013). *Stress, burnout, and stressors in volunteers working with refugees: A longitudinal study of compassion satisfaction and compassion fatigue. A dissertation submitted in partial fullment of the requirements for the Master of Public Health at Auckland University.* Auckland, New Zealand: The University of Auckland.

Jacobs, I., Charmillot, M., Martin Soelch, C., & Horsch, A. (2019). Validity, reliability, and factor structure of the Secondary Traumatic Stress Scale-French version. *Frontiers in Psychiatry*, *10*, 191. https://doi.org/10.3389/fpsyt.2019.00191

Johnstone, L. (2020). General Patterns in the Power Threat Meaning Framework–Principles and Practice. *Journal of Constructivist Psychology*, 1-11. https://doi.org/10.1080/10720537.2020.1773358

Johnstone, L., & Boyle, M. (2018). The power threat meaning framework: An alternative nondiagnostic conceptual system. *Journal of Humanistic Psychology*, 1-11. https://doi.org/10.1177/0022167818793289

Johnstone, L., Boyle, M., Cromby, J., Dillon, J., Harper, D., Kinderman, P., ... & Read, J. (2019, January). Reflections on responses to the Power Threat Meaning Framework one year on. In *Clinical Psychology Forum* (Vol. 2019, No. 313, pp. 47-54).

Joinson, C. (1992). Coping with compassion fatigue. *Nursing*, *22*(4), 116-118.

Kasparian, A. (2014). Justice beyond bars: exploring the restorative justice alternative for victims of rape and sexual assault. Suffolk Transnat'l L. Rev., 37, 377.

Kassam-Adams, N. (1995). *The risks of treating sexual trauma: Stress and secondary trauma in psychotherapists*. The Sidran Press.

Kellogg, M. B., Knight, M., Dowling, J. S., & Crawford, S. L. (2018). Secondary traumatic stress in pediatric nurses. *Journal of pediatric nursing*, *43*, 97-103. https://doi.org/10.1016/j.pedn.2018.08.016

Kelly, L. (2020). Burnout, Compassion fatigue, and secondary trauma in nurses: Recognizing the occupational phenomenon and personal consequences of caregiving. *Critical Care Nursing Quarterly*, *43*(1), 73-80. https://doi.org/10.1097/CNQ.0000000000000293

Kerig, P. K., Chaplo, S. D., Bennett, D. C., & Modrowski, C. A. (2016). "Harm as harm" gang membership, perpetration trauma, and posttraumatic stress symptoms among youth in the juvenile justice system. *Criminal Justice and Behavior*, *43*(5), 635-652. https://doi.org/10.1177/0093854815607307

Killian, K. D. (2008). Helping till it hurts? A multimethod study of compassion fatigue, burnout, and self-care in clinicians working with trauma survivors. *Traumatology*, *14*(2), 32-44. https://doi.org/10.1177/1534765608319083

Kuczynski, L., & Hildebrandt, N. (1997). Models of conformity and resistance in socialization theory. In J. E. Grusec & L. Kuczynski (Eds.), *Parenting and children's internalization of values: A handbook of contemporary theory* (pp. 227–256). John Wiley & Sons Inc.

La Bash, H., & Papa, A. (2014). Shame and PTSD symptoms. *Psychological Trauma: Theory, Research, Practice, and Policy*, *6*(2), 159. https://doi.org/10.1037/a0032637

Lambert, E. G., & Paoline, E. A. (2008). The influence of individual, job, and organizational characteristics on correctional staff job stress, job satisfaction, and organizational commitment. *Criminal Justice Review*, *33*(4), 541-564. https://doi.org/10.1177/0734016808320694

Lang, J. M., & Stover, C. S. (2008). Symptom patterns among youth exposed to intimate partner violence. *Journal of Family Violence, 23*(7), 619-629. https://doi.org/10.1007/s10896-008-9184-5

Lauvrud, C., Nonstad, K., & Palmstierna, T. (2009). Occurrence of post-traumatic stress symptoms and their relationship to professional quality of life (ProQoL) in nursing staff at a forensic psychiatric security unit: a cross-sectional study. *Health and quality of life outcomes*, *7*(1), 1-6. https://doi.org/10.1186/1477-7525-7-31

LeBel, J., & Goldstein, R. (2005). Special section on seclusion and restraint: The economic cost of using restraint and the value added by restraint reduction or elimination. *Psychiatric services*, *56*(9), 1109-1114. https://doi.org/10.1176/appi.ps.56.9.1109

Lee, J. J., Gottfried, R., & Bride, B. E. (2018). Exposure to client trauma, secondary traumatic stress, and the health of clinical social workers: A mediation analysis. *Clinical Social Work Journal*, *46*(3), 228-235. https://doi.org/10.1007/s10615-017-0638-1

Lerias, D., & Byrne, M. K. (2003). Vicarious traumatization: Symptoms and predictors. *Stress and Health: Journal of the International Society for the Investigation of Stress*, *19*(3), 129-138. https://doi.org/10.1002/smi.969

Lerner, J. S., Goldberg, J. H., & Tetlock, P. E. (1998). Sober second thought: The effects of accountability, anger, and authoritarianism on attributions of responsibility. *Personality and Social Psychology Bulletin*, *24*(6), 563-574. https://doi.org/10.1177/0146167298246001

Levenson, J. S., & Willis, G. M. (2019). Implementing trauma-informed care in correctional treatment and supervision. *Journal of Aggression, Maltreatment & Trauma*, *28*(4), 481-501. https://doi.org/10.1080/10926771.2018.1531959

Lewis, M., & Ireland, J. L. (2019). Understanding motives for aggression in forensic psychiatric patients: A preliminary study. *The Journal of Forensic Psychiatry & Psychology*, *30*(3), 496-509. https://doi.org/10.1080/14789949.2019.1570541

Li, H., Rosenthal, R., & Rubin, D. B. (1996). Reliability of measurement in psychology: From Spearman-Brown to maximal reliability. *Psychological Methods*, *1*(1), 98. https://doi.org/10.1037/1082-989X.1.1.98

Liang, H. L. (2020). How workplace bullying relates to facades of conformity and work–family conflict: the mediating role of psychological strain. *Psychological reports*, *123*(6), 2479-2500. https://doi.org/10.1177/0033294119862984

Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour research and therapy*, *33*(3), 335-343. https://doi.org/10.1016/0005-7967(94)00075-U

Ludick, M., & Figley, C. R. (2017). Toward a mechanism for secondary trauma induction and reduction: Reimagining a theory of secondary traumatic stress. *Traumatology*, *23*(1), 112. https://doi.org/10.1037/trm0000096

MacEachern, A. D., Dennis, A. A., Jackson, S., & Jindal-Snape, D. (2019). Secondary traumatic stress: Prevalence and symptomology amongst detective officers investigating child protection cases. *Journal of police and*

criminal psychology, 34(2), 165-174. https://doi.org/10.1007/s11896-018-9277-x

MacRitchie, V., & Leibowitz, S. (2010). Secondary traumatic stress, level of exposure, empathy and social support in trauma workers. *South African Journal of Psychology*, *40*(2), 149-158. https://doi.org/10.1177/008124631004000204

Maercker, A., & Hecker, T. (2016). Broadening perspectives on trauma and recovery: A socio-interpersonal view of PTSD. *European journal of psychotraumatology*, *7*(1), 29303. https://doi.org/10.3402/ejpt.v7.29303

Maguire, G., & Byrne, M. K. (2017). The law is not as blind as it seems: Relative rates of vicarious trauma among lawyers and mental health professionals. *Psychiatry, Psychology and Law, 24(*2), 233-243. https://doi.org/10.1080/13218719.2016.1220037

Makadia, R., Sabin-Farrell, R., & Turpin, G. (2017). Indirect exposure to client trauma and the impact on trainee clinical psychologists: Secondary traumatic stress or vicarious traumatization. *Clinical psychology & psychotherapy*, *24*(5), 1059-1068. https://doi.org/10.1002/cpp.2068

Martin, R. A., & Lefcourt, H. M. (1983). Sense of humor as a moderator of the relation between stressors and moods. *Journal of personality and social psychology*, *45*(6), 1313. https://doi.org/10.1037/0022-3514.45.6.1313

Maschi, T., Viola, D., Morgen, K., & Koskinen, L. (2015). Trauma, stress, grief, loss, and separation among older adults in prison: The protective role of coping resources on physical and mental well-being. *Journal of Crime and Justice*, *38*(1), 113-136. https://doi.org/10.1080/0735648X.2013.808853

Maslach C, Jackson SE, Leiter MP (1996) Maslach burnout inventory manual, 3rd edn. Consulting Psychologists Press, Inc., Palo Alto, CA.

Masson, F., & Moodley, J. (2020). Secondary Traumatic Stress: The Experiences of Social Workers in the South African Police Service. *Practice, 32*(3), 169-189. https://doi.org/10.1080/09503153.2019.1615043

Mauritz, M. W., Goossens, P. J., Draijer, N., & Van Achterberg, T. (2013). Prevalence of interpersonal trauma exposure and trauma-related disorders in severe mental illness. *European journal of*

psychotraumatology, *4*(1), 185-199. https://doi.org/10.3402/ejpt.v4i0.19985

McCann, I. L., & Pearlman, L. A. (1990). Vicarious traumatization: A framework for understanding the psychological effects of working with victims. *Journal of traumatic stress*, *3*(1), 131-149. https://doi.org/10.1007/BF00975140

McCullough, S., Stanley, C., Smith, H., Scott, M., Karia, M., Ndubuisi, B., ... & Davoren, M. (2020). Outcome measures of risk and recovery in Broadmoor High Secure Forensic Hospital: stratification of care pathways and moves to medium secure hospitals. *BJPsych open*, *6*(4). https://doi.org/10.1192/bjo.2020.61

McElvaney, R., & Tatlow-Golden, M. (2016). A traumatised and traumatising system: Professionals' experiences in meeting the mental health needs of young people in the care and youth justice systems in Ireland. *Children and Youth Services Review*, *65*, 62-69. https://doi.org/10.1016/j.childyouth.2016.03.017

McKee, I. R., & Feather, N. T. (2008). Revenge, retribution, and values: Social attitudes and punitive sentencing. *Social Justice Research*, *21*(2), 138-163. https://doi.org/10.1007/s11211-008-0066-z

Meadors, P., Lamson, A., Swanson, M., White, M., & Sira, N. (2010). Secondary traumatization in pediatric healthcare providers: Compassion fatigue, burnout, and secondary traumatic stress. *OMEGA-Journal of Death and Dying, 60*(2), 103-128. https://doi.org/10.2190/OM.60.2.a

Meldrum, L., King, R., & Spooner, D. (2002). Secondary traumatic stress in case managers working in community mental health services. In C. R. Figley (Ed.), *Treating compassion fatigue* (pp. 85–106). Brunner-Routledge.

Melvin, C. S. (2015). Historical review in understanding burnout, professional compassion fatigue, and secondary traumatic stress disorder from a hospice and palliative nursing perspective. *Journal of Hospice & Palliative Nursing*, *17*(1), 66-72. https://doi.org/10.1097/NJH.0000000000000126

Michalopoulos, L. M., & Aparicio, E. (2012). Vicarious trauma in social workers: The role of trauma history, social support, and years of

experience. *Journal of Aggression, Maltreatment & Trauma*, *21*(6), 646-664. https://doi.org/10.1080/10926771.2012.689422

Michelle Rowe, M., & Sherlock, H. (2005). Stress and verbal abuse in nursing: do burned out nurses eat their young. *Journal of nursing management*, *13*(3), 242-248. https://doi.org/10.1111/j.1365-2834.2004.00533.x

Molleman, T., & Leeuw, F. L. (2012). The influence of prison staff on inmate conditions: A multilevel approach to staff and inmate surveys. *European Journal on Criminal Policy and Research*, *18*(2), 217-233. https://doi.org/10.1007/s10610-011-9158-7

Molnar, B. E., Meeker, S. A., Manners, K., Tieszen, L., Kalergis, K., Fine, J. E., ... & Wells, M. K. (2020). Vicarious traumatization among child welfare and child protection professionals: A systematic review. *Child Abuse & Neglect*, *110*, 104679. https://doi.org/10.1016/j.chiabu.2020.104679

Molnar, B. E., Sprang, G., Killian, K. D., Gottfried, R., Emery, V., & Bride, B. E. (2017). Advancing science and practice for vicarious traumatization/secondary traumatic stress: A research agenda. *Traumatology*, *23*(2), 129. https://doi.org/10.1037/trm0000122

Moran, C., & Massam, M. (1997). An evaluation of humour in emergency work. *The Australasian Journal of Disaster and Trauma Studies*, *3*(11).

Motta, R. W. (2008). Secondary trauma. International Journal of Emergency Mental Health, 10(4), 291–298.

Muskett, C. (2014). Trauma-informed care in inpatient mental health settings: A review of the literature. *International journal of mental health nursing*, *23*(1), 51-59. https://doi.org/10.1111/inm.12012

Naturale, A. (2015). How do we understand disaster-related vicarious trauma, secondary traumatic stress, and compassion fatigue? *Psychosocial stress series. Vicarious trauma and disaster mental health: Understanding risks and promoting resilience*, 73-89. Routledge/Taylor & Francis Group.

Newell, J. M., & MacNeil, G. A. (2010). Professional burnout, vicarious trauma, secondary traumatic stress, and compassion fatigue. *Best Practices in Mental Health*, *6*(2), 57-68.

Newman, C., Eason, M., & Kinghorn, G. (2019). Incidence of Vicarious Trauma in Correctional Health and Forensic Mental Health Staff in New South Wales, Australia. *Journal of forensic nursing, 15*(3), 183-192. https://doi.org/10.1097/JFN.0000000000000245

Nimmo, A. (2011). *Compassion fatigue, vicarious trauma and secondary traumatic stress among professionals within health and education: A structured literature review and review article. A thesis submitted in partial ful lment of the requirements for the Bachelor of Public Health (Honours) Degree at Auckland University.* Auckland, New Zealand: The University of Auckland.

Nimmo, A., & Huggard, P. (2013). A systematic review of the measurement of compassion fatigue, vicarious trauma, and secondary traumatic stress in physicians. Australasian Journal of Disaster and Trauma Studies, 2013(1), 37–44.

Olver, M. E., Stockdale, K. C., & Wormith, J. S. (2011). A meta-analysis of predictors of offender treatment attrition and its relationship to recidivism. *Journal of consulting and clinical psychology*, *79*(1), 6. https://doi.org/10.1037/a0022200

Ortet-Fabregat, G., & Pérez, J. (1992). An assessment of the attitudes towards crime among professionals in the criminal justice system. *The British Journal of Criminology*, *32*(2), 193-207. https://doi.org/10.1093/oxfordjournals.bjc.a048191

Pacella, M. L., Hruska, B., & Delahanty, D. L. (2013). The physical health consequences of PTSD and PTSD symptoms: a meta-analytic review. *Journal of anxiety disorders*, *27*(1), 33-46. https://doi.org/10.1016/j.janxdis.2012.08.004

Pallant, J. (2013). *SPSS survival manual: A step by step guide to data analysis using IBM SPSS*. Maidenhead: McGraw-Hill.

Paradies, Y. (2006). A systematic review of empirical research on self-reported racism and health. *International journal of epidemiology*, *35*(4), 888-901. https://doi.org/10.1093/ije/dyl056

Pare, P. P., & Felson, R. (2014). Income inequality, poverty and crime across nations. *The British Journal of Sociology*, *65*(3), 434-458. https://doi.org/10.1111/1468-4446.12083

Park, J. Y. (2011). Psychometric Properties of the Korean Version of the Secondary Traumatic Stress Scale (K-STSS). *Korean Journal of Social Welfare*, *63*(4), 33-57. https://doi.org/10.1111/j.1440-1819.2007.01774.x

Pearlman, L. A. (2003). Trauma and attachment belief scale (TABS). Los Angeles, CA: Western Psychological Services.

Pearlman, L. A. (2012). What can child welfare workers do about vicarious trauma? CW 360, Secondary Trauma and the Child Welfare Workforce. Spring, pp 20. Retrieved April 13, 2021, from http://ncwwi.org/files/Incentives__Work_Conditions/Secondary_Trauma__ the_CW_Workforce_CW360.pdf

Pearlman, L. A., & Mac Ian, P. S. (1995). Vicarious traumatization: An empirical study of the effects of trauma work on trauma therapists. *Professional psychology: Research and practice*, *26*(6), 558. https://doi.org/10.1037/0735-7028.26.6.558

Pearlman, L. A., & Saakvitne, K. W. (1995). *Trauma and the therapist: Counter-transference and vicarious traumatization in psychotherapy with incest survivors*. New York: Norton.

Pearlman, L. A., & Saakvitne, K. W. (1995). Treating therapists with vicarious traumatization and secondary traumatic stress disorders. *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized*, *23*, 150-177.

Penrod, J., Loeb, S. J., Ladonne, R. A., & Martin, L. M. (2016). Empowering change agents in hierarchical organizations: Participatory action research in prisons. *Research in Nursing & Health*, *39*(3), 142-153. https://doi.org/10.1002/nur.21716

Perez, L. M., Jones, J., Englert, D. R., & Sachau, D. (2010). Secondary traumatic stress and burnout among law enforcement investigators exposed to

disturbing media images. *Journal of Police and Criminal Psychology, 25*(2), 113-124. https://doi.org/10.1007/s11896-010-9066-7

Perron, B. E., & Hiltz, B. S. (2006). Burnout and secondary trauma among forensic interviewers of abused children. *Child and Adolescent Social Work Journal*, *23*(2), 216-234. https://doi.org/10.1007/s10560-005-0044-3

Pich, J., & Roche, M. (2020, December). Violence on the job: the experiences of nurses and midwives with violence from patients and their friends and relatives. In *Healthcare* (Vol. 8, No. 4, p. 522). Multidisciplinary Digital Publishing Institute.

Potter, P., Deshields, T., Divanbeigi, J., Berger, J., Cipriano, D., Norris, L., & Olsen, S. (2010). Compassion Fatigue and Burnout. *Clinical journal of oncology nursing*, *14*(5). https://doi.org/10.1188/10.CJON.E56-E62

Pratto, F., Sidanius, J., Stallworth, L. M., & Malle, B. F. (1994). Social dominance orientation: A personality variable predicting social and political attitudes. *Journal of personality and social psychology*, *67*(4), 741. https://doi.org/10.1037/0022-3514.67.4.741

Procter, N., Ayling, B., Croft, L., DeGaris, P., Devine, M., Dimanic, A., ... & Sullivan, R. (2017). Trauma-Informed Approaches in Forensic Mental Health.

Radey, M., & Figley, C. R. (2007). The social psychology of compassion. *Clinical Social Work Journal*, *35*(3), 207-214. https://doi.org/10.1007/s10615-007-0087-3

Raja, S., Hasnain, M., Hoersch, M., Gove-Yin, S., & Rajagopalan, C. (2015). Trauma informed care in medicine. *Family & community health*, *38*(3), 216-226. https://doi.org/10.1097/FCH.0000000000000071

Read, J., & Harper, D. J. (2020). The Power Threat Meaning Framework: Addressing Adversity, Challenging Prejudice and Stigma, and Transforming Services. *Journal of Constructivist Psychology*, 1-14. https://doi.org/10.1080/10720537.2020.1773356

Rettinger, L. J., & Andrews, D. A. (2010). General risk and need, gender specificity, and the recidivism of female offenders. *Criminal Justice and Behavior*, *37*(1), 29-46. https://doi.org/10.1177/0093854809349438

Robins, J. A., & Wiersema, M. F. (2003). The measurement of corporate portfolio strategy: Analysis of the content validity of related diversification indexes. *Strategic Management Journal*, *24*(1), 39-59. https://doi.org/10.1002/smj.282

Robinson-Keilig, R. A. (2014). Secondary traumatic stress and disruptions to interpersonal functioning among mental health therapists. *Journal of Interpersonal Violence*, *29*(8), 1477-1496. https://doi.org/10.1177/0886260513507135

Rousseau, C., & Measham, T. (2007). Posttraumatic suffering as a source of transformation: A clinical perspective. *Understanding trauma: Integrating biological, clinical, and cultural perspectives*, 275-293. https://doi.org/10.1017/CBO9780511500008.019

Sabo, B. M. (2006). Compassion fatigue and nursing work: can we accurately capture the consequences of caring work?. *International journal of nursing practice*, *12*(3), 136-142. https://doi.org/10.1111/j.1440-172X.2006.00562.x

Salston, M., & Figley, C. R. (2003). Secondary traumatic stress effects of working with survivors of criminal victimization. *Journal of traumatic stress*, *16*(2), 167-174. https://doi.org/10.1023/A:1022899207206

Samios, C., Rodzik, A. K., & Abel, L. M. (2012). Secondary traumatic stress and adjustment in therapists who work with sexual violence survivors: The moderating role of posttraumatic growth. *British Journal of Guidance & Counselling, 40*(4), 341-356. https://doi.org/10.1080/03069885.2012.691463

Schauben, L. J., & Frazier, P. A. (1995). Vicarious trauma the effects on female counselors of working with sexual violence survivors. *Psychology of women quarterly*, *19*(1), 49-64. https://doi.org/10.1111/j.1471-6402.1995.tb00278.x

Schmucker, M., & Lösel, F. (2015). The effects of sexual offender treatment on recidivism: An international meta-analysis of sound quality evaluations. *Journal of Experimental Criminology*, *11*(4), 597-630. https://doi.org/10.1007/s11292-015-9241-z

Schwab P (2002) Humor's Role in Tragedy .www.fundamentallyspeaking.com/pdf/HumorandTragedyEMTs.pdf (accessed 26 July 2021)

Severn, M. S., Searchfield, G. D., & Huggard, P. (2012). Occupational stress amongst audiologists: Compassion satisfaction, compassion fatigue, and burnout. *International Journal of Audiology*, *51*(1), 3-9. https://doi.org/10.3109/14992027.2011.602366

Shanock, L. R., & Eisenberger, R. (2006). When supervisors feel supported: Relationships with subordinates' perceived supervisor support, perceived organizational support, and performance. *Journal of Applied psychology*, *91*(3), 689. https://doi.org/10.1037/0021-9010.91.3.689

Shapiro, A. M., Benedict, R. H., Schretlen, D., & Brandt, J. (1999). Construct and concurrent validity of the Hopkins Verbal Learning Test–revised. *The Clinical Neuropsychologist*, *13*(3), 348-358. https://doi.org/10.1076/clin.13.3.348.1749

Shelton, D. (2009). Forensic nursing in secure environments. *Journal of forensic nursing*, *5*(3), 131-142. https://doi.org/10.1111/j.1939-3938.2009.01046.x

Shmueli-Goetz, Y., Target, M., Fonagy, P., & Datta, A. (2008). The Child Attachment Interview: A psychometric study of reliability and discriminant validity. *Developmental psychology*, *44*(4), 939. https://doi.org/10.1037/0012-1649.44.4.939

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

Sidanius, J., & Pratto, F. (1999). *Social dominance: An intergroup theory of social hierarchy and oppression*. New York, NY, US: Cambridge University Press. doi:10.1017/CBO9781139175043

Sireci, S. G. (1998). The construct of content validity. *Social indicators research*, *45*(1-3), 83-117. https://doi.org/10.1023/A:1006985528729

Slattery, S. M., & Goodman, L. A. (2009). Secondary traumatic stress among domestic violence advocates: Workplace risk and protective factors. *Violence against women*, *15*(11), 1358-1379. https://doi.org/10.1177/1077801209347469

Snowden, R. J., Craig, R. L., & Gray, N. S. (2011). Indirect behavioral measures of cognition among sexual offenders. *Journal of Sex Research*, *48*(2-3), 192-217. https://doi.org/10.1080/00224499.2011.557750

Sodeke-Gregson, E. A., Holttum, S., & Billings, J. (2013). Compassion satisfaction, burnout, and secondary traumatic stress in UK therapists who work with adult trauma clients. *European journal of psychotraumatology*, *4*(1), 218-269. https://doi.org/10.3402/ejpt.v4i0.21869

Specker, J., Focquaert, F., Sterckx, S., & Schermer, M. H. (2018). Forensic practitioners' expectations and moral views regarding neurobiological interventions in offenders with mental disorders. *BioSocieties*, *13*(1), 304-321. https://doi.org/10.1057/s41292-017-0069-9

Spielberger, C. D. (1991). Preliminary test manual for the Job Stress Survey (JSS). Odessa, FL: Psychological Assessment Resources.

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

Spreitzer, G. M. (1995a). Psychological empowerment in the workplace: Dimensions, measurement and validation. *Academy of Management Journal, 38*(5), 1442–1465. https://doi.org/10.5465/256865

Spreitzer, G.M. (1995b). An empirical test of a comprehensive model of intrapersonal empowerment in the workplace. *American Journal of Community Psychology, 23*(5), 601–629. https://doi.org/10.1007/BF02506984

Spreng, R. N., McKinnon, M. C., Mar, R. A., & Levine, B. (2009). The Toronto Empathy Questionnaire: scale development and initial validation of a factor-analytic solution to multiple empathy measures. *Journal of*

Personality Assessment, 91, 62–71. https://doi.org/10.1080/00223890802484381

Stamm, B. H. (2002). Measuring compassion satisfaction as well as fatigue: developmental history of the compassion satisfaction and fatigue test.

Stamm, B. H. (2003). Professional quality of life: Compassion fatigue and satisfaction subscales, R-III (Pro-QOL).

Stamm, B. H. (2010). The concise ProQOL manual.

Stamm, B. H., Larsen, D., & Davis-Griffel, K. (2002). ProQOL, the Professional Quality of Life Scale: Compassion Satisfaction and Fatigue Subscales: RIII.

Steiner, B., & Wooldredge, J. (2015). Individual and environmental sources of work stress among prison officers. *Criminal Justice and Behavior*, *42*(8), 800-818. https://doi.org/10.1177/0093854814564463

Steinkopf, B., Reddin, R. A., Black, R. A., Van Hasselt, V. B., & Couwels, J. (2018). Assessment of stress and resiliency in emergency dispatchers. *Journal of police and criminal Psychology, 33*(4), 398-411. https://doi.org/10.1007/s11896-018-9255-3

Strother, E., Lemberg, R., Stanford, S. C., & Turberville, D. (2012). Eating disorders in men: underdiagnosed, undertreated, and misunderstood. *Eating disorders*, *20*(5), 346-355. https://doi.org/10.1080/10640266.2012.715512

Sweeney, A., Filson, B., Kennedy, A., Collinson, L., & Gillard, S. (2018). A paradigm shift: relationships in trauma-informed mental health services. *BJPsych advances*, *24*(5), 319-333. https://doi.org/10.1192/bja.2018.29

Tajfel, H., & Turner, J. (2001). An integrative theory of intergroup conflict. In M. A. Hogg, D. Abrams, M. A. Hogg, D. Abrams (Eds.), *Intergroup relations: Essential readings* (pp. 94-109). New York, NY, US: Psychology Press.

Tam, K. P., Leung, A. K., & Chiu, C. Y. (2008). On Being a Mindful Authoritarian: Is Need for Cognition Always Associated with Greater Tolerance of Deviant and Stigmatized Groups. *Political Psychology*, *29*(1), 77. https://doi.org/10.1111/j.1467-9221.2007.00613.x

Taylor, P., & Cooper, C. (2008). 'It was absolute hell': Inside the private prison. *Capital & Class*, *32*(3), 3-30. https://doi.org/10.1177/030981680809600101

Tedeschi, R.G., & Calhoun, L.G. (1995). Trauma and transformation: Growing in the aftermath of suffering. Thousand Oaks, CA: Sage.

Teel, J., Reynolds, M., Bennett, M., Roden-Foreman, J. W., McShan, E., Hamilton, R., ... & Warren, A. M. (2019). Secondary traumatic stress among physiatrists treating trauma patients. In Baylor University Medical Centre Proceedings (Vol. 32, No. 2, pp. 209-214). Taylor & Francis.

Tehrani, N. (2007). The cost of caring–the impact of secondary trauma on assumptions, values and beliefs. *Counselling Psychology Quarterly*, *20*(4), 325-339. https://doi.org/10.1080/09515070701690069

Tehrani, N. (2010). Compassion fatigue: Experiences in occupational health, human resources, counselling and police. *Occupational Medicine*, *60*(2), 133-138. https://doi.org/10.1093/occmed/kqp174

Tewksbury, R., & Mustaine, E. E. (2008). Correctional orientations of prison staff. *The Prison Journal*, *88*(2), 207-233. https://doi.org/10.1177/0032885508319163

Theriot, M. T. (2003). Criminal justice system involvement among clients at outpatient mental health agencies.

Thøgersen, J. (2006). Norms for environmentally responsible behaviour: An extended taxonomy. *Journal of environmental Psychology*, *26*(4), 247-261. https://doi.org/10.1016/j.jenvp.2006.09.004

Ting, L., Jacobson, J. M., Sanders, S., Bride, B. E., & Harrington, D. (2005). The secondary traumatic stress scale (STSS) confirmatory factor analyses with a national sample of mental health social workers. *Journal of human behavior in the social environment*, *11*(3-4), 177-194. https://doi.org/10.1300/J137v11n03_09

Tomlin, J., Egan, V., Bartlett, P., & Völlm, B. (2020). What do patients find restrictive about forensic mental health services? A qualitative study. *International Journal of Forensic Mental Health*, *19*(1), 44-56. https://doi.org/10.1080/14999013.2019.1623955

Trippany, R. L., Kress, V. E. W., & Wilcoxon, S. A. (2004). Preventing vicarious trauma: What counselors should know when working with trauma survivors. *Journal of Counseling & development*, *82*(1), 31-37. https://doi.org/10.1002/j.1556-6678.2004.tb00283.x

Turgoose, D., Glover, N., Barker, C., & Maddox, L. (2017). Empathy, compassion fatigue, and burnout in police officers working with rape victims. *Traumatology, 23*(2), 205. https://doi.org/10.1037/trm0000118

Underwood, L. G., & Teresi, J. A. (2002). The daily spiritual experience scale: Development, theoretical description, reliability, exploratory factor analysis, and preliminary construct validity using health-related data. *Annals of Behavioral Medicine, 24*(1), 22-33. https://doi.org/10.1207/S15324796ABM2401_04

Vachon, M. L. S., Huggard, P. K., & Huggard, J. (2015). Reflections on occupational stress in palliative care nursing: Is it changing. In *Oxford textbook of palliative nursing* (Vol. 4, pp. 969-986). New York, NY: Oxford University Press.

Vachon, M. L. S., Huggard, P., & Huggard, J. (2015). Reflections on occupational stress in palliative care nursing: Is it changing? In B.R.Ferrier and N.Coyle (Eds.), *Oxford textbook of palliative nursing* (4th ed.) (pp. 969- 986). New York: Oxford University Press.

Van Craenendonck, T., & Blockeel, H. (2015). Using internal validity measures to compare clustering algorithms. *Benelearn 2015 Poster presentations (online)*, 1-8.

Van Wormer, K., & Boes, M. (1997). Humor in the emergency room: A social work perspective. *Health & Social Work*, *22*(2), 87-92. https://doi.org/10.1093/hsw/22.2.87

Vickery, S. K., Droge, C., & Markland, R. E. (1994). Strategic production competence: convergent, discriminant, and predictive validity. *Production and Operations Management*, *3*(4), 308-318. https://doi.org/10.1111/j.1937-5956.1994.tb00127.x

Vigil, J. D. (1988). Group processes and street identity: Adolescent Chicano gang members. *Ethos*, *16*(4), 421-445. https://doi.org/10.1525/eth.1988.16.4.02a00040

Viki, G. T., Abrams, D., & Winchester, L. (2013). Ingroup identification and evaluations of confessions from ingroup and outgroup members. *Social Psychology*.

Vrklevski, L. P., & Franklin, J. (2008). Vicarious trauma: The impact on solicitors of exposure to traumatic material. *Traumatology, 14*(1), 106-118. https://doi.org/10.1177/1534765607309961

Watson D, Clark LA, Tellegen A (1988) Development and validation of brief measures of positive and negative affect: the PANAS scales. *J Pers Soc Psychol 54*(6):1063–1070. https://doi.org/10.1037/0022-3514.54.6.1063

Way, I., VanDeusen, K. M., Martin, G., Applegate, B., & Jandle, D. (2004). Vicarious trauma: A comparison of clinicians who treat survivors of sexual abuse and sexual offenders. *Journal of interpersonal violence, 19*(1), 49-71. https://doi.org/10.1177/0886260503259050

Weathers, F. W., Huska, J. A. and Keane, T. M. (1991). PCL-C for DSM-IV. Boston: National Centre for PTSD – Behavioural Science Division.

Wilson, J. P. (1989). *Trauma, Transformation and Healing: An Integrative Approach to Theory, Research, and Post-Traumatic Therapy.* New York: Brunner/Mazel.

Wilson, J. P., Friedman, M., & Lindy, J. D. (Ed.). (2001). *Treating Psychological Trauma and PTSD.* New York: The Guilford Press.

Wolf, L. A., Delao, A. M., & Perhats, C. (2014). Nothing changes, nobody cares: understanding the experience of emergency nurses physically or verbally assaulted while providing care. *Journal of emergency nursing*, *40*(4), 305-310. https://doi.org/10.1016/j.jen.2013.11.006

World Health Organization. (1996). Mental health care law: ten basic principles: with annotations suggesting selected actions to promote their implementation. In *Mental health care law: ten basic principles: with annotations suggesting selected actions to promote their implementation*.

Yassen, J. (1995). Preventing secondary traumatic stress disorder. *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized*, 178-208.

Zerach, G. (2013). Compassion fatigue and compassion satisfaction among residential childcare workers: The role of personality resources. *Residential Treatment for Children & Youth, 30*(1), 72-91. https://doi.org/10.1080/0886571X.2012.761515

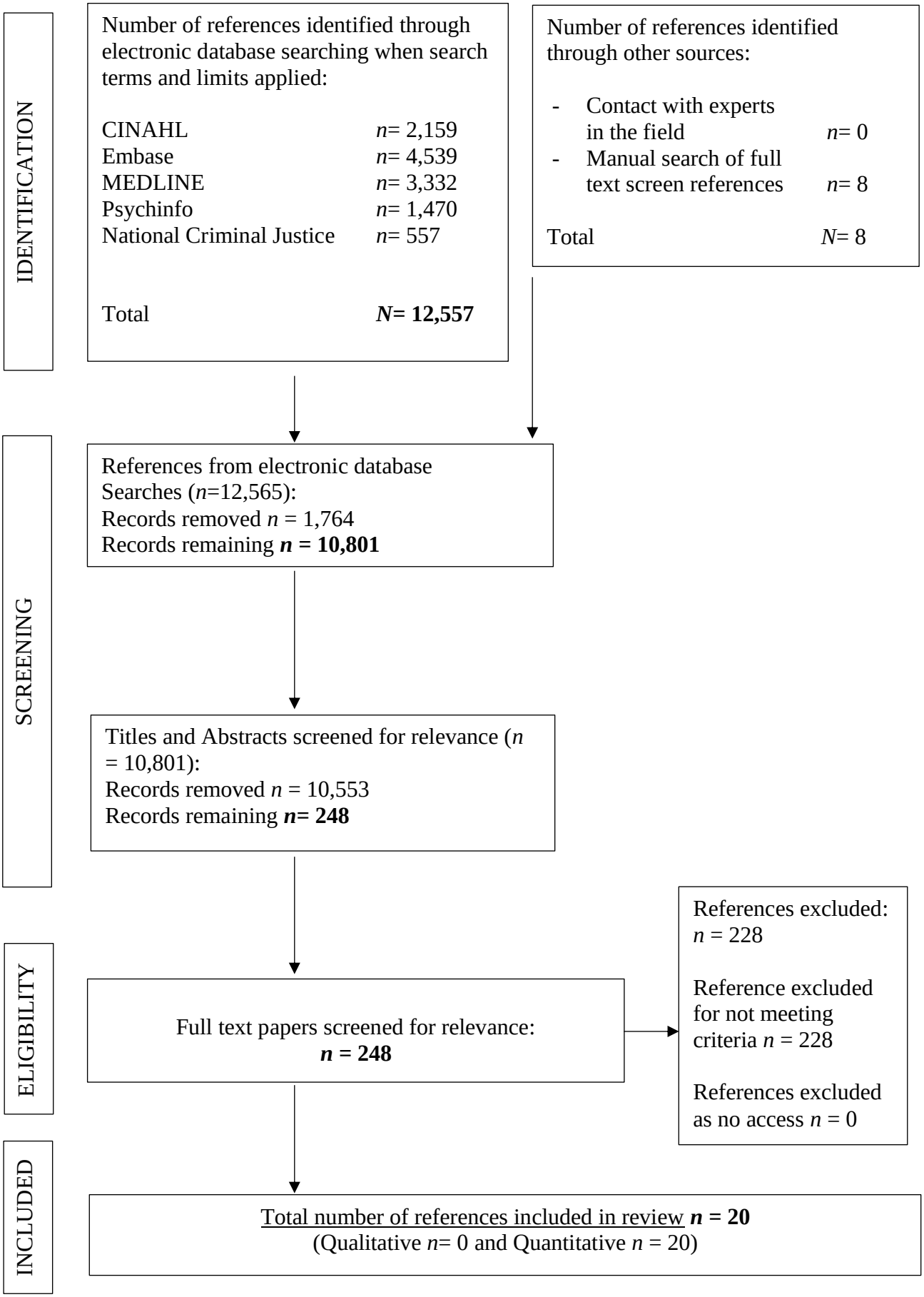
Zigmond, A. S., & Snaith, R. P. (1983). The hospital anxiety and depression scale. *Acta psychiatrica scandinavica, 67*(6), 361-370. https://doi.org/10.1111/j.1600-0447.1983.tb09716.x

Zlotnick, C., Johnson, J., Kohn, R., Vicente, B., Rioseco, P., & Saldivia, S. (2008). Childhood trauma, trauma in adulthood, and psychiatric diagnoses: results from a community sample. *Comprehensive psychiatry*, *49*(2), 163-169. https://doi.org/10.1016/j.comppsych.2007.08.007

Appendices

Appendix A

Flow Diagram of the Selection and Screening Process.



Appendix B

Quality assessment scores for the included studies.

Criterion	1	2	3(I)	(II)	(III)	(IV)	(V)	4	5	6	Total Score
Article											
Baird	Y	Y	Y	Y	Y	Y	Y	Y	N	N	0.67
Baugerud	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	0.83
Borjanić Bolić	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	1
Bridger	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	0.83
Choi(2011)	Y	Y	Y	Y	Y	Y	Y	Y	N	N	0.67
Choi(2017)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	1
Conrad	Y	Y	Y	Y	Y	Y	Y	Y	N	N	0.67
Creamer	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	0.83
Hurrell	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	0.83
MacEachern	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	1
Maguire	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	0.83
Masson	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.83
Newman	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	0.83
Perez	Y	Y	Y	Y	Y	Y	Y	Y	N	N	0.67
Samios	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	0.83
Steinkopf	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	0.83
Teel	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	0.83
Turgoose	Y	Y	Y	N	Y	Y	Y	Y	N	N	0.63
Way	Y	Y	Y	Y	Y	Y	N	Y	N	Y	0.8
Zerach	Y	Y	Y	Y	Y	Y	Y	Y	N	N	0.67

Appendix C

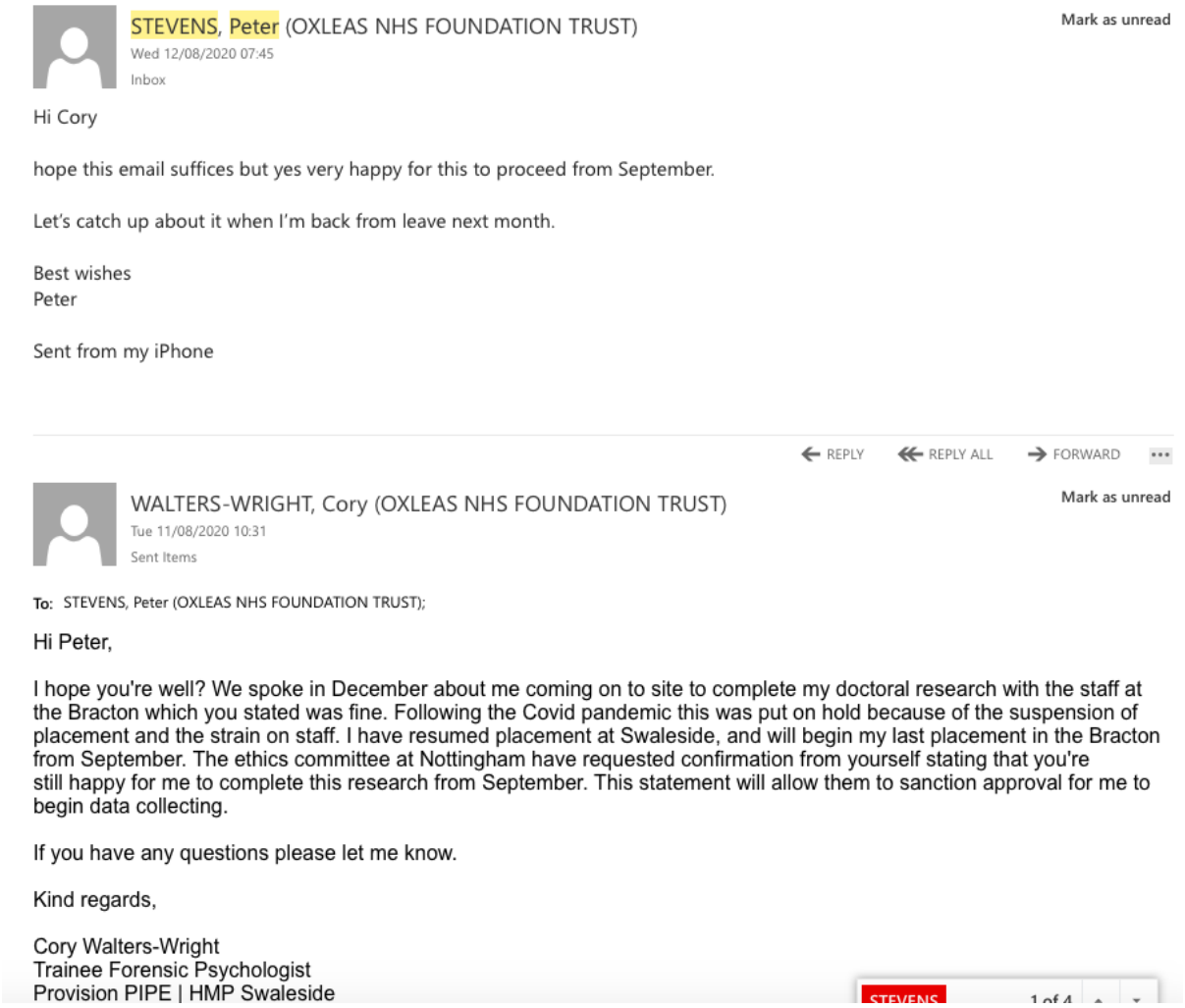
The Secondary Traumatic Stress Scale.

The following is a list of statements made by persons who have been impacted by their work with traumatized patients. Read each statement, then indicate how frequently the statement was true for you in the past seven (7) days by circling the corresponding number next to the statement

	Never	Rarely	Occasionally	Often	Very Often
1. I felt emotionally numb.	1	2	3	4	5
2. My heart started pounding when I thought about my work with patients.	1	2	3	4	5
3. It seemed as if I was reliving the trauma(s) experienced by my patient(s).	1	2	3	4	5
4. I had trouble sleeping.	1	2	3	4	5
5. I felt discouraged about the future.	1	2	3	4	5
6. Reminders of my work with patients upsets me.	1	2	3	4	5
7. I had little interest in being around others.	1	2	3	4	5
8. I felt jumpy.	1	2	3	4	5
9. I was less active than usual.	1	2	3	4	5
10. I thought about my work with patients when I didn't intend to.	1	2	3	4	5
11. I had trouble concentrating.	1	2	3	4	5
12. I avoided people, places, or things that reminded me of my work with patients.	1	2	3	4	5
13. I had disturbing dreams about my work with patients.	1	2	3	4	5
14. I wanted to avoid working with some patients.	1	2	3	4	5
15. I was easily annoyed.	1	2	3	4	5
16. I expected something bad to happen.	1	2	3	4	5
17. I noticed gaps in my memory about patient sessions.	1	2	3	4	5

Appendix D

Gatekeeper approval email for me to conduct the research project at the venue.



STEVENS, Peter (OXLEAS NHS FOUNDATION TRUST)
Wed 12/08/2020 07:45
Inbox

Mark as unread

Hi Cory

hope this email suffices but yes very happy for this to proceed from September.

Let's catch up about it when I'm back from leave next month.

Best wishes
Peter

Sent from my iPhone

REPLY REPLY ALL FORWARD

WALTERS-WRIGHT, Cory (OXLEAS NHS FOUNDATION TRUST)
Tue 11/08/2020 10:31
Sent Items

Mark as unread

To: STEVENS, Peter (OXLEAS NHS FOUNDATION TRUST);

Hi Peter,

I hope you're well? We spoke in December about me coming on to site to complete my doctoral research with the staff at the Bracton which you stated was fine. Following the Covid pandemic this was put on hold because of the suspension of placement and the strain on staff. I have resumed placement at Swaleside, and will begin my last placement in the Bracton from September. The ethics committee at Nottingham have requested confirmation from yourself stating that you're still happy for me to complete this research from September. This statement will allow them to sanction approval for me to begin data collecting.

If you have any questions please let me know.

Kind regards,

Cory Walters-Wright
Trainee Forensic Psychologist
Provision PIPE | HMP Swaleside

STEVENS 1 of 4

Appendix E

Ethics approval letter.

University of Nottingham
UK | CHINA | MALAYSIA

Faculty of Medicine & Health Sciences
Research Ethics Committee
Faculty Hub
Room E41, E Floor, Medical School
Queen's Medical Centre Campus
Nottingham University Hospitals
Nottingham, NG7 2UH
Email: FMHS-ResearchEthics@nottingham.ac.uk

5 February 2020

Cory Walters-Wright
Top-Up Doctorate Forensic Psychology Student
c/o Dr Simon Duff
Deputy Director of Forensic Programmes
Centre for Forensic and Family Psychology
Division of Psychiatry and Applied Psychology
Room B05 YANG Fujia
Jubilee Campus
Wollaton Road
Nottingham
NG8 1BB

Dear Cory

Ethics Reference No: 465-2001 **– please always quote**	
Study Title: Ideas about societal status and the impact of working with a forensic population.	
Chief Investigator/Supervisor: Dr Simon Duff, Deputy Director of Forensic Programmes, Centre for Forensic and Family Psychology, Division of Psychiatry and Applied Psychology, School of Medicine.	
Lead Investigators/student: Cory Walters-Wright, Top-Up Doctorate Forensic Psychology student, School of Medicine.	
Other Key investigators: Dr Kathleen Green, Assistant Professor, Centre for Forensic and Family Psychology, Division of Psychiatry and Applied Psychology, School of Medicine.	
Proposed Start Date: 01/03/2020	**Proposed End Date:** 01/09/2021

Thank you for submitting the above application which was considered by the Committee on 24 January 2020 and the following documents were received:

- FMHS REC Application form and supporting documents version 1.0: 27/12/2019.

These have been reviewed on and are satisfactory and the project has been given a favourable opinion.

A favourable opinion has been given on the understanding that:

1. Evidence of approval is submitted from the HM Prison and Probation Service when this is available
2. The protocol agreed is followed and the Committee is informed of any changes using a notice of amendment form (please request a form).
3. The Chair is informed of any serious or unexpected event.
4. An End of Project Progress Report is completed and returned when the study has finished (Please request a form).

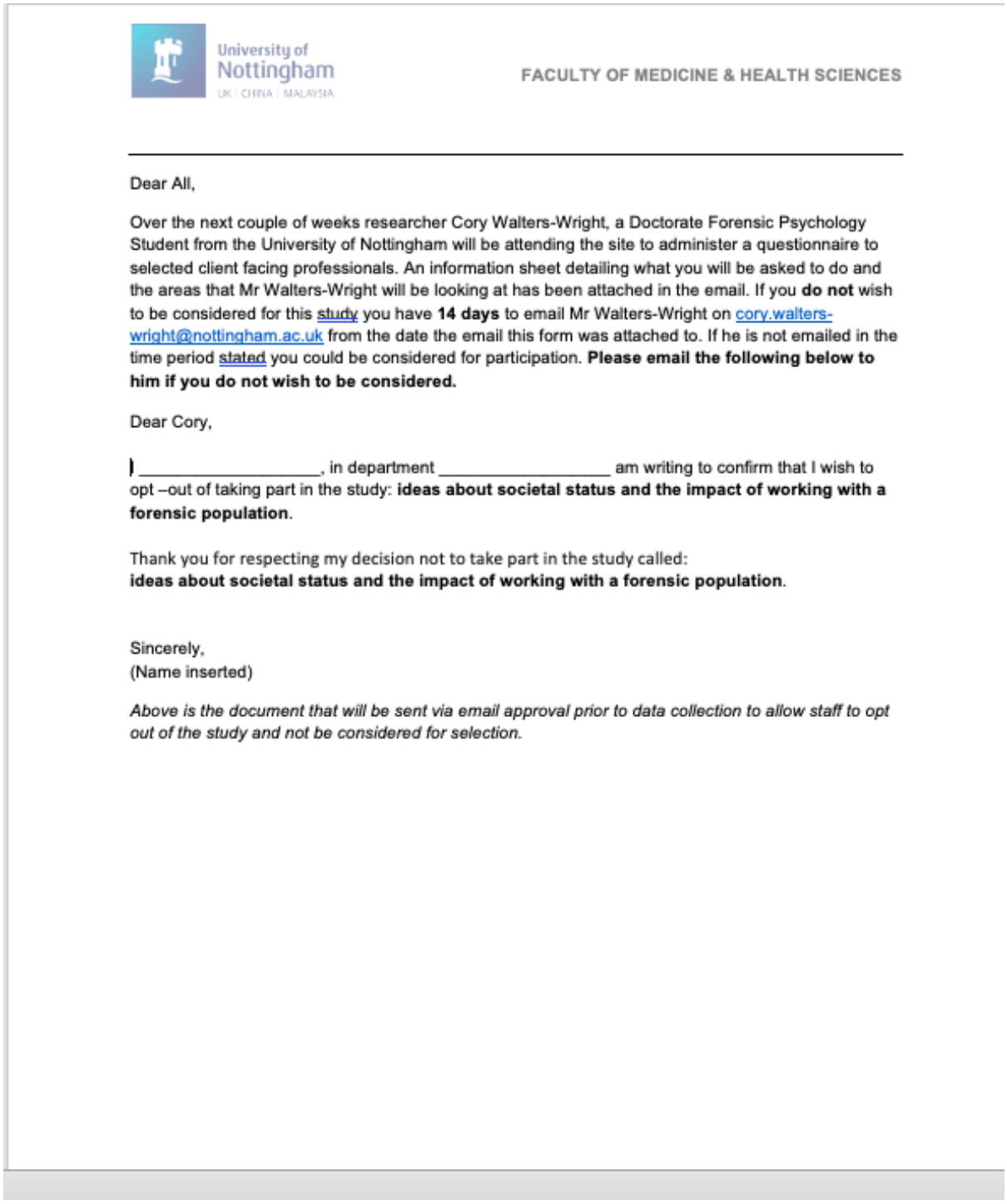
Yours sincerely

pp

Dr John Williams, Associate Professor
Chair, Faculty of Medicine & Health Sciences Research Ethics Committee

Appendix F

Opt-out document



University of Nottingham
UK | CHINA | MALAYSIA

FACULTY OF MEDICINE & HEALTH SCIENCES

Dear All,

Over the next couple of weeks researcher Cory Walters-Wright, a Doctorate Forensic Psychology Student from the University of Nottingham will be attending the site to administer a questionnaire to selected client facing professionals. An information sheet detailing what you will be asked to do and the areas that Mr Walters-Wright will be looking at has been attached in the email. If you **do not** wish to be considered for this study you have **14 days** to email Mr Walters-Wright on cory.walters-wright@nottingham.ac.uk from the date the email this form was attached to. If he is not emailed in the time period stated you could be considered for participation. **Please email the following below to him if you do not wish to be considered.**

Dear Cory,

I _____, in department _____ am writing to confirm that I wish to opt –out of taking part in the study: **ideas about societal status and the impact of working with a forensic population**.

Thank you for respecting my decision not to take part in the study called:
ideas about societal status and the impact of working with a forensic population.

Sincerely,
(Name inserted)

Above is the document that will be sent via email approval prior to data collection to allow staff to opt out of the study and not be considered for selection.

Appendix G

Information sheet for project,

Study Title: Ideas about societal status and the impact of working with a forensic population.

PARTICIPANT INFORMATION SHEET

Research Ethics Reference:
Version 1.0 Date: 11/08/20

We would like to invite you to take part in a research study. Before you decide, it is important for you to understand why the research is being done and what it will involve. One of our team will go through the information sheet with you and answer any questions you have. Please take time to read this carefully and discuss it with others if you wish. Ask us anything that is not clear.

What is the purpose of the research?

To investigate the relationships between people's thoughts about societal status, working with forensic clients and whether they are related to potential job burnout and stress.

Why have I been invited to take part?

All professionals working directly with forensic clients are eligible to take part in the research.

Do I have to take part?

No. It is up to you to decide if you want to take part in this research. We will describe the study and go through this information sheet with you to answer any questions you may have. If you agree to participate, we will ask you to sign a consent form and will give you a copy to keep. However, you would still be free to withdraw from the study at any time, without giving a reason and without any negative consequences, by advising the researchers of this decision. This would not affect your legal rights.

1. What will happen to me if I take part?

You will be asked to fill in a questionnaire taking up to 30 minutes. his is a 112-item questionnaire that has been adapted from 7 validated surveys designed to measure: ideas about societal status; negative and positive experiences at work

and how they affect you; attitudes about clients; self-belief in ability to do the job, and victimisation experiences. Some of these questions may cause distress as they explore whether you have been exposed to violence and the impact it has had on you.
If you are still happy to take part, then you will then be asked to sign a consent form.

2. Are there any risks in taking part?

The purpose of several items within the questionnaires will be to explore with participants times they have been victimised at work or in public (i.e. physical assault or verbal abuse) and will require participants to consider how these incidents have impacted them. In addition to this, the questionnaire will explore how working with clients with traumatic histories has impacted their wellbeing. Possible difficult feelings following participation will be managed by offering all participants a verbal debrief alongside a written document. In addition to this, I will provide details of where participants can get support, either professionally (i.e. within their service) or outside. This may mean signposting staff members to Samaritans or reminding participants they can speak with their GP.

3. Are there any benefits in taking part?

There will be no direct benefit to you from taking part in this research but your contribution may help with the understanding of how we can best help professionals working with Forensic clients. In addition to this, it could potentially help with recruitment strategies.

4. Will my time/travel costs be reimbursed?

Participants will not receive an inconvenience allowance to participate in the study.

5. What happens to the data provided?

All participant data will be anonymised and only will be identifiable by a unique code created by participants consisting of a memorable two digit number and favourite animal. Participants will be asked to create this code at the beginning of completing the questionnaire. Cory Walters-Wright (researcher) will ensure that research data is stored and processed in a managed environment that protects the data against data loss and corruption, unauthorised access and modification, and complies with relevant legal, ethical, regulatory, contractual and intellectual property protection obligations. Therefore, all research data (completed surveys) will be held in a locked cabinet at Cory’s property what only he has access to. However, informed consent sheets will remain on research sites in a locked cabinet to ensure that if individuals wish to withdraw their data from the study they can be easily identified. Informed consent documents will remain on site until data collection is completed on that site then the data will be transferred to Cory's property on that final day

of data collection. Once data collection is completed using paper surveys these surveys will be transferred to the University of Nottingham by Cory Walters-Wright at the earliest opportunity.
The researcher and supervisor will have access to personal / sensitive data / research data. All research data and records will be stored for a minimum of 7 years after publication or public release of the work of the research.

We would like your permission to use anonymised data in future studies, and to share our research data (e.g. in online databases) with other researchers in other Universities and organisations both inside and outside the European Union. This would be used for research in health and social care. Sharing research data is important to allow peer scrutiny, re-use (and therefore avoiding duplication of research) and to understand the bigger picture in particular areas of research. All personal information that could identify you will be removed or changed before information is shared with other researchers or results are made public. Data sharing in this way is usually anonymised (so that you could not be identified)

6. What will happen if I don't want to carry on with the study?

Even after you have signed the consent form, you are free to withdraw from the study at any time without giving any reason and without your legal rights being affected. Any personal data will be destroyed. Please attempt to withdraw data before September 2021 as data collection will be completed and the thesis will be submitted for publication. If you withdraw past this point information may have already been used in some analyses and may still be used in the final study analyses. To safeguard your rights, we will use the minimum personally-identifiable information possible.

7. Who will know that I am taking part in this research?

Data will be used for research purposes only and in accordance with the General Data Protection Regulations. Any electronic data will be anonymised with a code as detailed above. Electronic storage devices will be encrypted while transferring and saving of all sensitive data generated in the course of the research. All such data are kept on password-protected databases sitting on a restricted access computer system and any paper information (such as your consent form, contact details and any research questionnaires) would be stored safely in lockable cabinets in a swipe-card secured building and would only be accessed by the research team.
Under UK Data Protection laws the University is the Data Controller (legally responsible for the data security) and the Chief Investigator of this study (named above) is the Data Custodian (manages access to the data). This means we are responsible for looking after your information and using it properly. Your rights to access, change or move your information are limited as we need to manage your information in specific ways to comply with certain laws and for the research to be reliable and accurate. To safeguard your rights we will use the minimum personally – identifiable information possible.

You can find out more about how we use your information and to read our privacy notice at:

https://www.nottingham.ac.uk/utilities/privacy.aspx/

Designated individuals of the University of Nottingham may be given access to data for monitoring and/or audit of the study to ensure we are complying with guidelines. With your consent, we will keep your personal information on a secure database in order to contact you for future studies.

8. What will happen to the results of the research?

The research will be written up as a thesis. On successful submission of the thesis, it will be deposited both in print and online in the University archives, to facilitate its use in future research. The thesis will be published open access.

9. Who has reviewed this study?

All research involving people is looked at by an independent group of people, called a Research Ethics Committee, to protect your interests. This study has been reviewed and given favourable opinion by the Faculty of Medicine and Health Sciences Research Ethics Committee (Reference number: FMHS 465-2001.

10. Who is organising and funding the research?

Principal Investigator Dr Simon Duff (mczsd@exmail.nottingham.ac.uk), Academic Supervisor Dr Kathleen Green (kathleen.green@nottingham.ac.uk**)**

11. What if there is a problem?

If you have a concern about any aspect of this project, please speak to the researcher Cory Walters-Wright (coty.walters-wright@nottingham.ac.uk) or the Principal Investigator Dr Simon Duff (mczsd@exmail.nottingham.ac.uk), who will do their best to answer your query. The researcher should acknowledge your concern and give you an indication of how he/she intends to deal with it. If you remain unhappy and wish to complain formally, you can do this by contacting the FMHS Research Ethics Committee Administrator, Faculty Hub, Medicine and Health Sciences, E41, E Floor, Medical School, Queen's Medical Centre Campus, Nottingham University Hospitals, Nottingham, NG7 2UH or via E-mail: FMHS-ResearchEthics@nottingham.ac.uk.

12. Contact Details

If you would like to discuss the research with someone beforehand (or if you have questions afterwards), please contact:

Cory Walters-Wright
School of Medicine
Jubilee Campus
Wollaton Road
Nottingham
NG8 1BB
Tel: 07557444839
Email: cory.walters-wright@nottingham.ac.uk

Appendix H

Informed Consent Shee.t

University of Nottingham
UK | CHINA | MALAYSIA

FACULTY OF MEDICINE & HEALTH SCIENCES

RESEARCH INFORMED CONSENT FORM

Title of Project:	ideas about societal status and the impact of working with a forensic population.	**Ethics Approval Number:**	
Investigator(s):	Cory Walters-Wright	**Researcher Email:**	Cory.walters-wright@nottingham.ac.uk

Please read the following statements and, if you agree, initial the corresponding box to confirm agreement:

	Initials
I confirm that I have read and understand the information sheet for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.	
I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason.	
I understand that my data will be treated confidentially and any publication resulting from this work will report only data that does **not** identify me.	
I freely agree to participate in this study.	

Signatures:

Name of participant (block capitals)	Date	Signature
~~Cory Walters-Wright~~ Researcher (block capitals)	Date	~~CWW~~ Signature

If you would like a copy of this consent form to keep, please ask the researcher. If you have a concern about any aspect of this project, please speak to the researcher Cory Walters-Wright (cory.walterswright@nottingham.ac.uk) or the Principal Investigator Dr Simon Duff (mczsd@exmail.nottingham.ac.uk), who will do their best to answer your query. you remain unhappy and wish to complain formally, you can do this by contacting the FMHS Research Ethics Committee Administrator, Faculty Hub, Medicine and Health Sciences, E41, E Floor, Medical School, Queen's Medical Centre Campus.

Appendix I

Debrief Sheet.



FACULTY OF MEDICINE & HEALTH SCIENCES

Debrief

In this study, several variables were examined. The variables include ideas about societal status, negative and positive experiences at work and how they influence the way you think and behave, your attitudes about clients, beliefs about achieving within work, and victimisation experiences.

The aim of the study was to investigate the relationships between people's thoughts about societal status and whether they were related to attitudes towards clients, victimisation experiences, secondary traumatic stress, job satisfaction and job burn-out. The study examined whether thoughts about societal status differed amongst establishment. In addition to this, the study examined whether spending more physical contact time with clients related to the onset of secondary traumatic stress.

All the research data you have provided will be anonymous and used for research purposes only. If you wish to withdraw your data from this study at any time please let us know quoting the unique code you created before completing the questionnaire. However this will not be possible after the research paper has been submitted at the end of September 2021.

Please do not hesitate to contact Cory via e-mail if you have any questions;

Cory Walters-Wright – cory.walters-wright@nottingham.ac.uk

If you have a concern about any aspect of this project, please speak to the researcher Cory Walters-Wright (cory.walterswright@nottingham.ac.uk) or the Principal Investigator Dr Simon Duff (mczsd@exmail.nottingham.ac.uk), who will do their best to answer your query.If you remain unhappy and wish to complain formally, you can do this by contacting the FMHS Research Ethics Committee Administrator, Faculty Hub, Medicine and Health Sciences, E41, E Floor, Medical School, Queen's Medical Centre Campus, Nottingham University Hospitals, Nottingham, NG7 2UH or via E-mail: FMHS-ResearchEthics@nottingham.ac.uk.

THANK YOU AGAIN FOR YOUR CO-OPERATION

Appendix J

Example email sent out to participants on sites.

Dear staff

Cory Walters-Wright, Trainee Forensic Psychologist will be on-site from **DD/MM/YYYY** carrying out research looking at workplace stress and trauma. Attached is an in-depth information sheet about the study.

In addition to this, attached to the email is an opt-out procedure to follow if you do not wish to be considered for selection. All client facing staff members have **14 days** to follow this procedure before Cory arrives on site or there may be a possibility that you could be approached to take part in the study.

If you have any questions please contact Cory via email cory.walters-wright@Nottingham.ac.uk.

Kind regards
(inserts name)

Above is the email that will be sent on all sites prior to my arrival on site and the random selection of participants.

Appendix K

Study one and two questionnaire.

Questionnaire

Please fill in the details below and circle the answers you feel represents you the best.

Age: …….

Gender: Male Female

Ethnicity:

1) White British

2) Irish

3) Traveller of Irish heritage

4) Gypsy/Roma

5) Mixed White and Black Caribbean

6) Mixed White and Black African

7) Mixed White and Asian

8) Indian

9) Pakistani

10) Bangladeshi

11) Black Caribbean

12) Black African

13) Chinese

14) Other **Please specify** _____

Please state you current role:……

Which establishment best describes where you are currently employed?

Prisons Secure Hospitals Community Forensic Services

How long have you worked in forensic services (this does not solely include your current role)?

Less than a year 1-2 years 2-4 years 4-10 years 10-15 years More than 15 years

On average how many hours a week do you spend directly in the presence of clients in you your current role? ……..

Please circle the answer that represents the degree to which you agree with the following statements.

1. Some groups of people are simply inferior to other groups.

Strongly Disagree	Disagree	Somewhat Disagree	Neither Disagree or Agree	Somewhat Agree	Agree	Strongly Agree

2. In getting what you want, it is sometimes necessary to use force against other groups.

Strongly Disagree	Disagree	Somewhat Disagree	Neither Disagree or Agree	Somewhat Agree	Agree	Strongly Agree

3. It's OK if some groups have more chances in life than others.

Strongly Disagree	Disagree	Somewhat Disagree	Neither Disagree or Agree	Somewhat Agree	Agree	Strongly Agree

4. To get ahead in life, it is sometimes necessary to step on other groups.

Strongly Disagree	Disagree	Somewhat Disagree	Neither Disagree or Agree	Somewhat Agree	Agree	Strongly Agree

5. If certain groups stayed in their place, we would have fewer problems.

Strongly Disagree	Disagree	Somewhat Disagree	Neither Disagree or Agree	Somewhat Agree	Agree	Strongly Agree

6. It's probably a good thing that certain groups are at the top and other groups are at the bottom.

Strongly Disagree	Disagree	Somewhat Disagree	Neither Disagree or Agree	Somewhat Agree	Agree	Strongly Agree

7. Inferior groups should stay in their place.

Strongly Disagree	Disagree	Somewhat Disagree	Neither Disagree or Agree	Somewhat Agree	Agree	Strongly Agree

8. Sometimes other groups must be kept in their place.

Strongly Disagree	Disagree	Somewhat Disagree	Neither Disagree or Agree	Somewhat Agree	Agree	Strongly Agree

9. It would be good if groups could be equal.

Strongly Disagree	Disagree	Somewhat Disagree	Neither Disagree or Agree	Somewhat Agree	Agree	Strongly Agree

10. Groups equality should be our ideal.

Strongly Disagree	Disagree	Somewhat Disagree	Neither Disagree or Agree	Somewhat Agree	Agree	Strongly Agree

11. All groups should be given an equal chance in life.

Strongly Disagree	Disagree	Somewhat Disagree	Neither Disagree	Somewhat Agree	Agree	Strongly Agree

or
Agree

12. We should do what we can to equalise conditions for different groups.

Strongly Disagree	Disagree	Somewhat Disagree	Neither Disagree or Agree	Somewhat Agree	Agree	Strongly Agree

13. Increased social equality.

Strongly Disagree	Disagree	Somewhat Disagree	Neither Disagree or Agree	Somewhat Agree	Agree	Strongly Agree

14. We would have fewer problems if we treated people more equally.

Strongly Disagree	Disagree	Somewhat Disagree	Neither Disagree or Agree	Somewhat Agree	Agree	Strongly Agree

15. We should strive to make incomes as equal as possible.

Strongly Disagree	Disagree	Somewhat Disagree	Neither Disagree or Agree	Somewhat Agree	Agree	Strongly Agree

16. No one group should dominate in society.

Strongly Disagree	Disagree	Somewhat Disagree	Neither Disagree or Agree	Somewhat Agree	Agree	Strongly Agree

TURN OVER THE PAGE

Please circle the answer that represents the degree to which you agree with the following statements.

17. Do you feel that the purpose of a secure setting (e.g prison or hospital) is rehabilitation, punishment, or both?

(a) Totally rehabilitation;

(b) More rehabilitation, but still punishment;

(c) Equally rehabilitation and punishment;

(d) More punishment, but still rehabilitation;

(e) Totally punishment.

18. Rehabilitation should be a central goal of placing individuals in custody?

Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree

19. The job of a secure setting (e.g prison or hospital) is to keep the public safe, not to help inmates?

Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree

20. Do you think that most people who end up in prison or secure settings are there because of personal failure, or because they did not have advantages like strong families, good education, and job opportunities?

(1) Totally lack of advantages;

(2) Mostly lack of advantages, but still personal failure;

(3) Equally lack of advantages and personal failure;

(4) More personal failure, but still lack of advantages;

(5) Totally personal failure.

21. Forensic clients who want it should have access to academic training at least up to and including GCSE.

Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree

22. Forensic clients who want it should have access to drug and alcohol treatment.

Strongly Disagree	Disagree	Neither Disagree Or Agree	Agree	Strongly Agree

23. Forensic clients who want it should be given access to vocational training.

Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree

Your honesty in responding to the questions below is very important. Be sure to answer every question, even if it does not apply. Please circle the appropriate answer.

24. Have you ever been physically assaulted at work by a resident, client or outside of work by a member of the public?

Yes Both Yes work only Yes outside of work No

25. Have you ever been sexually assaulted at work by a resident, client or outside of work by a member of the public?

Yes Both Yes work only Yes outside of work No

26. Have you ever been verbally abused at work by resident or client or outside of work by a member of the public?

Yes Both Yes work only Yes outside of work No

27. When a staff member has been assaulted at the place where you work, how often has any action been taken by the institution to discipline the inmate or inmates involved?

Never Rarely Now and then Often Very often Always Don't know

28. When action was taken in response to an instance of resident-on-staff violence, how often do you feel that the action taken was adequate?

Never Rarely Now and then Often Very often Always Don't know

TURN OVER THE PAGE

Please circle the answer that represents the degree to which you agree with the following statements.

29. It is OK to hit someone if they make you look stupid?

Agree Disagree

30. If you are not willing to fight it means you are weak and pathetic?

Agree Disagree

31. If I felt threatened by someone, I would stop them by attacking them first?

Agree Disagree

32. Being violent shows you are strong?

Agree Disagree

33. Fighting can help to sort out most disagreements?

Agree Disagree

34. It is OK to hit someone who upsets you?

Agree Disagree

35. Sometimes you have to be violent to show that you are a man?

Agree Disagree

36. Physical violence is a necessary sign of strength and power?

Agree Disagree

37. 'Real men' are not afraid of fighting?

Agree Disagree

38. If someone attacked me verbally, I would attack them physically?

Agree Disagree

39. I expect real men to be violent?

Agree Disagree

40. Being violent shows that you can assert yourself?

Agree Disagree

41. If I don't show that I'm tough and strong, people will think I'm weak and pathetic?

Agree Disagree

42. People who irritate you deserve to be hit?

Agree Disagree

43. Most people won't learn unless you physically hurt them?

Agree Disagree

44. I would rather lose a fight and get beaten up than embarrass myself by walking away?

Agree Disagree

45. It is shameful to walk away from a fight?

Agree Disagree

46. If I am provoked, I can't help but hit the person who provoked me?

Agree Disagree

47. When I can't think of what to say, it's easier to react with my fists?

Agree Disagree

48. It is OK to hit someone who threatens to make you look stupid?

Agree Disagree

49. If trouble starts, I wouldn't think about it—I would just get stuck in and fight?

Agree Disagree

50. It is OK to be violent if someone threatens to damage your property?

Agree Disagree

51. If I were in a potentially violent situation, I would automatically confront the person threatening me?

Agree Disagree

52. You won't survive if you run away from fights and arguments?

Agree Disagree

53. You can never face people again if you show you are frightened?

Agree Disagree

54. When you are pushed to your limit, there is nothing you can do except fight?

Agree Disagree

55. Men who are gentle get walked on?

Agree Disagree

56. I believe that if someone annoys you, you have a right to get them back, by whatever means necessary?

Agree Disagree

57. If you don't stick up for yourself physically you will get trodden on?

Agree Disagree

58. I see myself as a violent person?

Agree Disagree

59. Violence is second nature to me?

Agree Disagree

60. I just seem to attract violence?

Agree Disagree

61. Fear is a sign of weakness?

Agree Disagree

62. I enjoy fighting?

Agree Disagree

63. It is normal for men to want to fight?

Agree Disagree

64. If I get angry, hitting out makes me feel better?

Agree Disagree

65. It is OK to hit your partner if they behave unacceptably?

Agree Disagree

66. It is OK (or normal) to hit women if you need to teach them a lesson?

Agree Disagree

67. Sometimes you have to use violence to get what you want?

Agree Disagree

68. .Some people only understand when you show them through physical strength?

Agree Disagree

69. I tend to just react physically without thinking?

Agree Disagree

70. I am totally against violence?

Agree Disagree

71. I hate violence?

Agree Disagree

72. It is OK (or normal) to hit someone if they hit you first?

Agree Disagree

73. I wouldn't feel bad about hitting someone if they really deserved it?

Agree Disagree

74. Because anyone can suffer hurt and pain, you should not hit other people?

Agree Disagree

75. I enjoy watching violence on TV or in films?

Agree Disagree

76. I enjoy watching violent sports (e.g. boxing)?

Agree Disagree

77. If someone cuts you up in traffic, it's OK to swear at them?

Agree Disagree

78. It is OK to have violence on TV?

Agree Disagree

79. It is OK to hit someone who threatens your family?

Agree Disagree

80. When I have hurt people, I feel bad or even hate myself for it afterwards?

Agree Disagree

81. It is OK to hit someone who threatens your partner?

Agree Disagree

82. Fighting can make you feel alive and ‘fired up’?

Agree Disagree

83. It is OK to have violence in films at the cinema?

Agree Disagree

These questions are designed to help us get a better understanding of the kinds of things that are difficult for professionals.

84. I can remain calm when facing difficulty in my job because I can rely on my ability?

Never Rarely Sometimes Often Always

85. When I am confronted with a problem in my job I can usually find several solutions?

Never Rarely Sometimes Often Always

86. Whatever comes my way in my job I can usually find several solutions?

Never Rarely Sometimes Often Always

87. My past experiences in my job has prepared me well for my occupational future?

Never Rarely Sometimes Often Always

88. I meet the goals I set myself in my job?

Never Rarely Sometimes Often Always

89. I feel prepared for most of the elements in job?

Never Rarely Sometimes Often Always

Consider the following items about your work/life situation. Write the number that best reflects your experiences using the following rating scale, 1 through 10

Never/Rarely Very Often

1 2 3 4 5 6 7 8 9 10

___a. I have felt trapped by my work.

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

___d. I feel that I am a “failure” in my work.

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

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

___i. I have felt depressed as a result of my work.

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

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

90. My direct supervisor is competent in doing his or her job?

Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree

91. My direct supervisor shows very little interest in the feelings of subordinates?

Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree

92. There is a level of commitment to professionalism at all levels of this organization?

Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree

93. Our top management does not try to make this organisation a good place to work?

Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree

94. When I have a problem at work, there is someone I can talk to who will really help me solve It?

Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree

95. Have you ever used any of the following resources to address work- related stress, anxiety, depression, or other issues related to health and well-being?

Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree

The following is a list of statements made by persons who have been impacted by their work with traumatized patients. Read each statement, then indicate how frequently the statement was true for you in the past seven (7) days by circling the most relevant response to the statement.

96. I felt emotionally numb.

Never	Rarely	Occasionally	Often	Very Often

97. My heart started pounding when I thought about my work with patients.

Never	Rarely	Occasionally	Often	Very Often

98. It seemed as if I was reliving the trauma(s) experienced by my patient(s).

Never	Rarely	Occasionally	Often	Very Often

99. I had trouble sleeping.

Never	Rarely	Occasionally	Often	Very Often

100. I felt discouraged about the future.

Never	Rarely	Occasionally	Often	Very Often

101. Reminders of my work with patients upsets me.

Never Rarely Occasionally Often Very Often

102. I had little interest in being around others.

Never Rarely Occasionally Often Very Often

103. I felt jumpy.

Never Rarely Occasionally Often Very Often

104. I was less active than usual.

Never Rarely Occasionally Often Very Often

105. I thought about my work with patients when I didn't intend to.

Never Rarely Occasionally Often Very Often

106. I had trouble concentrating.

Never Rarely Occasionally Often Very Often

107. I avoided people, places, or things that reminded me of my work with patients.

Never Rarely Occasionally Often Very Often

108. I had disturbing dreams about my work with patients.

Never Rarely Occasionally Often Very Often

109. I wanted to avoid working with some patients.

Never Rarely Occasionally Often Very Often

110. I was easily annoyed.

Never Rarely Occasionally Often Very Often

111. I expected something bad to happen.

Never Rarely Occasionally Often Very Often

112. I noticed gaps in my memory about patient sessions.

Never Rarely Occasionally Often Very Often