

Doctoral Thesis

Submitted in partial fulfilment of the Lancaster University Doctorate in Clinical Psychology

Striving for Trauma-Informed Organisations: What it Takes to Take the Lead

Doctorate in Clinical Psychology

Lancaster University

Nicole Thordarson

2020 intake

June 2023

Section	Main Text	Appendices (including references, figures and tables)	Total
Abstract	271	-	271
Literature Review	7,962	10,344	18,306
Empirical Paper	7,966	6,813	14,779
Critical Appraisal	3,639	311	3,950
Ethics	8,363	2,884	11,247
Total	28,201	20,352	48,553

Statement of Total Word Count

Thesis Abstract

The presented thesis includes a systematic literature review, an empirical research paper, and a critical appraisal providing a reflective overview of the research process.

In Chapter One, 21 studies exploring predictors of Secondary Traumatic Stress (STS) in mental health professionals are subject to narrative synthesis. Factors increasing risk of STS included personal trauma history, higher levels of empathy, larger caseloads, longer working hours and higher rates of exposure to traumatised clients. Factors reducing risk of STS included use of active coping strategies, frequent and effective supervision processes, perceived psychosocial support from colleagues and family/friends, and positive psychological affect. Findings are discussed in relation to the work-related stress literature, with clinical implications relevant for professionals and their employers provided.

Chapter Two details a study adopting a grounded theory methodology to explore the experiences of leaders across health, social care and education settings. Specifically, leaders are interviewed surrounding their experiences moving organisations towards traumainformed culture change. The model constructed outlines three processes of leader-driven change, including "starting from within", a process of leader self-exploration, "working with the threat response", an approach to recognising and meeting the needs of stakeholders during change, and "rewriting historical cultural norms", a commitment to dismantling hierarchical, power-led approaches used previously, in order to bring teams and services together towards shared goals. The model is discussed in relation to psychological theory before clinical implications and future research directions are considered.

Chapter Three provides a reflective overview of the research process as a whole, including the reasons for selecting this topic area, further consideration of epistemology and reflexivity, recognition of challenges and further detail surrounding key decisions made.

Declaration

This thesis contains work undertaken between September 2020 and June 2023 for the Doctorate in Clinical Psychology. I declare that the work presented is the author's own, except where otherwise stated. The work has not been submitted for the award of a higher degree anywhere else.

Name: Nicole Thordarson

Date: 10th June 2023

Acknowledgements

Firstly, I would like to thank all of the leaders who devoted their time and reflected so openly during our meetings, your stories were truly inspiring and I'll carry them with me through the rest of training and beyond. I would also like to thank the Faculty Librarian, Louise Speakman, for all of her help navigating literature searches. To my research supervisor, Dr. Suzanne Hodge, and my field supervisor, Dr. Suzanne Knowles, thank you for all of your guidance and support pursuing an area of research that interests me, and for all of the quick turnaround draft reads! I really could not have done it without either of you. Finally, I'd like to thank both of my parents, Gary and Janice, whose continued support and encouragement has meant more to me than they will ever know. As I look back over the years I often wonder how I got to where I am today, but with parents like you it was inevitable.

Chapter One: Systematic Literature Review	Page
Abstract	1-2
Introduction	1-3
Methods	1-8
Results	1-11
Discussion	1-22
References	1-29
Tables and Figures	
Table 1: Search Terms	1-42
Table 2: Overview of Quality Appraisal	1-43
Table 3: Data Extracted from Included Papers	1-46
Figure 1: PRISMA flowchart outlining selection process	1-62
Appendices	
Appendix A: Submission guidelines for Journal of Traumatic Stress	1-63
Appendix B: Assessment of Cross-Sectional Research Tool	1-66
Chapter Two: Empirical Paper	Page
Abstract	2-2
Introduction	2-3
Methods	2-7
Findings	2-12
Discussion	2-24
References	2-29

Contents

Table 1: Participant Demographics	2-39
Figure 1: Conceptual Model of Leader-Driven Trauma Informed Change	
Appendices	
Appendix A: Submission guidelines for Journal of Traumatic Stress	2-41
Appendix B: Screening Conversation Prompts	2-44
Appendix C: Interview Topic Guide (Cluster 1)	2-45
Appendix D: Transcript Excerpt including Example Coding	2-47
Appendix E: Memo-Writing Examples	2-51
Appendix F: Interview Topic Guide (Cluster 2)	2-54
Appendix G: Overview of Category Construction	2-56
Chapter Three: Critical Appraisal	Page
Research Focus	3-2
Considering Epistemology	3-3
Reflexivity	3-5
Summary of Key Findings	3-6
Key Challenges	3-9
Further Findings	3-10
Implications of Further Findings	3-12
Making Explicit Links	3-13
References	3-14
Chapter Four: Ethics	Page
Ethics Application	4-2
Research Protocol	4-13
Letter Confirming Ethical Approval	4-30

Appendices

Appendix 1: Participant Information Sheet	4-31
Appendix 2: Consent Form	4-35
Appendix 3: Participant Debrief Sheet	4-36

Chapter One: Systematic Literature Review

Secondary Traumatic Stress in Mental Health Professionals: A Narrative Synthesis of Risk and Protective Factors

Word Count: 7,962

Nicole Thordarson

Doctorate in Clinical Psychology

Division of Health Research, Lancaster University

All correspondence should be sent to:

Nicole Thordarson

Doctorate in Clinical Psychology

Health Innovation One

Sir John Fisher Drive

Lancaster University

Lancaster

LA1 4AT

n.thordarson@lancaster.ac.uk

Compiled in line with submission guidance for The Journal of Traumatic Stress¹

¹ Submission guidance included in Appendix 1-A

Abstract

Background: Secondary Traumatic Stress (STS) presents following exposure to distressing and graphic details of trauma experienced by another, which is an increased risk in mental health professionals (MHPs) who support traumatised clients. Whilst most research exploring work-related distress has considered burnout and compassion fatigue (CF), a more informed understanding of STS is needed, especially considering recent pressures on services to adopt trauma-informed approaches. Such practices may increase the likelihood of trauma exposure within the workplace. Aims: The current review aimed to synthesise literature exploring predictive and protective factors of STS in MHPs. Method: Four databases were searched in March 2023: CINAHL, MEDLINE, PsychINFO and Scopus. Quality was assessed using the Appraisal Tool for Cross Sectional Studies (AXIS; Downes et al., 2016). Findings: 23 papers were selected following screening protocols, with samples including 7,381 participants in total. Included papers were deemed moderate to high quality, although one study was removed during appraisal due to contradictory reporting of findings. STS was associated with demographic, personal, psychosocial and organisational factors. Conclusions: Personal trauma, empathy, suppression of emotions, increased workloads, and a higher rate of traumatised clients on a professionals' caseload are associated with increased risk of STS in MHPs. Psychosocial support, frequent and effective supervision, and use of active coping strategies decreased risk of STS. Such findings support the prioritisation of reflective and connective practices in mental health services, to keep staff members well within their work. This should be considered the responsibility of both the individual, and the organisation they work for.

Keywords: Secondary Traumatic Stress; Trauma; Mental Health Professionals

Introduction

Individuals who have experienced trauma during their lifetime are at a significantly greater risk of developing mental health difficulties (Felitti et al., 1998; Torjesen, 2019). Whilst the threat response evoked by the body and brain during traumatic experiences aims to protect a person from immediate danger, this response can linger long after threat has passed. If trauma memories are not processed effectively, a person may experience nightmares, intrusive memories and flashbacks which trigger stress responses for weeks, months or even years after a traumatic event. Whilst such symptoms are frequently associated with a diagnosis of Post-Traumatic Stress Disorder (PTSD), research suggests only a minority of individuals who experience trauma meet the clinical diagnostic criteria (Alisic et al., 2014). More common diagnoses associated with trauma include generalised anxiety disorders, major mood disorders, obsessive compulsive disorder, eating disorders, and personality disorders (Badour et al., 2012; Grant et al., 2008; Macintosh et al., 2015; Trottier & Macdonald, 2017). Nonetheless, as a person attempts to cope with the long-term effects of trauma and subsequent distress, the probability of risk behaviours such as substance misuse, suicide and high risk sexual behaviour also increases (Wiehn et al., 2018), only furthering long-term health implications as well as the potential need for intervention from mental health services.

Dependent on the nature and severity of their presentation, individuals seeking support from services will typically be seen by a selection of professionals, including psychiatrists, psychologists, social workers, mental health nurses, and support staff. Whilst trauma related discussions are not obligatory, disclosures and descriptions of trauma are likely as therapeutic relationships strengthen and distress experienced in the present is linked with distressing experiences from the past. As such, MHPs receive training in how to manage disclosures requiring safeguarding input as per organisational policy. However, little consideration is usually given in how to manage general disclosures, how to support clients

through disclosure processes, and the impact trauma details can have on a professional's own psychological wellbeing (Cox & Steiner, 2013; Newell & MacNeil, 2010).

The prevalence of work-related distress in MHPs is well documented (Brown et al., 2017; Edwards et al., 2000; Rössler, 2012), although attempts to conceptualise the negative consequences of caregiving remain unclear. Over the years, various scholars have suggested many constructs to define distressing responses seen in "helping" professionals, which vary in cause, onset, and presentation, yet are often used synonymously throughout exploratory studies. For purposes of the current review, and to increase the rationale for further systematic explorations in this area, an attempt to disentangle theorised constructs through a summary of relevant literature is provided below.

Conceptualising Work-Related Distress in Mental Health Professionals

The conceptualisation of work-related distress was first attempted in the 1970's, when Freudenberger introduced the term "burnout" to describe his own experience of fatigue, disappointment, and detachment following prolonged attempts to achieve results with clients that felt unreachable (Freudenberger 1974; 1977). Shortly after, the Maslach Burnout Inventory was introduced (Maslach et al., 1997), with scholars suggesting it as the result of 'moral injury' (Leiter & Maslach, 1999), which involves organisational barriers interfering with professional values and practice standards. Whilst research exploring burnout identified exhaustion, cynicism, and feelings of helplessness as common indicators of its presentation (Kalliath et al., 2000), this was not limited to those in "helping" professions (Cordes et al., 1997), and thus the term became a broader concept to define "a syndrome of emotional exhaustion, depersonalisation, and reduced personal accomplishment that can occur in any individual who works with people in some capacity" (Maslach et al., 1997, p.4).

Secondary Traumatic Stress (STS) was later introduced by Figley (1995) to describe "the natural consequent behaviours and emotions resulting from knowing about a

1-4

traumatising event experienced by a significant other [or client], and the stress resulting from helping or wanting to help a traumatised or suffering person [or client]" (pg. 7). Figley (1995) identified that similar to symptoms associated with PTSD, STS can present in avoidance, arousal, and/or re-experiencing symptoms immediately after exposure to graphic and explicit details of a client's trauma experiences, including intense feelings of anger and/or sadness, irritability, numbness or dissociation, lack of interest and enjoyment in both work and personal activities, disturbed sleep, and flashbacks/nightmares related to the client's trauma story. Figley (1995) and Stamm (1999) both identified that the intense emotions and behaviours seen in healthcare professionals experiencing STS likely result from empathic engagement with clients during their description of traumatic events, combined with a lack of ability to help in any way, or reduce the distress experienced.

Throughout conceptualisations of STS, Figley (1995) used a previously coined term, "Compassion Fatigue" (CF), to describe this exhaustive repercussion of empathic engagement with clients, suggesting both terms were synonymous due to their association with "the cost of caring for others in emotional pain" (pg. 8). As a result, clarity surrounding differences between the concepts was lost, and empirical research exploring STS began using the terms interchangeably. This somewhat confused the evidence-base when the Professional Quality of Life scale (Pro-QOL; Stamm, 2005) was later developed to measure burnout, compassion satisfaction, and STS in "helping professionals", as STS and burnout were outlined as two varying potential consequences of CF. It was around this point that CF was recognised as a broader concept describing the generic psychological impact that empathic engagement with distressed individuals can have (Stamm, 2005). Despite this conceptualisation of the relationship between STS and CF however, some scholars continue to refer to the two concepts synonymously, despite multiple explorations of the literature suggesting this is incorrect (Newell et al., 2016; Newell & MacNeil, 2010). Thus, empirical

research and systematic reviews recognising the differences between CF and STS, and considering such differences during interpretation of findings are needed.

Rationale for the Current Review

Due to the likelihood that MHPs will engage directly with clients' trauma histories, the majority of research surrounding work-related distress (particularly CF and STS) has explored populations within psychiatric settings. Whilst systematic reviews of the literature have focused on exploring risk and protective factors for burnout and CF in MHPs (O'Connor et al., 2018; Turgoose & Maddox, 2017), the only recent review exploring STS focused solely on risk factors in therapists working with traumatised clients (Hensel et al., 2015), with little consideration given to factors that may mitigate STS symptoms, or the experiences of professionals' working outside of the therapeutic realm.

Exploring risk and protective factors of STS seems particularly important since updates to the Diagnostic and Statistical Manual of Mental Disorders (5th ed.; DSM-5) in 2013 recognised "repeated or extreme exposure to aversive details of traumatic event(s)" as a potential contributing factor in the diagnosis of PTSD (American Psychological Association, 2013, p. 271). Furthermore, repeated experience of STS has been found to gradually increase absenteeism and staff turnover in mental health settings (Maslach, 2015), with professionals remaining in work despite STS symptoms feeling less connected to their roles and their clients, reducing quality of care (Jonsson & Segesten, 2004; Ratrout & Hamdon-Mansour, 2019). Identifying factors increasing or decreasing a professional's risk of STS is therefore crucial if approaches to reducing its prevalence are to be identified, and wellbeing, staffing levels, and quality of care are to be improved across the sector.

A large volume of research exploring STS has looked to identify both personal and organisational factors that can increase or decrease a professional's likelihood of being negatively impacted by hearing about client trauma. In terms of personal factors, studies have

explored age, gender, ethnicity, years of experience, self-compassion, emotional intelligence, presence of a personal trauma history etc. (Bride et al., 2007; Hensel et al., 2015; Yazıcı & Özdemir, 2022). Organisational factors theorised to impact STS levels have included size and nature of a professional's caseload, frequency and quality of supervision, level of support from colleagues, and perceptions about leadership and service culture (Dworkin et al., 2014; Hensel et al., 2015; Slattery & Goodman, 2009). Whilst studies exploring STS in MHPs have considered many factors that may contribute to its development, findings are contradictory and, as outlined above, use of the term CF, and measurement of CF, within studies claiming to explore STS, only adds to the uncertainty when attempting to draw conclusions from the evidence-base.

Further clarity surrounding factors correlating with STS is in the interest of mental health services at present due to growing pressures for trauma-informed approaches to be adopted (Beckett et al., 2017; NHS, 2019; Portman-Thompson, 2020). As Trauma-Informed Care (TIC) involves enhanced consideration of client trauma within treatment planning, and increases trauma-focused training, reflective spaces, and formulations for staff members, the likelihood of exposure to details of trauma increases, thus also increasing the likelihood of STS. As trauma-informed approaches also prioritise the support, supervision, and self-care of staff members, the need for a review identifying factors which may increase or decrease risk of STS is needed. This would allow for appropriate support initiatives to be planned for individuals at a higher personal risk, and considerations to be made in how to buffer against organisational risks from a system-level.

Review Aims

In line with the above, the current review aimed to address the following questions:

1. What are the personal and organisational factors that increase mental health professionals' risk of developing secondary traumatic stress?

- 2. What are the personal and organisational factors that protect mental health professionals from developing secondary traumatic stress?
- 3. What can be taken from the current evidence-base exploring STS in terms of clinical implications and future research directions?

Method

Prior to undertaking the review, a protocol featuring predetermined aims, search strategies, and planned syntheses was identified and formally registered with Prospero (Reference CRD42023408364). As part of this process, a Cochrane Library search was undertaken, yielding no existing reviews in this area. PRISMA guidance outlining best practice for systematic reviews was followed during searches and screening (Page et al., 2020).

Inclusion and Exclusion Criteria

The review sought to include studies that met the following criteria: (a) explored MHP's levels of STS in relation to at least one personal and/or organisational factor; (b) explored risk and protective factors in MHP's working directly with individual clients (c) used quantitative methods and reported quantitative data; (d) measured STS levels using a validated measure; (e) reported relevant variables in relation to STS directly, and not solely as part of a wider model of work-related distress; (f) recognised differences between STS and CF within the report, rather than using the terms synonymously; (g) provided an adequate level of information surrounding STS related outcomes within the report; and (h) were available in the English language.

Exclusion criteria included: (a) studies featuring samples of MHPs not actively working in the mental health field or with distressed clients e.g., MHPs working in medical settings, in education, or in solely consultancy-based roles; (b) studies featuring a mixed sample of MHPs and other professional groups e.g., interpreters, teachers, advocates,

chaplains; (c) studies featuring samples predominantly including untrained MHPs e.g., lay counsellors, or students of mental health disciplines with limited clinical experience e.g., less than a year; (d) studies exploring the prevalence of STS and related factors with no consideration of relationships between variables of interest.

Search Strategy

Suitable studies were identified through a systematic search of four databases: PsychInfo, MEDLINE, CINAHL, and Scopus. These databases were selected to ensure the identification of journals covering a range of mental health disciplines. As the term "Secondary Traumatic Stress" was first coined in 1995 (Figley 1995), only articles published from 1995 onwards were sought. It was planned that a decision in regard to including or excluding dissertation/thesis articles would be made following the initial screening of search results, dependent on whether enough peer-reviewed literature was identified to satisfy review aims. A highly sensitive search strategy was created following an exploration of common terms used in existing literature, as well as the use of Boolean operators and EBSCO host thesauruses/subject headings. Table 1 contains details of the final search terms utilised. (TABLE 1 HERE)

Initial Searches and Screening

Searches of databases were undertaken in March 2023, with all papers generated exported into Endnote for reference management. Duplicate papers were identified using Endnote's deduplication tool and subsequently removed. Remaining papers were screened via title/abstract in line with the inclusion/exclusion criteria set out above. Citations deemed not relevant through title/abstract alone were excluded at this point, and full texts sought for the remaining papers. These were examined in full to ascertain their relevance to the review aims and inclusion/exclusion criteria. Citations deemed to meet the inclusion/exclusion criteria following this second phase of screening were included in the review.

Data Extraction

Data deemed relevant for synthesis were extracted from included papers and entered into a form purposefully designed by the author. Data extracted included: author(s); year of publication; country of origin; study aims and design; sample size and demographics; risk/protective variable(s) explored; measure(s) utilised; findings relevant to variables of interest; and effect sizes.

Quality Appraisal

The Appraisal of Cross-Sectional Studies (AXIS; Downes et al., 2016) tool was used for quality appraisal of included papers. The AXIS provided a systematic approach to assessing reliability and potential risk bias in cross-sectional research, which was the study design expected. When planning the current review, an adapted version of the Newcastle-Ottawa Scale (NOS; Wells et al., 2000) was initially planned for use (Alshabanat et al., 2015; Herzog et al., 2013; Modesti et al., 2016). However, further exploration of adapted tools identified multiple items that did not seemingly apply to cross-sectional research. As an example, one section focused solely on the comparability of findings and controls utilised. As research sought for the current review was expected to distribute surveys to one group (MHPs), and consider all variables (both personal and organisational) impacting STS levels, comparability across groups and controls were not deemed of relevance. As a result, the AXIS was identified as a more suitable tool. The review protocol and Prospero registration were at this point updated to reflect changes made.

The AXIS (included in Appendix A) featured 20 items assessing study quality through the consideration of seven key areas: design, sample size justification, target population, sampling frame, sample selection, measurement validity and reliability, and overall methods. Each item was rated "yes", "no" or "I don't know", with an option to comment on any decision-making difficulties. As authors provided no numeric score system, this was applied

using the following method. A score of 1 was provided to each item marked "yes", with items 13 and 19 reverse scored. Percentages were then calculated for the amount of items marked 1 out of a total 20. A higher percentage thus reflected a higher quality paper with lower risk of bias. Quality assessment was undertaken by one author, using the tool's attached explanatory document. A random sample of included papers were also assessed by a colleague to improve consistency (n=5), with any discrepancies discussed until consensus was reached.

Data Synthesis

Due to the variation in measures used to assess STS within the literature, as well as inconsistencies in effect sizes used and lack of homogeneity across samples, a narrative synthesis approach was adopted to explore, group, and compare findings of included papers. Where effect sizes were presented or calculable, these were used to establish the relevance of study findings in the wider context of selected papers. Effect size calculations were informed by Cohen's (2009) recommended remits.

Results

Database searches featuring terms included in Table 1 identified 10,760 results. After removing duplicates and papers published before 1995 (when STS was first coined; Figley, 1995), 7,332 studies were screened via title and abstract, of which, 97 full texts were sought, and 91 full texts were retrieved. 23 papers met inclusion criteria, with 68 papers excluded at this latter stage, mainly due to a lack of subjection to peer-review processes (n=41), use of invalid measures of STS (n=8) and exploration of samples featuring predominantly non-MHPs (n=7). Figure 1 includes an overview of the selection process.

(FIGURE 1 HERE)

Quality Appraisal

The AXIS (Downes et al., 2016) was used to ascertain quality of all included papers. Table 2 includes individual and total scores. Although initially quality appraisal was not

undertaken as a means to exclude papers, the decision was made to remove the study by Baugerud et al. (2018) due to its contradictory reporting of findings. Within the paper, two tables were included providing correlation results for STS and predictor variables, which reported varying coefficients and significance values. Additionally, when variables were entered into the regression model, the direction of relationships between some predictors and STS changed, meaning establishing key findings was not possible. Whilst the study's scores for quality appraisal remain in Table 2, it is not included in the synthesis of findings.

For remaining papers, quality appraisal scores ranged from 45% (Owens-King, 2019) to 85% (Fye et al., 2021), holding a mean of 71.8%. As such, papers were deemed to hold moderate to high quality. No discrepancies were raised in regard to the sample of papers inter-rated. All reports stated clear aims, utilised appropriate study designs, and featured published measures of STS and relevant predictor variables. Only two papers undertook measures to describe and categorise non-responders however (Diehm et al., 2019; Fye et al., 2021), despite 11 studies raising bias concerns regarding response rates and five not reporting response rates at all.

Whilst only one study was removed based upon quality, other papers with lower scores were approached more cautiously within synthesis, with higher scoring papers given more weight. As an example, the lowest scoring paper featured a 3.9% response rate (Owens-King, 2019), with no attempt to ascertain why or recognise the impact response numbers may have had on the study's generalisability. Therefore, whilst conclusions from the paper are noted, implications in terms of validity are also considered.

(TABLE 2 HERE)

Study Characteristics

Key characteristics of the 22 included papers are summarised in Table 3. All studies were published between 2011 and 2022, and feature cross-sectional designs, with one paper

providing a longitudinal follow up three years post initial contact (Rienks, 2020). Two papers feature in the same row in Table 3 as they reported different aspects of findings from the same study (Choi, 2011; Choi, 2017). Therefore, main findings from both papers were summarised together during data extraction and will be referred to as Choi (2011, 2017) in the narrative synthesis.

The 21 samples encompassed 7,381 participants, with an average of 336 MHPs taking part in each study. The smallest sample featured 78 participants (Diehm et al., 2019) and the largest 1968 (Rienks, 2020), with studies undertaken across nine countries, including America (8), Australia (5), Israel (2), Britain (1), Turkey (1), Romania (1), China (1), Greece (1), and Cyprus (1). One paper did not report age (Rienks, 2020), and two provided solely age ranges (Rayner et al., 2020; age 35-44; Shell et al., 2021; age 24-60). Remaining samples held a mean age of 44.8 years, and featured 80.9% female participants, ranging from 43.7% (Christodoulou-Fella et al., 2017) to 94.2% (Dagan et al., 2016). Of the eight that reported ethnicity, six featured predominantly Caucasian participants (M = 79.4%; Choi, 2011, 2017; Fye et al., 2021; Owens-King, 2019; Quinn, 2019; Rienks, 2020; Singer et al., 2021), one featured solely Asian participants (Kwong et al., 2018), and one featured solely Black American participants (Shell et al., 2021). Samples featured Psychiatrists, Psychologists, Counsellors, Social Workers, Mental Health Nurses, Trainee Practitioners, and support staff working across child services, addiction services, domestic violence and sexual assault services, community services, and support services set up during the COVID-19 pandemic. (TABLE 3 HERE)

Study Findings

To allow for a coherent synthesis, factors influencing professionals' risk of STS development are separated into four categories: demographic, personal, psychosocial, and organisational.

Demographic Influences

17 studies explored relationships between demographic variables and STS. No significant relationships were reported in relation to immigration status, location, professional background, marital status, number of children, or sexual orientation (Christodoulou-Fella., 2017; Dagan et al., 2016; Fye et al. 2021; Kwong, 2018; Shell et al., 2021; Singh & Hassard; Somoray et al., 2017; Yazici & Ozdemir, 2022). Of 13 papers exploring gender, and five exploring ethnicity, only Quinn (2019) included them in a model of best fit. Neither were significant predictors. Two studies reported significant findings in relation to education, with professionals holding higher levels of STS being less likely to have taken up further study (Ewer et al., 2015; Shell et al., 2021). Such findings were not supported in multiple other papers exploring education.

Two studies observed significant negative correlations between age and STS (Lai et al., 2021; Singh & Hassard, 2021), demonstrating small and medium effects. Of 5 studies including age in regression analyses, three reported it as a non-significant predictor (Dagan et al., 2016; Somoray et al., 2017; Harker et al., 2016), whilst two more reported it as a significant contributor (Raynor et al., 2020; Singh & Hassard, 2021). In the latter, age was reported as the only significant predictor in a model accounting for 14.9% of variance.

Of eight papers exploring experience, only studies by Dagan et al. (2016), Shell et al. (2021), and Singer et al. (2021) reported significant findings, with years in profession contributing to models accounting for 29%, 5%, and 16% of variance respectively. Shell et al. (2021) also observed a significant negative correlation between STS and years in current role, demonstrating a small effect. No other paper supported this finding.

Of four studies exploring income, two reported no significant relationship between salary and STS (Choi, 2011, 2017; Kwong, 2018), and a third did not report its findings (Singer et al., 2021). However, Quinn (2019) included salary in a model of best fit after

assessing 39 variables in relation to STS, with professionals earning under \$35,000 per year experiencing an STS score 5.3 points higher than those earning between \$35,000 and \$45,000. For context, a two unit change in the scale utilised could move someone from reporting STS symptoms 'rarely' to reporting them 'often'.

Despite the majority of papers included exploring a combination of demographic factors in relation to STS, contradictory findings and scarcely significant, usually small effects suggest they have limited impact on the development of STS. A small number of studies suggest younger, early career professionals who receive less pay are more at risk, although further research is required to draw viable conclusions surrounding these relationships.

Personal Influences

Personal Trauma History

11 papers explored personal trauma in relation to STS. Nine reported significant positive correlations, with three observing small effects (Dagan et al., 2016; Rayner et al., 2020; Rienks, 2020), four moderate (Dagan et al., 2015; Diehm et al., 2019; Somoray et al., 2017; Yazici & Ozdemir, 2022), and two large (Choi, 2011, 2017; Ewer et al., 2019). Diehm et al. (2019) also explored unresolved trauma as a separate predictor, again reporting a significant positive correlation with a large effect.

Choi (2011, 2017) found personal trauma accounted for 15% of variance in STS, Yazici and Ozdemir (2022) reported 13%, and in a model featuring personal and unresolved trauma, 28.99% of variance was explained, demonstrating a large effect (f^2 = .41; Diehm et al., 2019). In regression models including personal trauma among other predictors, Dagan et al. (2015) found 29% of variance was explained, Raynor et al. (2020) observed 10.4%, and Somoray et al. (2017) reported 13%, with only workplace and personal trauma found to be significant predictors. Ewer et al. (2015) reported that workers with STS were more than

twice as likely to have experienced a traumatic event, and experienced more types of trauma, with childhood trauma, war combat, and assault increasing STS risk the most (OR = 2.32; OR = 2.17; OR = 2.09).

Quinn (2019) did not include personal trauma in their model of best fit, although researchers identified that due to the extensive amount of variables explored, the impact of personal trauma may have been diluted by other related factors. Lai et al. (2021) also reported no significant correlation. Nonetheless, when taken together, findings highlight a clear positive relationship between personal trauma and STS in MHPs.

Empathy

Three papers explored empathy in relation to STS, with Lai et al. (2021) and Lakioti et al. (2020) reporting significant positive correlations with large and moderate effects respectively. Lakioti et al. (2020) also found empathy to be the most influential predictor of STS in a model demonstrating a moderate effect (p = .000), suggesting empathic professionals are more at risk of STS development.

This is in line with findings by Kwong (2018) who reported a significant positive relationship between STS and altruism. Whilst Lai et al. (2021) recognised the negative impact empathy can have on wellbeing in this context, authors also observed that professionals who developed STS through the paths of empathy were significantly more likely to experience vicarious post-traumatic growth (VPTG), a concept developed by Arthur et al. (2005) involving a process of learning from indirect trauma exposure. This indirect effect accounted for 14.39% of variance in the final model.

Whilst Rayner et al. (2020) also reported a significant correlation between empathy and STS, findings suggested a negative relationship, with only a small effect. In moderation analyses however, whilst empathy was not a direct predictor, a significant three-way interaction was observed between empathy, past trauma, and levels of caseload trauma (β =

33.184). The most significant effects suggested: (a) high empathy and high personal trauma predict higher STS as caseload trauma increases, and/or (b) low empathy and high personal trauma predict lower STS as caseload trauma increases. Although only three papers explored empathy, and findings were contradictory in terms of the direction and interaction of relationships reported, combined findings suggest empathy certainly influences STS in some way. Further research is needed so more viable conclusions can be drawn.

Emotional Labour and Regulation

Singh and Hassard (2021) explored emotional labour alongside STS, which involves a professionals' approach to engaging with emotions at work. 'Surface acting' (acting as though emotional but remaining detached) was significantly positively correlated with STS, demonstrating a medium effect. It was also the only significant predictor of a model accounting for 31% of variance in STS. Researchers also explored emotion regulation, observing 'expressive suppression' (keeping emotions hidden from clients and colleagues) to also be significantly positively correlated with STS. Such findings suggest that professionals less authentically engaged with emotions at work are at more risk of STS. Although Singh and Hassard (2021) received one of the highest scores during quality appraisal (80%), further findings are needed to strengthen the reliability of these relationships.

Psychological Distress

Five papers explored mental distress in relation to STS, specifically anxiety, depression, psychological distress, and PTSD symptomology. Quinn (2019) observed that STS score would increase 2.74 units for every one unit increase in anxiety. Christodoulou-Fella et al. (2017) also reported a significant positive correlation between STS and anxiety, as well as psychological distress, somatic symptoms and self-perceived functioning; all with moderate to large effects. Ewer et al. (2012), Fye et al. (2021) and Harker et al. (2016) all supported such findings, further reporting significant positive correlations between STS and

depressive symptoms. Ewer et al. (2012) also observed that professionals with STS were more likely to meet diagnostic criteria for PTSD (OR = 10.16). Taken together, it must be acknowledged there is a clear relationship between psychological distress and STS, however the direction of this causal relationship remains unknown.

Psychological Capital

Psychological capital refers to internal resources which help in the management of difficult situations, including hope, self-efficacy, resilience and optimism. Virga et al. (2020) found significant negative correlations between all aspects of psychological capital and STS, observing large effects. Such relationships were replicated by Lakioti et al. (2020) and Harker et al. (2016) for self-efficacy and resilience respectively, with the latter found to be the only significant predictor in a model accounting for 24% of variance in STS.

Other psychological factors significantly negatively correlating with STS included positive emotions, sense of meaning, and self-compassion, demonstrating moderate to large effects (Lakioti et al., 2020; Yazici & Ozdemir, 2022). Singer et al. (2021) also observed purpose in life to account for 16% of variance in STS when other factors were held constant, with Choi (2011, 2017) reporting higher levels of psychological empowerment predicted lower levels of STS. Taken together, such findings suggest that positive, empowering, self-compassionate psychological thinking can reduce the likelihood of STS development.

Personality

Only one study explored personality (Somoray et al., 2017), reporting a significant positive correlation between STS and 'neuroticism', and significant negative correlations between STS and 'extraversion' and 'agreeableness', all with moderate to large effects. A regression model including all personality constructs accounted for 23.3% of variance, with only 'neuroticism' and 'agreeableness' found to be significant predictors. Whilst such findings suggest personality influences STS, more data is needed to confirm this.

Psychosocial Factors

Coping Strategies

Two papers explored coping strategies in relation to STS, specifically 'problemfocused coping' and 'emotion-focused coping'. Owens-King (2019) observed self-care to be the only significant predictor of STS, although the model only accounted for 6% of variance. Findings are interpreted with caution due to the study's minimal response rate (3.9%), which poses questions surrounding the sample's representativeness. Nonetheless, with a much higher quality appraisal score, Rienks (2020) also found individuals with lower levels of STS more frequently engaged in self-care (mean difference 1.83), work-to-home transition plans (mean difference 1.59) and activities/hobbies (mean difference 1.6), all 'active coping strategies'. At baseline, and during a three-year follow up, professionals using frequent coping strategies held significantly lower levels of STS, with large effects observed. Harker et al. (2016) and Lai et al. (2021) also observed significant negative correlations between mindfulness and STS, both with large effects. Mindfulness moderated the relationship between empathy and STS in the latter study, with the effect accounting for 33.8% of variance. Such findings demonstrate the importance of taking pro-active approaches to selfcare, to reduce likelihood of STS development.

Psychosocial Support

Of four studies that explored psychosocial support, one reported no significant findings (Dagan et al., 2015), one reported a significant positive correlation with small effect (Dagan et al., 2016), one reported a significant negative correlation with small effect (Diehm et al., 2019), and one found socio-political support contributed to a model accounting for 15% of variance, again observing a negative relationship (Choi, 2011, 2017). Diehm et al. (2019) further reported that social support significantly moderated the relationship between hours of contact with clients who had experienced trauma and STS levels, demonstrating a

large effect. Taken together, findings suggest the presence of support from peers, friends and family can buffer against the effects of STS, even when caseload trauma is high. Further research is likely needed to enhance understanding in regard to these relationships.

Supervision

Although seven studies explored STS in relation to supervision processes, four observed no significant relationship (Choi, 2011, 2017; Fye et al., 2021; Lai et al., 2021; Lakioti et al., 2020). Of three studies reporting significant outcomes, one reported a negative correlation between perceived effectiveness of supervision and STS, observing a small effect (Dagan et al., 2016), and one reported that professionals experiencing STS received less clinical supervision hours each month than those with low levels of STS (Ewer et al., 2015). Quinn (2019) included supervision frequency, supervisor gender, and supervisory relationship in their model of best fit, with the latter found to be a significant predictor. For every one unit improvement in a professional's perception of the quality of their supervisory relationship, STS decreased by 4.88 units. Although findings are contradictory, they suggest frequency, quality, and comfortability of supervision can impact STS.

Organisational Influences

Work Setting

Three papers reported significant findings in relation to workplace setting, with Dagan et al. (2016) observing STS to be significantly higher in child protection workers compared to professionals working in general social care, and Quinn (2019) reporting community work to be a more significant predictor of STS than work in inpatient settings. Singer et al. (2021) also observed a significant relationship between work setting and STS, with moderate effect, but did not provide any context as to the nature of this relationship. Further research is required if viable conclusions are to be drawn surrounding STS and work setting.

Workload

Eight papers explored workload, with four studies observing significant positive correlations between hours worked per week and STS. Whilst Diehm et al. (2012) reported a moderate effect, Fye et al. (2021), Shell et al. (2021), and Singer et al. (2021), all observed small effects. The other four studies explored the nature of a professional's clinical caseload in relation to STS, consistently reporting that caseloads with higher proportions of traumatised clients significantly predicted STS (Ewer et al., 2015; Owens-King, 2019; Quinn, 2019; Rayner et al., 2020). Ewer et al. (2015) further identified that exposure to details of child abuse was significantly more likely to increase STS compared to other trauma exposures. This demonstrated a moderate effect.

Work-Related Distress

Of the seven studies that explored STS in relation to burnout, all reported significant positive correlations between the two variables, observing large effect sizes (Fye et al., 2021; Harker et al., 2016; Kwong, 2018; Lakioti et al., 2020; Rienks, 2020; Shell et al., 2020; Singer et al., 2021). A further study reported the same in relation to generic occupational stress (Dagan et al., 2016), and another in terms of job-related health issues (Kwong, 2018). In line with burnout literature, emotional exhaustion and cynicism were also significantly correlated with all three types of symptoms seen in STS (Virga et al., 2020), again demonstrating large effect sizes. Levels of moral distress professionals experienced in response to their work also showed a significant, positive, correlation with STS, with general mental distress observed to mediate this relationship, contributing to a model accounting for 45% of variance in STS levels. Despite moral dilemmas and health issues caused by working in such environments, professionals still reported moderate levels of organisational commitment also significantly predicted STS, with only small effects observed.

Racism

In a study of solely Black Mental Health Therapists, Shell et al. (2021) explored the impact of race-related stress on STS, observing significant positive correlations between STS and cultural racism, individual racism, and institutional racism. The first two demonstrated small effects, and the latter moderate effects. When holding demographic and work-related predictors constant, individual racism accounted for 5% of variance in STS, cultural racism also accounted for 5%, and institutional racism accounted for 10%.

Organisational Culture

In the one paper that explored organisational culture in relation to STS, no significant relationship was found in terms of composite score (Choi, 2011). In other findings, researchers highlighted that professionals who had access to strategic organisational information held significantly lower levels of STS, suggesting transparency fosters a culture that decreases STS levels. Other protective factors observed at the organisation level included higher levels of organisational support (Rienks, 2020), and perceived workplace belongingness (Somoray et al., 2017), both of which held significant, negative relationships with STS, demonstrating moderate and small effects respectively.

Discussion

The current review explored personal and organisational factors influencing STS in MHPs. Searches identified 22 relevant studies. Quality of papers generally was considered moderate to high. One paper was removed during appraisal due to inconsistent reporting of findings. (Baugerud et al., 2018). Of the 21 studies that remained, frequent lack of reporting surrounding non-responders was noted, with one study receiving a 3.9% response rate yet making no effort to consider the impact this may have had on findings (Owens-King, 2019). Lack of response is a common difficulty in cross-sectional research, but whilst historically scholars have associated poor response with invalid findings (McAvoy & Kaner, 1996),

recent empirical research has observed little relationship between the two (Hendra & Hill, 2018). Thus, studies demonstrating significantly small response rates (Owens-King, 2019) were not excluded but were interpreted with caution.

Synthesis of findings identified demographic, personal, psychosocial and organisational factors impacting STS levels. Personal and psychosocial influences seemingly held more consistent relationships with STS, perhaps because they were most widely considered. In terms of demographic and organisational factors, although included papers explored a wide breadth of potential predictors, depth was lacking, with only a few studies exploring similar variables and results often inconsistent across these. As such, tentative suggestions are offered in relation to demographic and organisational factors and their relationship with STS, but more research is likely needed for viable conclusions to be drawn.

Predictors of Secondary Traumatic Stress

Demographic Findings

Whilst many demographic variables were considered in relation to secondary trauma, only two demonstrated enough significant findings to warrant further exploration. Despite contradictions in significance, the majority of studies reported negative correlations between STS and age/experience (Dagan et al., 2016; Harker et al., 2016; Lai et al., 2021; Rayner et al., 2020; Singh & Hassard, 2021; Somoray et al., 2017), suggesting younger, early career professionals are more at risk. It could be that older, more experienced professionals become desensitised to trauma exposure, perhaps detaching as a means of protection. This is in line with literature suggesting older professionals experience more depersonalisation (Lee & Choi, 2010; O'Connor et al., 2018), yet contradicts findings by Kwong (2018), which propose suppression of feelings increases STS. As reviews cited above also found that older professionals are more at risk of emotional exhaustion and burnout (Lee & Choi, 2010; O'Connor et al., 2018), which were consistently positively correlated with STS in included

studies, it is difficult to place age-related findings from the current review in the context of existing literature. Further research is needed to clarify intercorrelations present between such variables along with the clinical significance of these.

Personal Findings

Perhaps the most consistently reported relationship throughout all studies was that between personal trauma and STS. Of the 11 papers that explored professionals' personal trauma histories, nine reported significant positive correlations (Dagan et al., 2015; Diehm et al., 2019; Somoray et al., 2017; Yazici & Ozdemir, 2022; Choi, 2011, 2017; Ewer et al., 2019). Professionals with higher levels of personal trauma were likely more impacted by client trauma due to its retriggering of emotions and memories. As three of four studies exploring empathy/altruism also reported positive correlations, observing large effects (Lai et al., 2021; Lakioti et al., 2020; Singh & Hassard, 2021), it could also be seen that such authentic understanding of how clients were feeling led to an intense empathic response that contributed to STS. This is in line with research suggesting those who have experienced trauma demonstrate higher levels of empathy due to an increased awareness of other peoples' emotions, and heightened motivation to help (Lim & DeSteno, 2016; Le et al., 2017). It also provides support for Stamm's (2010) model of Professional Quality of Life which identifies STS as a consequence of CF.

However, the paper by Raynor et al. (2020) needs consideration, with findings suggesting lower empathy predicts STS, which could be the result of samples explored. Whilst Lai et al. (2021) and Lakioti et al. (2020) solely recruited therapists and counsellors, Raynor et al. (2020) recruited mainly social workers. As empathic engagement constitutes such a significant part of a therapist's role, yet social workers more frequently engage in objective decision-making, perhaps empathy increased STS in therapists due to its consistent

and exhaustive nature, whereas decreased STS in social workers, as it allowed professionals to feel a higher sense of achievement in making humane decisions.

This is in line with the work of King and Holosko (2011) in their development of the Empathy Scale for Social Workers (ESSW), which suggests social workers who display empathy work more efficiently and derive a higher sense of achievement at work. Such findings suggest that to keep professionals well in the workplace, support initiatives may need to differ dependent on discipline, perhaps providing opportunities for empathic engagement for social work employees, and opportunities to vent freely and reflect honestly for those in therapeutic roles.

Findings from the current review also identified potential positive effects of STS caused by empathic engagement, through the development of VPTG (Lai et al. 2021). Whilst links between STS and VPTG in the literature are inconsistent, research suggests the development of VPTG is dependent on the extent to which a professional is exposed to client growth after exposure to client trauma (Cohen & Collens, 2013). Whilst continuity and consistency has been identified as an important element of effective care for trauma survivors (Bradway, 2001), such findings suggest perhaps consistency is also important for the professional, by allowing them to see the progress that has been made and adjust overwhelming feelings of empathy to perhaps those of hope. As services move towards trauma-informed working, where increased consideration of client trauma in treatment planning and facilitation may increase risk of exposure, it is imperative that services also provide opportunities for regular reflection surrounding client progress.

Psychosocial Findings

All factors considered psychosocial were deemed to protect MHPS from STS, and although not all papers explored their relevance, those that did consistently reported significant findings. Factors found to be negatively correlated with STS included

professionals' use of coping strategies (self-care, work to home transition plans, activities and hobbies), mindfulness, supervision (frequency/effectiveness of supervision, supervisory relationship) and level of social support. As all of these factors involved professionals' engagement in activities allowing connection and reflection in relation to others, self, and the environment, it could be that psychosocial activities decreased STS as they provided opportunities to share concerns in relation to work with clients and reflect on emotional and physiological responses, decreasing the likelihood of becoming overwhelmed by the work. This is in line with research into psychosocial support and activities used by professionals during the COVID-19 pandemic, which identified that psychosocial strategies, particularly collaboration and networking, were no less important than infection control in the midst of disaster management (Hyun et al., 2020). Whilst such strategies were valued by all during the pandemic, for MHPs, STS is an everyday risk, thus increasing opportunities for continued reflection, connection and growth needs to be a continuous priority.

Organisational Findings

In terms of organisational factors, every study that explored burnout reported it had a significant positive relationship with STS. This may have been caused by MHPs regular experience of morally distressing situations within the work setting (Christodoulou-Fella et al., 2017), caused by large caseloads and longer hours, both of which were found to be significant predictors of STS (Fye et al., 2021; Shell et al., 2021; Singer et al., 2021). As neither workload size nor hours worked is completely within a professional's control, it could be that STS develops due to an increased pressure that decreases capacity for stress. Findings have highlighted empathy as particularly high within MHPs, which increases felt pressure to help, resulting in larger caseloads and either working overtime and burning out, or not completing the work set, both of which reduce quality of care provided. Larger caseloads also mean less time spent engaged in reflective, connective practices, decreasing capacity for

stress. Therefore when clients describe past trauma, professionals lack the ability to cope with this, and thus experience traumatic stress reactions.

Such findings align with research that suggests burnout, moral distress, and STS are by-products of the system an individual works in (Epstein et al., 2020). Here, organisations are conceptualised as "moral communities", uniting individuals in the shared value and/or goal of wanting to help others. As such, it is seen as the organisation's responsibility to provide a morally safe working environment. However, as seen in findings from the current review, this isn't always the case, especially considering pressures placed on mental health services at present. As staffing crises faced within the mental health sector are likely to increase workloads, thus increasing likelihood of STS and more staff absences, organisations need to prioritise the wellbeing of the staff they do have, to reduce further crises long-term.

Strengths and Limitations

A strength of the current review includes its inclusion of papers representing a diverse range of countries. Nonetheless, this could also be seen as a limitation. Whilst the majority of research included originated in America, a large proportion of papers are the only representatives from their country. Whilst exploring a multitude of diverse perspectives and experiences surrounding STS is important, cultural differences between mental health sectors worldwide need consideration as it is possible differences observed between findings related to cultural variances across services rather than predictor variables explored.

Additionally, limitations of cross-sectional research needs consideration. Whilst crosssectional studies provide timely, cost-effective means of identifying provisional relationships between concepts of interest, they only provide information regarding one moment in time, meaning fluctuation in STS is not monitored, and the potential for confounding variables is high. Further, whilst research included often reported on the direction of relationships between STS and relevant variables, they provided little indication of causal relationships

between factors. Thus, it becomes difficult to identify whether STS is predicted by psychological distress, or emotional labour, or increased empathy, or whether all these things are predicted by STS. Future research should explore relevant factors through use of experimental research designs or qualitative studies, to gain a wider and deeper perspective in relation to STS.

Conclusion

The current review is the first to synthesise findings related to both predictive and protective factors associated with STS in MHPs. Through a systematic selection and synthesis process, a number of connections are made in relation to demographic, personal, psychosocial and organisational factors and a MHP's risk of STS development. At present, personal predictors are seemingly the most frequently explored, with a professional's own trauma history, and use of empathy when working with distressed clients increasing risk of STS. As STS derived from empathy has also been associated with VPTG, but this is dependent on a professional's observation of client growth, increasing opportunities to connect with clients and their progress could support the reduction of STS development. Furthermore, psychosocial findings in relation to STS suggest that when working with traumatised clients, having opportunities to reflect, connect, and seek support from colleagues and friends is fundamental. Such strategies were particularly important when working in organisations facing immense pressures. In conclusion, both individual practitioners and organisations overseeing their employment are encouraged to prioritise independent and shared reflective learning opportunities that facilitate staff members' consideration of the work they undertake and its impact. It is hoped shared responsibility surrounding such efforts will allow staff to feel more empowered and better supported within their roles, decreasing STS levels across the mental health workforce and thus improving quality of care.

References

- Alisic, E., Zalta, A. K., van Wesel, F., Larsen, S. E., Hafstad, G. S., Hassanpour, K., & Smid, G. E. (2014). Rates of post-traumatic stress disorder in trauma-exposed children and adolescents: Meta-analysis. *British Journal of Psychiatry*, 204(5), 335–340. https://doi.org/10.1192/bjp.bp.113.131227
- Alshabanat, A., Zafari, Z., Albanyan, O., Dairi, M., & FitzGerald, J. M. (2015). Asthma and COPD overlap syndrome (ACOS): A systematic review and meta-analysis. *PLOS ONE*, *10*(9). https://doi.org/10.1371/journal.pone.0136065
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders: DSM-5*.
- Arnold, D., Calhoun, L. G., Tedeschi, R., & Cann, A. (2005). Vicarious posttraumatic growth in psychotherapy. *Journal of Humanistic Psychology*, 45(2), 239–263. https://doi.org/10.1177/0022167805274729
- Badour, C. L., Bown, S., Adams, T. G., Bunaciu, L., & Feldner, M. T. (2012). Specificity of fear and disgust experienced during traumatic interpersonal victimization in predicting posttraumatic stress and contamination-based obsessive–compulsive symptoms. *Journal of Anxiety Disorders*, 26(5), 590–598.
 https://doi.org/10.1016/j.janxdis.2012.03.001
- Baugerud, G. A., Vanbaek, 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, 215–235. https://doi.org/10.1093/bjsw/bcx002

- Bradway, P.A. (2001) *Healing qualities of relationships: Voices of women survivors of interpersonal trauma*. Ann Arbor: UMI.
- Beckett, P., Holmes, D., Phipps, M., Patton, D., & Molloy, L. (2017). Trauma-informed care and practice: Practice Improvement Strategies in an Inpatient Mental Health Ward. *Journal of Psychosocial Nursing and Mental Health Services*, 55(10), 34–38. https://doi.org/10.3928/02793695-20170818-03
- Bride, B. E., Jones, J. L., & Macmaster, S. A. (2007). Correlates of secondary traumatic stress in Child Protective Services Workers. *Journal of Evidence-Based Social Work*, 4(3–4), 69–80. https://doi.org/10.1300/j394v04n03_05
- Brown, D., Igoumenou, A., Mortlock, A., Gupta, N., & Das, M. (2017). Work-related stress in Forensic Mental Health Professionals: A systematic review. *Journal of Forensic Practice*, 19(3), 227–238. https://doi.org/10.1108/jfp-05-2016-0024
- 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. (2016). 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
- Christodoulou-Fella, M., Middleton, N., Papathanassoglou, E. D., & Karanikola, M. N.
 (2017). Exploration of the association between nurses' moral distress and secondary traumatic stress syndrome: Implications for patient safety in Mental Health Services.
 BioMed Research International, 2017, 1–19. https://doi.org/10.1155/2017/1908712

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), 75–86. https://doi.org/10.1037/a0033798

Cohen, J. (2009). Statistical Power Analysis for the behavioral sciences. Psychology Press.

- Cohen, K., & Collens, P. (2013). The impact of trauma work on trauma workers: A metasynthesis on vicarious trauma and vicarious posttraumatic growth. *Psychological Trauma: Theory, Research, Practice, and Policy*, 5(6), 570–580.
 https://doi.org/10.1037/a0030388
- Cordes, C. L., Dougherty, T. W., & Blum, M. (1997). Patterns of burnout among managers and professionals: A comparison of models. *Journal of Organizational Behavior*, 18(6), 685–701. https://doi.org/10.1002/(sici)1099-1379(199711)18:6<685::aidjob817>3.0.co;2-u
- Cox, K., & Steiner, S. (2013). Self-care in Social Work: A guide for practitioners, supervisors, and administrators. NASW Press.
- Dagan, K., Itzhaky, H., & Ben-Porat, A. (2015). Therapists working with trauma victims: The contribution of personal, environmental, and professional-organizational resources to Secondary Traumatization. *Journal of Trauma & Dissociation*, *16*(5), 592–606. https://doi.org/10.1080/15299732.2015.1037038
- Dagan, S. W., Ben-Porat, A., & Itzhaky, H. (2016). Child Protection Workers Dealing With Child Abuse: The contribution of personal, social and organizational resources to

Secondary Traumatization. *Child Abuse & Neglect*, *51*, 203–211. https://doi.org/10.1016/j.chiabu.2015.10.008

- Diehm, R. M., Mankowitz, N. N., & King, R. M. (2019). Secondary traumatic stress in Australian psychologists: Individual risk and protective factors. *Traumatology*, 25(3), 196–202. https://doi.org/10.1037/trm0000181
- Downes, M. J., Brennan, M. L., Williams, H. C., & Dean, R. S. (2016). Development of a critical appraisal tool to assess the quality of cross-sectional studies (axis). *BMJ Open*, 6(12). https://doi.org/10.1136/bmjopen-2016-011458
- Dworkin, E. R., Sorell, N. R., & Allen, N. E. (2014). Individual-and setting-level correlates of secondary traumatic stress in rape crisis center staff. *Journal of Interpersonal Violence*, *31*(4), 743–752. https://doi.org/10.1177/0886260514556111
- Edwards, D., Burnard, P., Coyle, D., Fothergill, A., & Hannigan, B. (2000). Stress and burnout in Community Mental Health Nursing: A review of the literature. *Journal of Psychiatric and Mental Health Nursing*, 7(1), 7–14. https://doi.org/10.1046/j.1365-2850.2000.00258.x
- Epstein, E. G., Haizlip, J., Liaschenko, J., Zhao, D., Bennett, R., & Marshall, M. F. (2020).
 Moral distress, mattering, and secondary traumatic stress in provider Burnout: A call for moral community. *AACN Advanced Critical Care*, *31*(2), 146–157.
 https://doi.org/10.4037/aacnacc2020285
- Ewer, P. L., Teesson, M., Sannibale, C., Roche, A., & Mills, K. L. (2014). The prevalence and correlates of secondary traumatic stress among alcohol and other drug workers in Australia. *Drug and Alcohol Review*, 34(3), 252–258. https://doi.org/10.1111/dar.12204

- Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V.,
 Koss, M. P., & Marks, J. S. (1998). Relationship of childhood abuse and household
 dysfunction to many of the leading causes of death in adults. *American Journal of Preventive Medicine*, 14(4), 245–258. https://doi.org/10.1016/s0749-3797(98)00017-8
- Figley, C. R. (1995). Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized. New York, NY: Bruner/Mazel.

Freudenberger, H. J. (1974). Staff burn-out. Journal of Social Issues, 30(1), 159–165.

- Freudenberger, H. J. (1977). Burn-out: The organizational menace. *Training & Development Journal*.
- Fye, H. J., Cook, R. M., Choi, Y., & Baltrinic, E. R. (2021). Professional quality of life and affective distress among prelicensed counselors. *Journal of Counseling & Development*, 99(4), 429–439. https://doi.org/10.1002/jcad.12395
- Grant, D. M., Beck, J. G., Marques, L., Palyo, S. A., & Clapp, J. D. (2008). The structure of distress following trauma: Posttraumatic stress disorder, major depressive disorder, and generalized anxiety disorder. *Journal of Abnormal Psychology*, *117*(3), 662–672. https://doi.org/10.1037/a0012591
- Harker, R., Pidgeon, A. M., Klaassen, F., & King, S. (2016). Exploring resilience and mindfulness as preventative factors for psychological distress burnout and secondary traumatic stress among human service professionals. *Work*, *54*(3), 631–637. https://doi.org/10.3233/wor-162311

- Hendra, R., & Hill, A. (2018). Rethinking response rates: New evidence of little relationship between survey response rates and nonresponse bias. *Evaluation Review*, 43(5), 307–330. https://doi.org/10.1177/0193841x18807719
- 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
- Herzog, R., Álvarez-Pasquin, M. J., Díaz, C., Del Barrio, J. L., Estrada, J. M., & Gil, Á. (2013). Are Healthcare Workers' intentions to vaccinate related to their knowledge, beliefs and attitudes? A systematic review. *BMC Public Health*, *13*(1). https://doi.org/10.1186/1471-2458-13-154
- Hyun, J., You, S., Sohn, S., Kim, S.-J., Bae, J., Baik, M., Cho, I. H., Choi, H., Choi, K.-S., Chung, C.-S., Jeong, C., Joo, H., Kim, E., Kim, H., Kim, H. S., Ko, J., Lee, J. H., Lee, S. M., Lee, S. H., & Chung, U. S. (2020). Psychosocial support during the COVID-19 outbreak in Korea: Activities of multidisciplinary mental health professionals. *Journal of Korean Medical Science*, *35*(22). https://doi.org/10.3346/jkms.2020.35.e211
- Joinson, C. (1992). Coping with compassion fatigue. *Nursing*, 22(4), 116–121. https://doi.org/10.1097/00152193-199204000-00035
- Jonsson, A., & Segesten, K. (2004). Guilt, shame and need for a container: A study of posttraumatic stress among ambulance personnel. *Accident and Emergency Nursing*, *12*(4), 215–223. https://doi.org/10.1016/j.aaen.2004.05.001

- Kalliath, T. J., O'Driscoll, M. P., Gillespie, D. F., & Bluedorn, A. C. (2000). A test of the Maslach Burnout Inventory in three samples of healthcare professionals. *Work & Stress*, 14(1), 35–50. https://doi.org/10.1080/026783700417212
- King, S., & Holosko, M. J. (2011). The development and initial validation of the Empathy Scale for social workers. *Research on Social Work Practice*, 22(2), 174–185. https://doi.org/10.1177/1049731511417136
- Kwong, K. (2018). Assessing secondary trauma, Compassion Satisfaction, and burnout implications for professional education for Asian-American social workers.
 International Journal of Higher Education, 7(5), 75.
 https://doi.org/10.5430/ijhe.v7n5p75
- Lai, L., Ren, Z., Yan, Y., Niu, G., Zhao, C., Luo, M., & Zhang, L. (2021). The double-edged-sword effect of empathy: The secondary traumatic stress and vicarious posttraumatic growth of psychological hotline counselors during the outbreak of covid-19. *Acta Psychologica Sinica*, *53*(9), 992–1002. https://doi.org/10.3724/sp.j.1041.2021.00992
- Lakioti, A., Stalikas, A., & Pezirkianidis, C. (2020). The role of personal, professional, and psychological factors in therapists' resilience. *Professional Psychology: Research and Practice*, 51(6), 560–570. https://doi.org/10.1037/pro0000306
- Le, A., Mahurin, E., & Zarins, S. (2017). Adverse Childhood Events, Empathy, and Altruism. *Office of the Vice Chancellor for Research*.
- Lee, S. M., & Choi, B. Y. (2010). Individual and work-related factors influencing burnout of mental health professionals: A meta-analysis. *PsycEXTRA Dataset*. https://doi.org/10.1037/e572992012-062

- Leiter, M. P., & Maslach, C. (1999). Six areas of worklife: a model of the organizational context of burnout. *Journal of Health and Human Services*, 472–489.
- Lerias, D., & Byrne, M. K. (2003). Vicarious traumatization: Symptoms and predictors. *Stress and Health*, *19*(3), 129–138. https://doi.org/10.1002/smi.969
- Lim, D., & DeSteno, D. (2016). Suffering and compassion: The links among adverse life experiences, empathy, compassion, and prosocial behavior. *Emotion*, 16(2), 175–182. https://doi.org/10.1037/emo0000144
- MacIntosh, H. B., Godbout, N., & Dubash, N. (2015). Borderline personality disorder:
 Disorder of trauma or personality, a review of the empirical literature. *Canadian Psychology / Psychologie Canadienne*, 56(2), 227–241.
 https://doi.org/10.1037/cap0000028
- Maslach, C. (2015). Burnout: The cost of caring. Malor Books.
- Maslach, C., & Jackson, S. E. (1997). Maslach Burnout Inventory. *Scarecrow Education*. https://doi.org/10.1037/t05190-000
- McAvoy, B. R., & Kaner, E. F. (1996). General Practice Postal Surveys: A Questionnaire Too Far? *BMJ*, *313*(7059), 732–733. https://doi.org/10.1136/bmj.313.7059.732
- Modesti, P. A., Reboldi, G., Cappuccio, F. P., Agyemang, C., Remuzzi, G., Rapi, S.,
 Perruolo, E., & Parati, G. (2016). Panethnic differences in blood pressure in Europe: A systematic review and meta-analysis. *PLOS ONE*, *11*(1).
 https://doi.org/10.1371/journal.pone.0147601

- Newell, J M, & MacNeil, G. A. (2010). *Professional burnout, vicarious trauma, secondary traumatic stress, and compassion fatigue* (2nd ed., Vol. 6). Best practices in mental health.
- Newell, Jason M., Nelson-Gardell, D., & MacNeil, G. (2015). Clinician responses to client traumas: A chronological review of constructs and terminology. *Trauma, Violence, & Abuse*, 17(3), 306–313. https://doi.org/10.1177/1524838015584365
- NHS. (2019). NHS Long Term Plan V1.2 August 2019. The NHS Long Term Plan. https://www.longtermplan.nhs.uk/wp-content/uploads/2019/08/nhs-long-term-planversion-1.2.pdf
- Owens-King, A. P. (2019). Secondary traumatic stress and self-care inextricably linked. Journal of Human Behavior in the Social Environment, 29(1), 37–47. https://doi.org/10.1080/10911359.2018.1472703
- O'Connor, K., Muller Neff, D., & Pitman, S. (2018). Burnout in mental health professionals: A systematic review and meta-analysis of prevalence and determinants. *European Psychiatry*, 53, 74–99. https://doi.org/10.1016/j.eurpsy.2018.06.003
- Page, M. J., McKenzie, J., Bossuyt, P., Boutron, I., Hoffmann, T., mulrow, cindy, Shamseer,
 L., Tetzlaff, J., Akl, E., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J.,
 Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E., Mayo-Wilson, E., McDonald, S., ...
 Moher, D. (2020). *The Prisma 2020 Statement: An Updated Guideline for Reporting Systematic Reviews*. https://doi.org/10.31222/osf.io/v7gm2

- Portman-Thompson, K. (2020). Implementing trauma-informed care in mental health services. *Mental Health Practice*, 23(3), 34–41. https://doi.org/10.7748/mhp.2020.e1443
- Quinn, A., Ji, P., & Nackerud, L. (2018). Predictors of secondary traumatic stress among social workers: Supervision, income, and caseload size. *Journal of Social Work*, 19(4), 504–528. https://doi.org/10.1177/1468017318762450
- Ratrout, H. F., & Hamdan-Mansour, A. M. (2019). Secondary traumatic stress among emergency nurses: Prevalence, predictors, and consequences. *International Journal of Nursing Practice*, 26(1). https://doi.org/10.1111/ijn.12767
- Rayner, S., Davis, C., Moore, M., & Cadet, T. (2020). Secondary traumatic stress and related factors in Australian social workers and psychologists. *Health & Social Work*, 45(2), 122–130. https://doi.org/10.1093/hsw/hlaa001
- Rienks, S. L. (2020). An exploration of child welfare caseworkers' experience of secondary trauma and strategies for coping. *Child Abuse & Neglect*, 110, 104355. https://doi.org/10.1016/j.chiabu.2020.104355
- Rössler, W. (2012). Stress, Burnout, and job dissatisfaction in mental health workers.
 European Archives of Psychiatry and Clinical Neuroscience, 262(S2), 65–69.
 https://doi.org/10.1007/s00406-012-0353-4
- Sabin-Farrell, R., & Turpin, G. (2003). Vicarious traumatization: Implications for the Mental Health of Health Workers? *Clinical Psychology Review*, 23(3), 449–480. https://doi.org/10.1016/s0272-7358(03)00030-8

- Shah, S. A., Garland, E., & Katz, C. (2007). Secondary traumatic stress: Prevalence in humanitarian aid workers in India. *Traumatology*, 13(1), 59–70. https://doi.org/10.1177/1534765607299910
- Shell, E. M., Teodorescu, D., & Williams, L. D. (2021). Investigating race-related stress, Burnout, and secondary traumatic stress for Black Mental Health Therapists. *Journal of Black Psychology*, 47(8), 669–694. https://doi.org/10.1177/00957984211033963
- Singer, J., Cummings, C., Moody, S. A., & Benuto, L. T. (2019). Reducing burnout, vicarious trauma, and secondary traumatic stress through investigating purpose in life in social workers. *Journal of Social Work*, 20(5), 620–638. https://doi.org/10.1177/1468017319853057
- Singh, J., & Hassard, J. (2021). Emotional labour, emotional regulation strategies, and secondary traumatic stress: A cross-sectional study of Allied mental health professionals in the UK. *The Social Science Journal*, 1–15. https://doi.org/10.1080/03623319.2021.1979825
- 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
- Somoray, K., Shakespeare-finch, J., & Armstrong, D. (2017). The impact of personality and workplace belongingness on Mental Health Workers' professional quality of life. *Australian Psychologist*, 52(1), 52–60. https://doi.org/10.1111/ap.12182
- Stamm, B H. (1995). Professional Quality of Life Scale. *PsycTESTS Dataset*. https://doi.org/10.1037/t05192-000

- Stamm, B. (1999). Secondary traumatic stress: Self-care issues for clinicians, researchers, and educators. Sidran Press.
- Torjesen, I. (2019). Childhood trauma doubles risk of mental health conditions. *BMJ*, 1854. https://doi.org/10.1136/bmj.1854
- Trottier, K., & MacDonald, D. E. (2017). Update on psychological trauma, other severe adverse experiences and eating disorders: State of the research and Future Research Directions. *Current Psychiatry Reports*, 19(8). https://doi.org/10.1007/s11920-017-0806-6
- Turgoose, D., & Maddox, L. (2017). Predictors of compassion fatigue in mental health professionals: A narrative review. *Traumatology*, 23(2), 172–185. https://doi.org/10.1037/trm0000116
- Vîrgă, D., Baciu, E.-L., Lazăr, T.-A., & Lupşa, D. (2020). Psychological Capital protects social workers from burnout and secondary traumatic stress. *Sustainability*, *12*(6), 2246. https://doi.org/10.3390/su12062246
- Wells, G. A., Shea, B., O'Connell, D., Peterson, J., Welch, V., Losos, M., & Tugwell, P. (2000). The Newcastle-Ottawa Scale (NOS) for Assessing the Quality of Nonrandomised Studies in Meta-Analyses.
- Wiehn, J., Hornberg, C., & Fischer, F. (2018). How adverse childhood experiences relate to single and multiple health risk behaviours in German public university students: A cross-sectional analysis. *BMC Public Health*, 18(1). https://doi.org/10.1186/s12889-018-5926-3

Yazıcı, H., & Özdemir, M. (2022). Predictors of secondary traumatic stress in mental health professionals: Trauma history, self-compassion, emotional intelligence. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 41(1), 162–175.

https://doi.org/10.1007/s10942-022-00458-y

Conceptual Search Area	Search terms
Secondary traumatic stress	(DE "secondary traumatic stress" OR DE "occupational stress: OR DE "compassion fatigue" OR DE "stress reactions" OR DE burnout OR DE "caregiver burden") OR TI ("secondary traumatic stress" OR STS OR "compassion fatigue" OR "vicarious trauma*" OR "indirect trauma" OR PTSD) OR AB ("secondary traumatic stress" OR STS OR "compassion fatigue" OR "vicarious trauma*" OR "indirect trauma" OR PTSD) AND
Discipline	(DE "mental health personnel" OR DE "psychiatric staff" OR DE "psychiatric nurses" OR DE "psychiatric social workers" OR DE "social workers" OR DE psychiatrists OR DE "clinical psychologists" OR DE "counselling psychologists" OR DE psychotherapists OR DE therapists) OR TI ("mental health professionals" OR "mental health workers" OR "mental health personnel" OR psychiatrists OR psychologists OR psychotherapists OR therapists OR counsellors OR "social workers" OR "mental health nurses" OR "mental health nurses" OR "mental health personnel" OR "mental health personnel" OR "psychiatric nurses" OR "mental health care assistants") OR AB ("mental health professionals" OR "mental health workers" OR "mental health personnel" OR "social workers" OR "mental health professionals" OR psychologists OR psychologists OR psychologists OR psychologists OR Social workers" OR "mental health care assistants") OR AB ("mental health professionals" OR "mental health workers" OR "mental health personnel" OR psychiatrists OR psychologists OR psychologists OR psychologists OR social workers" OR "mental health workers" OR "mental health nurses" OR "mental healthealth nurses" OR "mental health nurs
Variables of interest	(DE "risk factors" OR DE "protective factors" OR DE prevention OR DE predisposition OR DE causality OR DE "resilience (psychological)" OR DE "psychosocial factors" OR "personality correlates" OR DE "personality traits" OR DE "demographic characteristics") OR TI ("risk factor*" OR "predisposing factor*" OR risk* OR determinant OR cause OR correlate OR "protective factor*" OR protector OR protective OR preventative OR personal OR individual OR characteristic OR attribute OR quality OR organisational) OR AB ("risk factor*" OR "predisposing factor*" OR risk* OR determinant OR cause OR correlate OR "protective factor*" OR protector OR protective OR preventative OR personal OR individual OR characteristic OR attribute OR quality OR organisational) OR AB ("risk factor*" OR preventative OR personal OR individual OR characteristic OR attribute OR quality OR factor*" OR protector OR protective OR preventative OR personal OR individual OR characteristic OR attribute OR quality OR organisational) OR AB ("risk factor*" OR preventative OR personal OR individual OR characteristic OR attribute OR quality OR factor*" OR protector OR protective OR preventative OR personal OR individual OR characteristic OR attribute OR quality OR organisational)

Table 1: Search Terms Utilised (all searches undertaken 20 March 2023)

	1. Were the aims/objectives of the study clear?	2. Was the study design appropriate for the stated aim(s)?	3. Was the sample size justified?	4. Was the target/reference population clearly defined?	 Was the sample from taken from an appropriate population base so that is closely represented the target/reference population under investigation? 	 Was the selection process likely to select subjects/participants that were representative of the target/reference population under investigation? 	7. Were measures undertaken to address and categorise non-responders?	8. Were the risk factor and outcome variables measured appropriate to the aims of the study?	 Were the risk factor and outcome variables measured correctly using instruments/measurements that had been trialled, piloted or published previously? 	10. Is it clear what was used to determine statistical significance and/or precision estimates? E.g., p-values, confidence intervals	11. Were the methods (including statistical methods) sufficiently described to enable them to be repeated?	12. Were the basic data adequately described?	13. Does the response rate raise concerns about non-response bias?	14. If appropriate, was information about non-responders described?	15. Were the results internally consistent?	 Were the results presented for all the analyses described in the method? 	17. Were the authors' discussions and conclusions justified by the results?	18. Were the limitations of the study discussed?	 Were there any funding sources of conflicts of interest that may affect the author's interpretation of the results? 	20. Was ethical approval or consent of participants attained?	
Study																					Score
Baugerud et al. (2018)**	1	1	N	1	1	1	Ν	1	1	1	1	Ν	1	N	N	1	N	1	U	1	65%
Choi (2011)	1	1	Ν	1	1	1	Ν	1	1	1	Ν	Ν	Y	Ν	1	1	1	1	1	1	70%
Choi (2017)	1	1	N	1	1	1	Ν	1	1	1	N	1	Y	N	1	1	1	1	1	1	75%
Christodoulou-Fella et al. (2017)	1	1	1	1	1	Ν	Ν	1	Ν	1	1	1	1	Ν	1	1	1	1	1	1	80%
Dagan et al. (2017)	1	1	Ν	1	1	1	Ν	1	1	1	1	1	Y	Ν	1	1	1	1	U	1	75%
Dagan et al. (2016)	1	1	N	1	1	Ν	Ν	1	1	1	1	1	1	Ν	N	1	1	1	U	1	70%
Diehm et al. (2019)	1	1	N	1	1	1	N	1	1	1	1	1	Y	Y	1	1	1	1	U	U	65%

Table 2: Overview of Quality Appraisal for Included Papers

	. Were the aims/objectives of the study clear?	Was the study design appropriate for the stated $\operatorname{aim}(s)$?	Was the sample size justified?	Was the target/reference population clearly defined?	Was the sample from taken from an appropriate population base so that is closely represented the target/reference population under investigation?	Was the selection process likely to select subjects/participants that were representative of the target/reference population under investigation?	Were measures undertaken to address and categorise non-responders?	Were the risk factor and outcome variables measured appropriate to the aims of the study?	Were the risk factor and outcome variables measured correctly using instruments/measurements that had been trialled, piloted or published previously?	10. Is it clear what was used to determine statistical significance and/or precision estimates? E.g., p-values, confidence intervals	 Were the methods (including statistical methods) sufficiently described to enable them to be repeated? 	12. Were the basic data adequately described?	13. Does the response rate raise concerns about non-response bias?	14. If appropriate, was information about non-responders described?	15. Were the results internally consistent?	16. Were the results presented for all the analyses described in the method?	17. Were the authors' discussions and conclusions justified by the results?	18. Were the limitations of the study discussed?	 Were there any funding sources of conflicts of interest that may affect the author's interpretation of the results? 	20. Was ethical approval or consent of participants attained?	
Study	1.	2.	3.	4	5.	6.	7.	×.	9.	1	1	1	1	Ť	1	1	1	1	1	2	Score
Ewer et al. (2015)	1	1	Ν	1	1	1	Ν	1	1	1	1	1	1	N	N	1	1	1	U	1	75%
Fye et al. (2021)	1	1	1	1	1	1	1	1	1	1	1	1	Y	N	1	1	1	1	U	1	85%
Harker et al. (2016)	1	1	Ν	Ν	Ν	U	Ν	Ν	1	1	1	N	Y	N	1	1	1	1	1	U	50%
Kwong (2018)	1	1	Ν	1	1	1	N	1	N	1	1	1	Y	Ν	1	1	1	1	U	U	65%
Lai et al. (2021)	1	1	N	1	1	Ν	N	1	1	1	1	1	1	N	1	1	1	1	U	1	75%
Lakioti et al. (2020)	1	1	N	1	1	1	N	1	1	1	1	1	Y	N	1	1	1	1	U	1	75%
Owens-King (2019)	1	1	N	1	1	Ν	Ν	1	1	Ν	Ν	N	Y	N	1	N	1	N	U	1	45%
Quinn (2019)	1	1	N	1	1	1	N	1	N	1	1	1	Y	Ν	1	1	1	1	1	1	75%

	 Were the aims/objectives of the study clear? 	2. Was the study design appropriate for the stated aim(s)?	3. Was the sample size justified?	4. Was the target/reference population clearly defined?	 Was the sample from taken from an appropriate population base so that is closely represented the target/reference population under investigation? 	 Was the selection process likely to select subjects/participants that were representative of the target/reference population under investigation? 	7. Were measures undertaken to address and categorise non-responders?	8. Were the risk factor and outcome variables measured appropriate to the aims of the study?	 Were the risk factor and outcome variables measured correctly using instruments/measurements that had been trialled, piloted or published previously? 	 Is it clear what was used to determine statistical significance and/or precision estimates? E.g., p-values, confidence intervals 	 Were the methods (including statistical methods) sufficiently described to enable them to be repeated? 	12. Were the basic data adequately described?	13. Does the response rate raise concerns about non-response bias?	14. If appropriate, was information about non-responders described?	15. Were the results internally consistent?	16. Were the results presented for all the analyses described in the method?	17. Were the authors' discussions and conclusions justified by the results?	18. Were the limitations of the study discussed?	 Were there any funding sources of conflicts of interest that may affect the author's interpretation of the results? 	20. Was ethical approval or consent of participants attained?	
Study				7	4,	C	(-	~	<u> </u>		-	-								(1	Quality
Rayner et al. (2020)	1	1	N	1	N	N	N	1	1	1	1	1	Y	N	1	1	1	1	U	1	65%
Rienks (2020)	1	1	Ν	1	1	1	N	1	1	1	1	N	1	N	N	1	1	1	1	1	75%
Shell et al. (2021)	1	1	1	1	1	1	N	1	1	1	1	N	U	N	1	1	1	1	1	1	80%
Singer et al. (2021)	1	1	1	1	1	1	N	1	1	1	1	1	U	N	1	N	1	1	1	1	75%
Singh & Hassard (2021)	1	1	1	1	1	1	N	1	1	1	1	1	Y	Ν	1	1	1	1	U	1	80%
Somoray et al. (2017)	1	1	Ν	1	N	U	Ν	1	1	1	1	1	U	N	1	1	1	1	U	1	70%
Virga et al. (2020)	1	1	Ν	1	1	1	Ν	1	1	1	1	1	U	N	1	1	1	1	1	U	75%
Yazici & Ozdemir (2022)	1	1	1	1	1	Ν	1	1	1	1	1	1	U	Ν	1	1	1	1	1	1	80%

I = Yes, N = No, U = Unknown, Items in bold red are reverse scored

Table 3: Data Extracted from Included Papers

Authors/ Location	Study Design/ Aims	Sample Size/ Demographics	Factors Explored/ Measures Used	Main Findings	Effect Sizes
Choi (2011) USA	Cross-sectional Explored impact of perceived organisational support/supervision quality on STS when controlling for demographic variables.	Agency social workers providing support to individuals who have experienced domestic violence/sexual assault. N=154 M Age = 46.7 years (SD = 17.7) 78.6% female 87.7% Caucasian	 STS Secondary Traumatic Stress Scale (STSS, Bride et al., 2004) Demographic Info (controlled for) Age, experience working with trauma cases, personal trauma history, salary, gender, and race/ethnicity. Work Conditions Hours per week working on trauma related cases (direct and indirect), Quality of supervision (including frequency, attentiveness, encouragement, and development). 	Mean STS score = 32.07 (SD = 10.39) Social workers with more socio-political support (β = -2.216, p < .05) and access to strategic information (β = -2.001, p < .05) experienced lower STS levels. Past trauma was the only control variable to significantly predict STS (β = 1.37, p < .05). The final model accounted for 15% of the variance in STS. No work related conditions were significantly associated with STS.	Adjusted <i>R</i> ² = .149
Choi (2017) USA ** Same participant pool	Explored impact of psychological empowerment on levels of STS when controlling for individual and		Organisational Support Social Structural Scale (Spreitzer, 1995, 1996; measures socio-political support, strategic information access, resources access, and organisational culture).	Higher levels of PE predicted lower levels of STS (β = -2.63, p < .01). Past trauma history was the only significant control variable STS (β = .209, p < .01). The model accounted for 11% of variance in STS.	Adjusted R^2 = .112
as above	demographic variables		Psychological Empowerment (PE) Psychological Empowerment Instrument developed by Spreitzer (1995; assesses meaningfulness of the work, self-assessed competence, self-motivation, level of perceived impact).	Having a higher sense of impact significantly related to lower STS (β =219, p < .05). This explained 11% variance in STS when controlling for past trauma history (β = .212, p < .01). The addition of other components of PE accounted for an additional 6% variance.	$R^2 = .116$ $R^2 = .067$ $R^2 = .174$

Christodoulou- Fella et al. (2017) Cyprus	Cross-sectional Explored (a) rates of	Cypriot mental health nurses working in child mental health services,	STS Secondary Traumatic Stress Scale (STSS, Bride et al., 2004)	Mean STS score = 31.1 (SD = 10.2) (low to moderate)	
Cyprus	STS, (b) the relationship between moral distress	inpatient units, community mental health services and	Demographic Info	Positive correlations were observed between STSS score and:	
	and severity of STS symptoms, and (c) general mental distress and work-related exhaustion/satisfaction as mediators of the relationship between moral distress and STS	substance misuse treatment centres. N = 206 M Age = 35.3 years (SD = 7.6) 43.7% female 35.9% postgraduate degree	Age, gender, marital status, number of children, education level, years of experience, years in current position, work setting, and rank. Job Satisfaction and Burnout Numeric ratings designed by authors. Moral Distress (MD)	Composite MD score ($p < .001$) Composite GHQ-8 score ($p < .001$) GHQ - anxiety/insomnia ($p < .001$) GHQ - somatic symptoms ($p < .001$) GHQ -self-perceived function ($p < .001$) After controlling for job satisfaction, satisfaction from therapy and emotional exhaustion, STS was significantly predicted	r = .35 r = .65 r = .7 r = .52 r = .37 Adjusted R^2 = .20
			Moral Distress Scale-Revised, Adult Nurse Version (M-MDS-MHS; Hamric et al.2012).	by composite MD score ($\beta = 0.269$, $p < .001$). This model accounted for 20% of the variance in STSS score.	
			General Symptoms of Mental Distress Greek version of the General Health Questionnaire (GHQ8; Goldberg et al., 1997; explored general health, anxiety, self-perception of functioning, and depressive/suicidal symptoms).	After adding GHQ-8, associations reduced slightly ($\beta = 0.154$, $p < .005$), thus, the relationship between MD and STSS score is partly mediated by general distress. This model accounted for 45% of variance in STSS score.	Adjusted R^2 = .45
Dagan et al. (2015)	Cross-sectional	Social workers working across Israel with families	STS Secondary Traumatic Stress Scale	Mean STS score = 2.33 (SD = 0.58)	
Israel	Explored STS in relation to: personal variables	and adolescent females experiencing distress.	(STSS, Bride et al., 2004).	Significant correlations were found between STS and:	
	(age, mastery, tolerance for ambiguity, stressors), environmental resources (personal/professional support), professional- organisational resources (caseload, organisational commitment).	N = 217 M Age= 38.36 (SD = 9.41) 76.6% married 80% had children Education 42.5% bachelor's	Stressors The Life Events Questionnaire (Solomon & Flum, 1988), and The Traumatic Experiences Questionnaire (Nijenhuis et al., 1996) **combined to represent one variable	Stressors ($p < .01$) Mastery ($p < .05$) Tolerance for ambiguity ($p < .001$) Caseload ($p < .01$) Organisational commitment ($p < .01$)	r = .36r =15r =37r = .22r = .20

48.4% master's

9.2% studying for master's

Tolerance for ambiguity ($\beta =36, p < .001$),
stressors ($\beta = .28, p < .01$), and heavier
caseloads ($\beta = .17, p < .01$) significantly
predicted STS. The final model accounted

1),	Adjusted R^2
	= .298

			Tolerance for Ambiguity Tolerance for Ambiguity Questionnaire (Freeston et al., 1994).	predicted STS. The final model accounted for 30% of variance.	
			Personal and Professional Support Multidimensional Scale of Perceived Social Support (Zimet et al., 1988).		
			Caseload Self-report of trauma cases on caseload, and exposure to details of clients' trauma experiences.		
			Organisational Commitment Organisational Commitment Questionnaire (Allen & Meyer, 1993; used subscale "continuance commitment").		
Dagan et al.	Cross-sectional	Social workers attending	STS	M STS Score = 2.55 (SD = 0.65)	
(2016) Israel	Compared STS among	conferences and training courses run by the	Secondary Traumatic Stress Scale (STSS, Bride et al., 2004)	STS scores were significantly higher in child	$\eta 2 = .09$
	child protection social workers versus social workers employed at social service	Ministry of Social Affairs and Services. N=255	Demographic Info Age, marital status, education, number of children, professional	protection workers compared to workers in social service departments ($F = 25.67$, p < .001).	
	departments, and	48.6% worked in child	experience, secondary trauma	STS significantly correlated with:	
	examined background	protection	exposure.	Field of practice ($p < .01$)	r = .30
	variables, personal	51.4% worked in social		Mastery ($p < .01$)	r = .17
	variables (mastery), and	service departments	Mastery	Social support $(p < .01)$	r = .16
	elements of social		The Mastery Scale (Pearlin &	Role Stress $(p < .01)$	r = .35
	environment (social	M Age = 41.6, SD = 10.12)	Schooler, 1978).	Supervision effectiveness ($p < .01$)	r =17
	support, effectiveness of supervision, and role	94.2% were female 73.7% were married		Past trauma $(p < .01)$ Exposure to shild abuse detail $(n < .01)$	r = .22 r = .35
	supervision, and role	/ 5. / 76 were married		Exposure to child abuse detail ($p < .01$)	r – .33

Mastery The Mastery Scale (Pearlin & Schooler, 1978).

	stress) as predictors of STS.	75.7% had children	 Personal and Professional Support Multidimensional Scale of Perceived Social Support (Zimet et al., 1988). Effectiveness of Supervision Self-report questionnaire adapted by Lazar & Itzhaky (2000). Role Stress Occupational Stress Questionnaire (Bhagat et al., 1991). Traumatic Experiences Traumatic Experiences Questionnaire (Nijenhuis et al., 1996). 	Years of experience ($\beta =12, p < .05$), field of practice ($\beta = .16, p < .05$), past trauma (β = .16, $p < .01$), exposure to child abuse victims ($\beta = .21, p < .001$), Mastery ($\beta =13, p < .05$), significantly predicted STS. The final model accounted for 29% of the variance in STS (F = 12.47, $p < .001$).	<i>R</i> ² = .29
Diehm et al. (2019) Australia	Cross-sectional Explored personal history of trauma, years of experience, exposure to clients' trauma history, and age as predictors of STS, and social support is a moderating factor.	Australian registered psychologists. N = 78 (represented 0.29% of population) M Age = 42.85 years, SD = 12.46) 82.9% female	STS Secondary Traumatic Stress Scale (STSS, Bride et al., 2004). Demographic Info Age, pathway to registration, employment setting, years of experience, trauma exposure (hours in clinical contact with trauma clients, percentage of trauma clients in caseload). Social Support The Social Support Questionnaire (SSQ; Caplan et al., 1980).	M STS Score = 2.02 (SD = 0.8) (Mild levels) Significant correlations were found between STS and: Social support ($p < .05$) Personal trauma history ($p < .001$) Unresolved trauma ($p < .001$) Hours worked per week ($p < .001$) Exposure to details of trauma ($p < .01$) Personal trauma history accounted for 13.69% of the variance in STS (F (1, 74) 11.62, $p < .001$), perceptions of trauma resolution accounted for an additional 15.3% of variance (F (2, 73) 15.75, $p < .001$). Combined predictor variables accounted for 28.99% of variance in STS.	r =20 r = .37 r = .53 r = .41 r = .30 Cohen's $f = .41$

				Social support was a significant moderator of the relationship between hours of clinical contact with trauma survivors and STS (F (1, 73) = 7.36, p = .008) Participants with low levels of social support had higher levels of STS when spending more clinical hours with trauma patients (F (3, 73) 8.91, p < .001)	$R^2 = .70$ **Effect size could not be calculated
Ewer et al. (2015) Australia	Cross – sectional Compared level of trauma training, extent of exposure to traumatised clients, personal trauma history and general symptoms of mental distress in professionals meeting criteria for STSS and professionals not meeting STSS clinical criteria.	Australian alcohol and other drug workers N = 412 M Age = 44.3 years (SD = 10.7) 70.5% female 21.7% nurses 20.5% counsellors 12.4% psychologists 11.5% case workers 7.1% social workers 26.8% other (doctors, psychiatrists, managers)	 STS Secondary Traumatic Stress Scale (STSS, Bride et al., 2004). Demographic and Personal Factors Level of education/training, hours of supervision, percentage of caseload featuring traumatised clients, and types of trauma experienced by clients. Past Trauma Exposure Composite International Diagnostic Instrument version 2.1 (World Health Organisation, 1997). PTSD PTSD checklist – civilian version (Ruggiero et al., 2003). Depression and Anxiety Short form Depression Anxiety Stress Scale (DASS-21; Koenen et al., 2002). 	One in five participants (19.9%) met criteria for STS. Workers with STS were less likely to have completed tertiary education (95.1% vs. 99.4%; $p = .016$) received less clinical supervision hours each month (median 1h vs. median 2h; $Z = -2.69$, $p = .007$), and had larger proportions of clients with trauma histories (median 90% vs 80%; $Z = 4.18$, $p < .0001$) compared to workers without STSS. Workers with STS were more likely to have: Experienced a traumatic event (88.9% vs, 79%; 95% CI 1.01-4.46) and experienced more trauma types (median 3 vs. 2; $z = 3.52$, p < .01) than workers without STS. Types of trauma more frequently experienced by workers with STS included: War combat ($p < .05$) Serious assault ($p < .05$), Captivation/kidnapping ($p < .05$) Sexual assault ($p < .05$), Childhood trauma (69.2% vs 49.2%; 95 CI 1.37-3.94) Childhood sexual assault (39.5% vs 27.1%; 95% CI 1.06-2.92).	** <i>Effect size</i> <i>could not be</i> <i>calculated</i> OR = 2.12 OR = 2.17 OR = 2.09 OR = 1.86 OR = 1.68 OR = 1.76

Workers with STS were more likely to meet	
criteria for PTSD (22.2% vs 2.7%; 95% CI	
4.37-23.64) and had higher levels of	OR = 10.16
depression (median 24 vs. 16; z = 8.87, <i>p</i> <	
.01), anxiety (median 22 vs. 14; z = 9.25, p <	
.01), and stress (median 30 vs. 20; $z = 9.40$,	
p < .01).	

Fye et al. (2021)	Cross-sectional	Pre-licensed counsellors	STS, burnout and CS	M STS score = 20.62 (SD = 6.21)	
USA		(early career professionals	Professional Quality of Life Scale		
	Explored relationships	completing training to	(Stamm, 2010)	Number of weekly client hours was	$R^2 = .012$
	between individual and	receiving a counselling		positively related to STS ($p < .01$)	
	occupational variables,	license).	Personal/Organisational Info		
	professional quality of		Age, gender, ethnicity, years of	STSS was positively related to:	
	life (including	N = 524	clinical experience, weekly client	Depression	r = .60
	compassion satisfaction	M Age =37.59, SD = 10.7)	hours, weekly supervision hours, type	Anxiety	r = .67
	(CS) burnout, and STS),	Participants identified as:	of degree, state working in.	Stress	r = .77
	and affective distress	Women (81.29%)		Burnout	r = .77
	(depression, anxiety and	Men (13.9%)	Affect		
	stress).	Non binary (1.1%)	Short form Depression and Anxiety	And negatively related to: Compassion	r =47
		Trans (2.5%)	Scale (DASS-21; Lovibond &	satisfaction	
		No response (0.6%)	Lovibond, 1995).		
		- ` ` `		** No p-values were calculated	
		Ethnicity		-	
		White (80.2%)			
		Multi-racial (7.3%)			
		Black (3.4%)			
		Latino (3.2%)			
		Asian (2.3%)			
		Other (3.7%)			
		Educational Background			
		Counsellors (78.2%)			
		Psychology (14.1%)			
		Other (7.6%)			
		(*****)			

Harker et al. (2016) Australia	Cross-sectional Explored resilience and mindfulness as preventative factors of burnout, psychological distress and STS.	Human service professionals working in psychology, social work, counselling, and foster care. N=133 M Age = 39.2, SD = 11.13) 79.7% female 20.3% male)	STS and BurnoutProfessional Quality of Life Scale (Stamm, 2010).Psychological Wellbeing and DistressThe General Wellbeing Scale (GWBS; Dupuy, 1977).Resilience The Resilience Factor Inventory (RFI; Rievich, 2002).	M STS score = 49.3 (SD = 8.48) STS significantly correlated with: Burnout ($p < .01$) Psychological distress ($p < .01$) Resilience ($p < .01$) Mindfulness ($p < .01$) Age, resilience and mindfulness equated for 26% of variance in STS (F (3, 129) = 14.69, p < .001), resilience was the only significant	r = .67 r = .47 r =48 r =41 $R^2 = .26$
			Minfulness The Frieburg Mindfulness Inventory (FMI; Walach, 2006)	predictor, accounting for 24% of variance (<i>F</i> change = $(1, 130) = 40.28$, $p < 0.001$).	R^2 change = 0.24
Kwong (2018)	Cross-sectional	Asian social workers and social work students	STS, Burnout, and CS	M STS score = 21.97 (low to average range)	
USA	Explored work related stressors, demographic characteristics, and beliefs and orientations (altruism, idealism and	working and/or studying in local and national service networks across America. N = 208	Professional Quality of Life Scale (Stamm, 2010). Demographic Info Age, gender, ethnicity, immigration status, parents' immigration status,	STS was significantly correlated with: Burnout ($p < .01$) Job-related health issues ($p < .01$) Altruism ($p < .01$) Social work idealism ($p < .05$)	r = .53 r = .55 r = .23 r = .15
	self-compassion) as predictors of professional quality of life (STS,	M Age = 37 years 82% female	sexual orientation, marital status, educational status, income, work status, job title, job tenure, job related	Self-compassion($p < .01$) Perceived Stress($p < .01$)	r =41 r =43
	burnout and CS).	Ethnicity: Chinese (51.2%) Korean (13.7%)	health problems, religion and zip code.	STS was significantly predicted by: Self-compassion (β =46, p < .05)	Adjusted R ² =.22 Adjusted R ²
		Japanese (8.9%) Filipino (6.5%) Asian Indian (4.2%)	Work Related Stressors Measure compiled based on study by Arrington (2008), assessing18 social	Work-related stressors ($\beta = .25, p < .05$) Social work idealisms ($\beta = .23, p < .05$).	=.056 Adjusted <i>R²</i> =.051
		Multi-racial (6.2%)	work related stressors.	The final model accounted for 34% variance in STS score.	$R^2 = .34$
			Social Work Idealism Measure designed to assess social work idealism (Csikai & Rozensky, 1997).		

			Self-CompassionSelf-Compassion Scale (Neff, 2003).Perceived StressPerceived Stress Scale (Cohen et al.,		
			1983) Stress Management Assessed use of stress management approaches in line with research by Arrington (2008)		
Lai et al. (2021) China	Cross-sectional Explored positive and negative effects of empathy, including: (a) the relationship between empathy and STS, (b) mindfulness as a mediator in the relationship between empathy and STS, and (c) empathy as a predictor of vicarious post-traumatic growth, through the paths of STS.	Professionals working as counsellors on the largest online psychiatric platform in China during the COVID-19 pandemic. N = 776 M Age: 42.57 years (SD = 7.9) 80.4% female Education level: High school (1.4%) Undergraduate (21.8%) Masters/Doctor (76.8%)	 STS Chinese version of the ProQol (Zheng et al., 2013). Demographic Info Age, gender, education, clinical experience, supervision experience, number of cases and trauma cases received by counsellors during their work on the hotline, and personal trauma history. Interpersonal Reactivity Index (IRI; Zhang et al., 2010). Post-Traumatic Growth Inventory (Revised Chinese PTGI; Wang et al., 2011). Search for Meaning (SM) Subscale of the Chinese Meaning in Life Questionnaire (C-ML-Q; Wang & Dai, 2008). Mindful Attention Awareness Scale (MAAS; Brown & Ryan, 2003). 	M STS score = 18.04 (SD = 4.64) STS was significantly correlated with: Age $(p < .001)$ VPTG $(p < .001)$ Searching for meaning $(p < .001)$ Empathy $(p < .001)$ Mindfulness $(p < .001)$ Mindfulness had a significant mediating effect in the relationship between empathy and STS (mediating effect = 0.19, 95% CI: 0.14, 0.24, $p < .001$), accounting for 33.8% of total effect.	r = -0.14 r =30 r = .23 r = .44 r =51 $R^2 = .338$

Lakioti et al. (2020)	Cross-sectional	Greek mental health practitioners working as	STS, burnout and CF Professional Quality of Life Scale	M STS score = 17.93 (SD = 4.47)	
Greece	Explored factors that protect professionals	therapists, recruited through National project.	(Stamm, 2010).	STS was significantly correlated with: Compassion satisfaction ($p < .01$)	r =23
	(counselling self-	8 I J	Demographic Info	Burnout ($p < .001$)	r = .48
	efficacy, empathy,	N = 163	Age, gender, family status, highest	Counselling Self-Efficacy ($p < .01$)	r =25
	wellbeing) from work	M Age = 40.62 years (SD	degree obtained, professional	Empathy $(p < .001)$	r = .34
	stressors (STS, burnout).	= 9.75)	identity, therapeutic approach,	Positive Emotion ($p < .001$)	r =31
		84.7% female	workplace setting, workload,	Relationships ($p < .001$)	r =28
			frequency of supervision, and	Meaning $(p < .001)$	<i>r</i> =31
		Psychologists (60.2%),	participation in personal therapy.	Accomplishment ($p < .01$)	r = .22
		counsellors (17.2%),	Counsellor Activity Self-Efficacy		
		psychotherapist (16%),	Scale (CASES; Lent et al., 2003).	STS was significantly predicted by	
		Other (6.7%).		counselling self-efficacy $(F(1, 155) = 4.53,$	$R^2 = .06$
			Brief Interpersonal Reactivity	p = .035), empathy (F (1, 154) = 20.35, p	$R^2 = .17$
		Bachelor: 10.4%	Index (B-IRI; Ingoglia et al., 2016).	=.000), positive emotion (F (1,153) = 8, p =	$R^2 = .21$
		Postgrad: 6.1%		.005), and meaning $(F(1, 150) = 4.80, p =$	$R^2 = .27$
		MSc: 43.6%	PERMA Profiler (Butler & Kern,	.030). The final model accounted for 27%	
		PhD: 14.7%	2016; assessed five components of wellbeing).	variance in STS.	
				Stepwise regression of predicting variables	
				revealed empathy ($F(1, 155) = 19.89, p =$	$R^2 = .198$
				.000) had a significant positive influence on	
				STS, and meaning (<i>F</i> (1, 154) = 16.18, <i>p</i> =	
				.000) had a significant inverse influence on	
				STS.	
Owens-King	Cross-sectional	Social workers registered	STS	STS Mean = 34 (SD = 12.2)	
(2019)		with the National	Secondary Traumatic Stress Scale	(low score)	
USA	Explored the relationship	Association of Social	(STSS, Bride et al., 2004).		
	between clinical practice	Workers who identified		STS was significantly predicted by	
	with trauma-exposed	mental health as their	Self-Care	magnitude of work with trauma clients and	$R^2 = .23$
	clients and STS, and the	speciality practice area.	Coping Strategies Inventory (CSI;	self-care ($F = 22.13$, $p < .001$). Magnitude of	
	role of coping strategies	NI 1/1	Bober et al., 2006).	work was the strongest predictor ($\beta =44, p$	
	and job satisfaction in	N = 161	Job Satisfaction	< .001), accounting for 17% of variance in STS. Salf core ($\rho = -24$, $n < -001$)	
	STS development.	M Age = 51 years (SD = 12)	Job Satisfaction The Association of Social Workers'	STS. Self-care ($\beta =24$, $p < .001$),	
		13) 78.3% female	standardised workplace questionnaire	accounting for an additional 6% of variance in STS. The final model explained 23% of	
		86% white	(Whitaker & Arrington, 2008).	the variance in STS.	
			(wintakei & Annigion, 2000).		

Quinn (2019) USA	Cross-sectional	Early career social workers accessed through a state	STS Secondary Traumatic Stress Scale	STS Mean = 33.07 (Range 17-88, SD = 10.80)	
	Explored predictors of STS, specifically income, supervisory relationship and nature of caseload.	wide mailing list of licensed social workers.	 Secondary Hadmatic bitess beate (STSS, Bride et al., 2004). Additional Explanatory Variables Age, gender, ethnicity, professional experience, length of time in role, setting worked in, direct clinical hours, trauma experienced by clients, personal trauma history, anxiety levels, supervisor gender, frequency of supervision, satisfaction with supervision Exposure to traumatised clients Self-report number of traumatised clients on caseload and frequency clients discussed trauma experiences. Supervisory relationship Supervisory relationship Inventory (Schacht et al., 1988). 	Subtests included in the model of best fit included: gender, ethnicity, personal income, supervision frequency, caseload size, supervisor gender, extent client caseload features trauma, personal anxiety, supervisory relationship, working in a community setting and clinical hours in direct contact with traumatised clients. Of the variables included in the model of best fit, significant predictors following ordinary least squares regressions included Income ($t(91) = 2.24$, $p = .03$), caseload size 0.13 ($t(91) = 2.30$, $p = .02$), anxiety ($t(91) =3.87$, $p = .01$), and supervisory relationship (t (91) = 3.87 , $p = .01$).	$R^{2} = .42$ ** standardised effect sizes not reported $\beta = 5.43$ $\beta = .13$ $\beta = 2.74$ $\beta = 4.88$
Rayner et al. (2020) Australia	Cross-sectional Explored nature of caseload and empathy as predictors of STS.	Social workers and psychologists working across Australia (recruited through professional organisations and organisational groups on social media). N = 190 Aged 35-44 years Female (93.1%)	STSSecondary Traumatic Stress Scale(STSS, Bride et al., 2004)Demographic InfoAge, gender, level of education,frequency of work with traumatisedclients, and personal trauma history.EmpathyEmpathy Scale for Social Workers	STSS Mean: 33.93 (SD = 10.95) Intrusion Mean: 9.71 (SD = 3.29) Avoidance Mean: 13.74 (SD=4.78) Arousal Mean: 10.47 (SD = 3.77) STSS was significantly correlated with: Past trauma history ($p < .05$) Empathy ($p < .001$) STS was significantly predicted by age, past trauma, frequency working with traumatised	r = .146 r =231
		()	(ESSW; King & Holosko, 2012).	clients, and employ $(F(4, 185) = 5.347, p < .001)$. The model explained 10.4% of	$R^2 = .104$

variance in STS.

				Empathy ($t = -3.686$, $p < .001$) and past trauma ($t = 2.341$, $p = .020$) were significant individual predictors. Age did not independently contribute to the model ($t = -$ 0.604, $p = .368$). In the moderation model, personal trauma	**No individual effect sizes reported cannot calculate
				history again contributed to STS (t (181) = 2.439, p = .016), but empathy was not a direct predictor (t9181) = .969, p = 3.334)	$\beta = 33.184$ $\beta = .372$
				Significant interaction effects were observed between caseload trauma and past trauma (t (181) = 2.282, $p < .024$), and empathy and past trauma (t (181) = -2.286, p = .023).	$\beta = -5.170$ $\beta =184$
				Caseload trauma, empathy and past trauma held a significant three way interaction effect on STS ($t(181) = 2.181, p = .0304$).	$\beta = .029$
				High levels of personal trauma moderated the relationship between caseload trauma and STS ($F(1, 181) = 5.041, p = .026$).	
Rienks (2020) USA	Cross-sectional/ Longitudinal (3 month follow up)	Large sample of child welfare workers who took part in a wider national project evaluating child	STS Secondary Traumatic Stress Scale (STSS, Bride et al., 2004).	STS Mean = 41.02 (SD = 14.78) Range 17-85 27.3% reporting moderate STS 29.6% reporting high STS	
	Explored the nature and extent of STS, and the extent to which coping strategies act as a buffer over time.	welfare workers over three states in the USA. N = 1968 (653 at follow up)	Demographic Info Gender, race, level of education, years of experience, average number of families on caseload, personal trauma, frequency clinical work	Child welfare workers who had experienced personal trauma held higher levels of STS (t $(1731) = 3.72, p < .001$).	Cohens <i>d</i> = .196
		86.5% female White 79.7% Black/ African 12.9% Multiracial 5.1%	focuses on client trauma. Burnout The Copenhagen Burnout Inventory (CBI; Kristensen et al., 2005).	STS was significantly correlated with: Client related burnout ($p < .001$) Organisational support ($p < .001$) Use of coping strategies ($p < .001$)	r = .60 r =36 r =38

1	-5	7

		Latino 4.8% Asian 1.9% Education Bachelors: 76.4% Masters: 20.7% Other: 3%	Coping The Coping Measure (Butler Institute for Families, 2009). Organisational Support Subscale taken from a larger measure of organisational climate (Gagnon et al., 2009).	"Copers" reported significantly lower STS levels than "non-copers" at both baseline and in the three year follow up (t $(1615) = 13.43$, p < .001). Greatest differences between "copers" and "non-copers" in terms of specific coping strategies were that "copers" had: A clear self-care plan (mean difference 1.83) Activities and hobbies (mean difference 1.60) Work to home transition plans	Cohens <i>d</i> = 0.7 **Unable to calculate effect sizes.
				(mean difference 1.59) The groups differed the least on the extent to which they used humour to cope (mean difference 0.59)	
Shell et al. (2021) USA	Cross-sectional/ Explored impact of race- related stress and demographic variables on STS and burnout	Black mental health therapists. N = 250 Counsellors (46.8%) Family Therapists (7.6%) Psychologists (10%) Social workers (35.6%) Age range (24-60) All participants identified as African American/Black American.	 STS/Burnout Professional Quality of Life Scale (Stamm, 2010). Demographic Info Age, gender, professional identity, level of education, professional experiences, hours worked per week, years of professional experience, time in current role. The Index of Race Related Stress-Brief (IRRS-B; Utsey, 1999). 	STS: $M = 20.24$ (SD = 5.28) STS was significantly related to: Burnout ($p < .01$) Cultural Racism ($p < .01$) Individual Racism ($p < .01$) Institutional Racism ($p < .01$) Years in current role ($p < .05$) Hours worked per week ($p < .05$) Hours worked per week significantly predicted STS (F, 3, 245) = 4.35, $p = .005$), accounting for 5% of variance. In model 1, individual racism accounted for a further 5% of variance. In model 2, institutional racism accounted for a further 10% of variance.	r = .493 r = .196 r = .209 r = .295 r = .132 r = .160 $R^{2} = .05$ $R^{2} = .10$ $R^{2} = .10$

				In model 3, cultural racism accounted for a further 5%.	$R^2 = .10$
Singer et al. (2021) USA	Cross–sectional Investigated purpose in life as a protective factor from STS when controlling for years of experience, ethnicity, and hours worked per week.	Social workers employed in adult/elder protective services, and child protective services. N = 292 $M Age = 42.03 years (SD = 12.34)$ Female (73.2%) Caucasian (76.4%) African American (12%) Hispanic (5.8%) Other (5.8%)	 STS Secondary Traumatic Stress Scale (STSS, Bride et al., 2004). Demographic Info Age, gender, ethnicity, education level, years of experience, income, hours worked per week, trauma experienced by clients, work support. Purpose in Life (Purpose in Life Scale; PIL, Ryff, 1989). 	STS Mean = 40.89 (SD = 8.79)STSS significantly correlated with: Burnout ($p < .05$) Vicarious trauma ($p < .05$) Compassion satisfaction ($p < .05$) Purpose in life ($p < .05$) Hours worked per week ($p < .05$) Work setting ($p < .05$)Higher purpose in life significantly predicted lower rates of STS (F (3, 263) = 16.548, $p < .001$) when controlling for hours worked per week and years of experience. The model accounted for 16% of variance in STS.	r = .784 r = .721 r =378 r = .36 r = .165 r =238 $R^2 = .16$
Singh & Hassard (2021) UK	Cross-sectional Explored relationships between STS and emotional labour/emotion regulation strategies	Allied Health Professionals (AHP's; Psychologists, Social Workers, Psychotherapists, Counsellors) and professionals in training working in mental health settings. N=99 M Age = 36.2 years (SD = 5.45). 76% female 61.17% Practitioners 39.4% Trainees	 STS Professional Quality of Life Scale (Stamm, 2010). Demographic Info Age, gender, occupational status, educational qualifications, clinical experience, and caseload volume. Emotional Labour (EL) The Emotional Labour Scale (ELS; Brotheridge & Lee, 2003). Emotion Regulation (ER) Emotional Regulation Questionnaire (ERQ; Gross & John, 2003). 	accounted for 16% of variance in STS. STS: Mean = 21.76 (SD = 22) Range 10-39 Low STS (13%) Moderate STS (35.35%) High Levels (51.51%) STS significantly correlated with: Age ($p < .05$) Surface acting ($p < .001$) Expressive suppression ($p = .012$) AHP's with higher level of STS also scored higher for deep acting (95% BCa CI [.120, .629], $p < .010$). Sociodemographic factors accounted for 14% of variance in STS (F (6, 99) = 2.271, p	r =26 r = .42 r = .270 r = .390 $R^{2} = .149$

				= .045), but age was the only significant predictor (β =435, t = -3.032, 95% BCa CI [-3.863,779], p = .002).	
				Emotional labour (surface acting and deep acting) accounted for a further 16% (<i>F</i> (8, 99) = 4.285, $p = .000$), but surface acting was the only significant predictor ($\beta = .398$, t = 3.986, 95% BCa CI [1.134, 3.209], $p = .001$).	$R^2 = .311$
				Emotional regulation accounted for a further 2.18% of variance in STS ($F(10, 99) =$ 3.348, $p < .001$), but neither cognitive reappraisal nor expressive suppression were significant predictors.	$R^2 = .312$
Somoray et al. (2017) Australia	Cross-sectional Explored the impact of personality and workplace belongingness on STS, burnout and CF.	Mental health workers providing counselling services in an Australian non-government organisation.	STS, Burnout, CF Professional Quality of Life Scale (Stamm, 2010). Demographic Info Age, gender, work role, history of	STS: Mean = 20.90 (SD = 5.07) Range 11-41 Low STS (68%) Moderate STS (32%) High Levels (0%)	
	on 515, ournout and C1.	N = 156 M Age = 44.6 years (SD = 12.42)	trauma, perceived severity of personal trauma.	STS was significantly correlated with: Personal trauma ($p < .01$) Work trauma ($p < .01$)	r = .24 r = .27
		Female (79.5%)	Personality	Neuroticism $(p < .01)$	r = .50
			NEO Five Factor Inventory (NEO-	Extraversion $(p < .01)$	<i>r</i> =27
			FFI, Costa & McCrae, 1992).	Agreeableness ($p < .01$)	r =30
				Workplace belongingness $(p < .05)$	<i>r</i> =19
			Workplace Belongingness Psychological sense of organisational membership (PSOM; Cockshaw & Shochet, 2010).	Demographic factors explained 13% of variance in STS ($F(4, 141) = 5.19, p < .001$), only personal and work trauma history were significant predictors. Personality accounted for an additional 23.3% variance (Fchange (5, 136) = 9.86, $p < .001$) with	$R^2 = .13$ $R^2 = .36$

				predictors. The final model accounted for 36% of variance.	
V irga et al. 2020) Romania	Cross –sectional Investigated the role of social capital in	Social workers employed by the public sector working across Romania.	STS: Secondary Traumatic StressScale (STSS, Bride et al., 2004).Burnout: Maslach Burnout	STS scores: Intrusion: $M = 10.95$ (SD = 3.72) Avoidance: $M = 14.79$ (SD = 5.59) Arousal: $M = 11.24$ (SD = 4.26)	
	protecting social workers	N = 193	Inventory – General (MBI-GS;		
	from developing burnout	M Age = 39.16 (SD =	Schaufeli et al., 1996; used two	STSS-Intrusion was significantly correlated	
	and STS.	8.12)	subscales: emotional exhaustion and	with:	<i>r</i> =22
		87.6% female	cynicism)	Self-efficacy ($p < .01$)	<i>r</i> =27
				Hope $(p < .01)$	<i>r</i> =23
			Psychological Capital: Psy-Cap	Resilience ($p < .01$)	r =34
			Questionnaire (Luthans et al., 2007;	Optimism ($p < .01$)	r = .54
			assessed self-efficacy, resilience, optimism and hope).	Emotional Exhaustion ($p < .01$) Cynicism ($p < .01$)	<i>r</i> = .41
				STSS-Avoidance was significantly correlated with:	
				Self-efficacy ($p < .01$)	r =37
				Hope $(p < .01)$	r =44
				Resilience $(p < .01)$	r =34
				Optimism $(p < .01)$	r =53
				Emotional Exhaustion ($p < .01$)	r = .62
				Cynicism ($p < .01$)	r = .60
				Intrusion $(p < .01)$	<i>r</i> = .62
				STSS-Arousal was significantly associated with:	
				Self-efficacy ($p < .01$)	<i>r</i> =37
				Hope $(p < .01)$	<i>r</i> =44
				Resilience $(p < .01)$	<i>r</i> =36
				Optimism $(p < .01)$	<i>r</i> =53
				Emotional Exhaustion ($p < .01$)	<i>r</i> = .67
				Cynicism $(p < .01)$	<i>r</i> = .56
				Intrusion $(p < .01)$	r = .58
				Avoidance $(p < .01)$	r = .72

				Burnout totally mediated the relationship between PsyCap and STS (-0.53; 85% CI (- 0.62, -0.44, $p < .001$), with the indirect effect significant for all three dimensions of STS: intrusion (-0.41; 95% CI (-0.48, -0.33, $p <$.001), avoidance (-0.50; 95% CI (-0.59, - 0.41, $p < .001$), and arousal (-0.49; 95% CI (-0.57, -0.41, $p < .001$). This model explained 61% of variance in STS.	$R^2 = .61$
Yazici & Ozdemir (2022) Turkey	Cross-sectional Explored relationships between STS and personal history of trauma, self-compassion and emotional intelligence.	Qualified mental health professionals working across Turkish mental health services (recruited through social media). N = 155 M Age = 30.86, SD = 5.6)	STS : Secondary Traumatic Stress Scale (STSS, Bride et al., 2004). Demographic Info: Age, gender, degree level, job, current employment status, professional experience, type of certified training.	STS: Mean = 31.84 (SD = 12.36) 11.6% scored moderate 12.3% scored severe STS significantly correlated with: Trauma History ($p < .01$) Self-compassion ($p < .01$) Emotional Intelligence ($p < .01$)	r = .36 r = .32 r = .31
		Counsellors (54.2%) Psychologists (28.4%) Psychiatrists (17.4%)	Personal Trauma Life Events Checklist for DMS-5 (LEC-5; Weathers et al., 2013) Self-Compassion Self-Compassion Scale (SCS; Neff, 2003).	Trauma history accounted for 13% of the variance in STS symptoms (B = 0.367, p = 0.00). Self-compassion accounted for a further 8% of variance (B = -0.29, p = 0.00), and emotional intelligence another 2% (B =22, p = 0.03). The final model explained 23% of variance in STS.	Adjusted R^2 = .13 Adjusted R^2 = .08 Adjusted R^2 = .02
			Emotional Intelligence Trait Emotional Intelligence Questionnaire (TEIQue-SF; Petrides & Furnham, 2003).		Final $R^2 =$.23

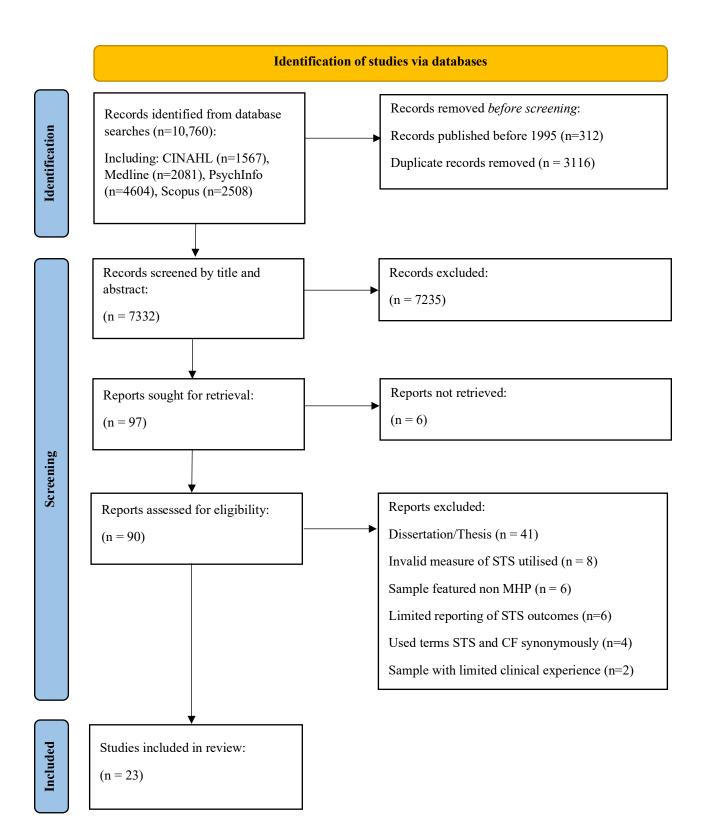


Figure 1: PRISMA flow chart outlining process for selection of studies

Appendix 1-A Author Submission Guidance for the Journal of Traumatic Stress

Submission and Peer Review Process

Once the submission materials have been prepared in accordance with the Author Guidelines, manuscripts should be submitted online at <u>https://mc.manuscriptcentral.com/jots</u>.

For help with submissions, please contact **JOTS@bu.edu**. This journal does not charge submission fees.

Article Preparation Support

<u>Wiley Editing Services</u> offers expert help with English Language Editing, as well as translation, manuscript formatting, figure illustration, figure formatting, and graphical abstract design – so you can submit your manuscript with confidence. Also, check out our resources for <u>Preparing Your Article</u> for general guidance about writing and preparing your manuscript.

Free format submission

Journal of Traumatic Stress now offers **Free Format submission** for a simplified and streamlined submission process.

Title Page

The title page should contain:

- A brief informative title containing the major key words. The title should not contain abbreviations (see <u>Wiley's best practice SEO tips</u>);
- 2. A short running title of less than 40 characters;
- 3. The full names of the authors;
- 4. The author's institutional affiliations where the work was conducted, with a footnote for the author's present address if different from where the work was conducted;

5. Acknowledgments.

Important: the journal operates a double-blind peer review policy. Please anonymize your manuscript and prepare a separate title page containing author details.

Main Text File

Please ensure that all identifying information such as author names and affiliations, acknowledgements or explicit mentions of author institution in the text are on a separate page.

The main text file should be in Word format and include:

- A short informative title containing the major key words (the title should not contain abbreviations).
- Abstract
- Up to seven keywords
- Main body, formatted as:
 - Method
 - Participants
 - Procedure
 - Measures
 - Data Analysis
 - Results
- References
- Tables (each table complete with title and footnotes)
- Figure legends: Legends should be supplied as a complete list in the text. Figures should be uploaded as separate files (see below).

Reference Style

Journal of Traumatic Stress uses APA reference style. However, because *JTS* offers Free Format submission, you do not need to format the references in your article until the revision stage when your article is more likely to be accepted.

Figures and Supporting Information

Figures, supporting information, and appendices should be supplied as separate files, preferably in Word. You should review the <u>basic figure requirements</u> for manuscripts for peer review, as well as the more detailed post-acceptance figure requirements. View <u>Wiley's</u> <u>FAOs</u> on supporting information.

Appendix 1-B

20

Was ethical approval or consent of participants attained?

Don't know/ Question Yes No Comment Introduction 1 Were the aims/objectives of the study clear? Methods 2 Was the study design appropriate for the stated aim(s)? Was the sample size justified? 3 Was the target/reference population clearly defined? (Is it clear who the 4 research was about?) Was the sample frame taken from an appropriate population base so that it 5 closely represented the target/reference population under investigation? Was the selection process likely to select subjects/participants that were 6 representative of the target/reference population under investigation? 7 Were measures undertaken to address and categorise non-responders? Were the risk factor and outcome variables measured appropriate to the aims 8 of the study? Were the risk factor and outcome variables measured correctly using 9 instruments/measurements that had been trialled, piloted or published previously? Is it clear what was used to determined statistical significance and/or 10 precision estimates? (e.g. p-values, confidence intervals) Were the methods (including statistical methods) sufficiently described to 11 enable them to be repeated? Results 12 Were the basic data adequately described? 13 Does the response rate raise concerns about non-response bias? 14 If appropriate, was information about non-responders described? 15 Were the results internally consistent? 16 Were the results presented for all the analyses described in the methods? Discussion 17 Were the authors' discussions and conclusions justified by the results? 18 Were the limitations of the study discussed? Other Were there any funding sources or conflicts of interest that may affect the 19 authors' interpretation of the results?

Appraisal Tool for Cross-Sectional Studies (AXIS, Downes et al., 2016)

Section Two: Empirical Paper

Striving for Trauma Informed Organisations: What it Takes to Take the Lead

Word Count: 7,966

Nicole Thordarson

Doctorate in Clinical Psychology

Division of Health Research, Lancaster University

All correspondence should be sent to:

Nicole Thordarson

Doctorate in Clinical Psychology

Health Innovation One

Sir John Fisher Drive

Lancaster University

Lancaster

LA1 4AT

n.thordarson@lancaster.ac.uk

Compiled in line with submission guidance for The Journal of Traumatic Stress²

² Submission guidance included in Appendix 1-A

Abstract

Background: Since Trauma-Informed Care (TIC) was conceptualised over two decades ago, organisations have struggled to embed its principles. Although research demonstrates short-term improvements in staff knowledge and practice following traumainformed training, holistic approaches to TIC are needed if culture is to be changed longterm. As those in leadership positions are deemed focal to bridging the gap between research and practice, the current study aimed to explore leaders' experiences moving systems towards trauma-informed culture change. *Method:* 10 leaders across health, social care, and education were interviewed. All had attempted to establish trauma-informed culture change within their respective organisations. Data was collected and analysed using a grounded theory methodology. *Findings:* A tentative conceptual model is proposed, featuring three corecategories of leader-driven change deemed imperative to trauma-informed culture change: "starting from within", "working with the threat response", and "rewriting historical cultural norms". The model is considered in the context of existing literature, with clinical implications and recommendations for future research identified.

Keywords: Trauma-Informed Care, Child, Mental Health, Leadership, Culture Change

Introduction

Since Felitti et al. (1998) empirically associated Adverse Childhood Experiences (ACEs) with poorer later life outcomes, the physical and mental health consequences of developmental trauma have been estimated to cost the NHS £42.8 billion per year (Hughes et al., 2020). Although trauma experienced at any stage of life is likely to impact wellbeing, young brains exposed to abuse, maltreatment, and/or neglect have limited means of coping, particularly when protective factors are lacking (Afifi & MacMillan, 2011). Over time, an excess of stress hormones released as an adaptive response for survival have been found to halt the brain's natural development (Teicher & Samson, 2016), hindering systems facilitating learning, memory, emotion regulation, and decision-making (Lupien et al., 2014; Shonkoff & Garner, 2012), and impairing the body's autonomic nervous systems (Webster-Marketon & Glaser, 2008; Young-Southward et al., 2020). As a result, repeated exposure to childhood adversity increases the risk of physical illness, mental health difficulties, and health risk behaviours in later life (Bryan, 2019), as well as predicting poor education and employment outcomes, reduced life satisfaction, and increasing risk of incarceration (Bellis et al., 2014).

The Vicious Cycle of Trauma

With a recent survey of over 200,000 adults in the US revealing nearly 60% of respondents had experienced at least one ACE, and over 20% had experienced more than three ACEs (Giano et al., 2020), it must be assumed most individuals accessing health and social services have experienced some trauma in their lifetime. Similar surveys among professionals working in such settings indicate an even higher prevalence (Aykanian & Mammah; Keesler, 2018; Steen et al., 2021), with scholars suggesting individuals with trauma histories are drawn to helping professions due to their own "loss and injury" (Bloom & Farragher, 2010; pg. 66). Whilst Bloom and Farragher (2010) acknowledge that professionals holding lived experience of trauma are no less clinically effective, the risk of

parallel process and vicarious retraumatisation increases (Bloom, 2006; Leung et al., 2022) as distressed clients trigger responses in practitioners due to their prior experiences. Although Durant (2011) recognised that parallel processes and subsequent responses are not always conscious, restrictive measures driven by a need for power and control are more likely when professionals feel unsafe, only furthering client distress, and perpetuating trauma reenactments within the systems they access.

Traditional interventions for substance misuse, mental health difficulties, and physical ailments demonstrate significantly less long-term improvements when ACEs are present (Craner et al., 2022; Holgerson et al., 2018; Sacks et al., 2008; Verbist et al., 2021). This is likely due to the lack of consideration given to trauma-related causes of illness/distress in traditional treatment approaches, as well as trauma-related engagement difficulties, and parallel processes as outlined above. Even at the systemic level, clinical practices used to support individuals with trauma histories have been questioned due to their counterproductive nature (McElvaney & Tatlow-Golden, 2016). Researchers suggest by overlooking a client's trauma narrative, services fail to provide meaningful treatment pathways, appropriate referrals, and retraumatise both clients and staff members through the use of physical restraint and seclusion (Oral et al., 2015; Stubbs et al., 2009; Wilson et al., 2017). Identifying approaches to health and social services that recognise the trauma-related needs of both service-users and staff members is therefore crucial if outcomes and experiences are to be improved across the sector.

Trauma-Informed Care (TIC)

TIC provides a systemic approach that recognises the presence and impact of trauma in clients and staff members. It urges organisations to transform service-provision in line with the trauma-related needs of its stakeholders, encouraging the development of an infrastructure that provides contextually perceptive care. To achieve this, staff are educated in trauma and its effects, and encouraged to consider introgenic harm caused by traditional approaches to care. Organisational vision, policies, and procedures are then adapted to move focus away from a client's presenting difficulties, towards the consideration of why and how these came to be.

Since it was conceptualised in the early 2000's as a nuanced approach to health and social care (Harris & Fallot, 2001), TIC has also been attempted in educational settings, prison services and probation (McAnallen & McGinnis, 2021; Thomas et al., 2019; Vaswani & Paul, 2019). Whilst empirical research exploring its efficacy has proposed positive outcomes for various stakeholders, including reduced restraint rates, less staff injury, and improved camaraderie in the workplace (Azeem et al., 2011; Damian et al., 2017), the potential for bias needs consideration. In a quantitative exploration of TIC in secure services, Azeem et al. (2011) worked closely with service leads, allowing them to set outcome measures/goals despite their involvement in decision-making on the ground during data collection. As service leads had a vested interest in demonstrating successful findings, the reduction in restraint may have reflected an awareness practice was being observed, rather than the attainment of trauma-informed change. Similarly, in a qualitative exploration of staff experience surrounding TIC, Damien et al. (2017), interviewed participants in their work setting, increasing the likelihood of desirability bias.

The quality of approaches taken to embed trauma-informed principles must also be considered. Whilst various frameworks are available in the literature outlining areas of service-provision that need consideration for TIC (Elliott et al., 2005; Huckshorn, 2004; Huang et al., 2014), these tend to focus more on the "what" than the "how", meaning bridging the "translational gap" between theory and practice has proven difficult (Tansella & Thornicroft, 2009). In their interpretation of guidance, many services have focused their efforts on solely education-based initiatives. Although these have demonstrated positive outcomes immediately post-training, long-term impact on practice and culture is minimal (Azeem et al., 2011; Brown et al., 2012; Palfrey et al., 2018). A review of evidence suggests early approaches to trauma-informed research and practice focus too much on education initiatives and restraint reduction, identifying that TIC needs to be seen more holistically if service-wide change is to be achieved (Muskett, 2013).

Moving Towards Trauma Responsive Systems

The Sanctuary Model of Trauma-Informed Organisational Change (Bloom & Sreedhar, 2008) acknowledges the need for a holistic approach to TIC, proposing a template for creating trauma-responsive cultures through the "active creation and maintenance of a non-violent, democratic, therapeutic community that fosters growth and change" (pg.1). Here, rather than focusing on simply educating staff in trauma and expecting culture change as a result of this, Bloom and Sreedhar (2008) propose a framework for creating a contextually perceptive environment which moves systems away from being trauma-organised (where trauma re-enactments display at every level), and towards becoming trauma-responsive (where "adversity, culturally, and trauma-informed, infused and responsive practice is adopted at a whole-system organizational level"; Treisman, 2021, p.135). Despite the Sanctuary Model having been proposed over a decade ago however, and the recent evidence-base outlining the need for whole system culture change as opposed to the adoption of trauma-informed practices, little research is available identifying challenges to changing culture in line with TIC, and how services can begin to overcome these.

Rationale for the Current Study

In any health, social care, or education setting, those in leadership positions are key to influencing quality of care through their approach to strategizing and managing change initiatives. Research exploring leader impact has demonstrated a clear link between leader style and cultural norms, with these seen to directly influence organisation effectiveness (Klein et al., 2013). What is not often considered however is the reverse effect of this relationship, and the impact systemic challenges and cultural norms can have on the leader themselves. As well as parallel processes and traumatic re-enactments presenting at the client and staff team levels, increased workloads, service cuts, and vacant posts only add to the pressure felt by leaders. The recurrent interaction between traumatised clients, traumatised staff teams and systems under pressure can lead to an environment that tends to hinder its stakeholders rather than facilitate growth and healing. As the person perceived as responsible, it is understandable that leaders can become overwhelmed, avoidant, and helpless in their attempts to meet various needs presenting. This can often lead them to be pulled into parallel processes themselves (Bloom, 2010), only furthering the trajectory of trauma re-enactments into operational and systemic realms.

Although research has identified that moving towards trauma-responsive systems is only possible if ownership is taken at the leadership level (Brooker et al., 2016; Sweeney et al., 2018), no research has yet attempted to understand what this involves in practice. Exploring the experiences of leaders fronting attempts at trauma-informed culture change is necessary if we are to understand the personal and systemic challenges involved in creating trauma-responsive cultures, and how these can be managed/overcome.

Research Question

"How do leaders in the health, social care, and education sector support organisations to become more trauma-informed?"

Method

Design

The methodology featured constructivist grounded theory (CGT; Charmaz, 2014), which shows particular strength when exploring social worlds beyond an individual level of analysis (Clarke, 2005). CGT was selected in line with the researcher's pragmatic position, as it felt the most appropriate method to acquire the knowledge sought, acknowledging the reciprocal and mutual role of participant and researcher in the construction of social meaning (Sexton & Griffin, 1997; Mills et al., 2006). Through an iterative process of theoretical sampling and constant comparative analysis, a conceptual model was formed representing collective experiences and reflections provided by participants, and the researcher's approach to organising these (Thornberg et al., 2014; Timonen et al., 2018). The resulting model aimed to provide leaders of relevant services with a framework for overcoming barriers limiting trauma-informed culture change.

Research Approval

Approval to undertake the study was granted by the Lancaster University Faculty of Health and Medicine Research Ethics Committee (See ethics section for approval letter and relevant documentation).

Procedure

Sampling and Recruitment

For purposes of the current study, a leader is defined as somebody taking responsibility for a system's movement towards trauma-informed culture change, through the motivation and influence of individuals and teams working within it. Potential participants were identified and contacted by the researcher's field supervisor, who provided consultation to leaders of various child welfare services. Some leaders were known personally by the field supervisor prior to recruitment, whereas others were accessed through wider networks. Inclusion criteria were leading an organisation attempting system-wide trauma-informed culture change and having direct involvement in planning and embedding such change. Exclusion criteria were leading an organisation where only partial adaptations in line with TIC had been undertaken (e.g., trauma-informed training), but wholescale culture change was not attempted. The sampling method featured a purposive approach, as participants held specific expertise surrounding organisational processes occurring within relevant services (Payne & Payne, 2004). A targeted method was adopted to ensure the sample represented various professional disciplines and hierarchical levels.

Although initially the research aimed to explore leader experience across services commissioned for various age groups, participants featured in cluster one solely worked in child services, as this was the group most easily accessed. As leaders included still provided a vast amount of information surrounding barriers to culture change and approaches used to overcome these, it was felt expanding the sample further to include leaders of adult/older adult services may result in an overwhelming number of perspectives to consider, diluting the richness of data. The decision was therefore made to focus solely on the experience of leaders within child services.

Screening Procedure

Leaders expressing interest in participation were introduced to the researcher via email and forwarded a Participant Information Sheet before a time for screening was arranged. Screening conversations used the Trauma and ACE (TrACE) Informed Organisations Toolkit (ACE Hub Wales, 2020) to explore the level at which leaders had attempted trauma-informed culture change within their respective organisations. The toolkit identified elements of service transformation deemed imperative to change e.g., governance, leadership, policies and procedures, workforce support, environment, and outcomes. These were extracted to form a list of conversational prompts which structured screening conversations (Appendix 2-B). Once all aspects had been explored, leaders had the opportunity to ask any questions regarding participation. Following this, if both parties were satisfied that participation was appropriate, the leader was asked to provide consent via the relevant form, before interviews were arranged.

Participants

Ten leaders were approached to partake in the study, all of whom demonstrated they had attempted trauma-informed culture change at an appropriate level during screening and provided informed consent. In line with CGT literature surrounding discontinuation of data collection, no further participants were sought after this point as cluster three data analysis constructed no new conceptual themes (Birks & Mills, 2023; Olshansky, 2015).

Leaders worked across a range of child services, including fostering and adoption services, residential homes, secure services, mental health services, and specialist education provisions. Participants had a mean age of 47 years (SD=9.1) and had spent on average 7.3 years in their respective roles at the time of interview (SD=5.4). Nine of ten participants were from a White British ethnic background, whilst one participant was from a British Indian ethnic background. Table 1 provides an overview of participant characteristics, as well as pseudonyms assigned for anonymity purposes.

(TABLE 1 HERE)

Data Collection

Data collection was undertaken through semi-structured interviews conducted and recorded via Microsoft Teams. Prior to the interview commencing, participants provided demographic information (Table 1). Interviews lasted between 45 and 115 minutes and were underpinned by a topic guide which listed areas of relevant enquiry (Appendix 2-C). Interview recordings and transcripts were transferred to a secure electronic storage space and original files deleted. Transcripts were then checked for accuracy and any identifiable information removed.

Data Analysis

As per CGT, data collection and analysis occurred simultaneously (Charmaz, 2014). Coding of transcripts took place in two phases. First, initial codes were applied line-by-line (Charmaz, 2006). Then, focused codes were applied to larger excerpts of text deemed explanatory of actions, processes and opinions of relevance. In-vivo codes were also used to extract quotes deemed of high importance, protecting clarity of data (Charmaz, 2008). Appendix 2-D includes an example of initial and focused coding.

Codes consistently present and/or of significant relevance to the research question were transferred to a spreadsheet where they were compared, contrasted and merged together into conceptual themes, which represented groups of codes providing multiple layers of meaning surrounding important concepts. Throughout this process, the researcher undertook continuous memo-writing and diagrammatic sketching to support the direction of thinking and inform the construction of categories representative of processes ensuing between themes (See Appendix 2-E).

After cluster one analysis, the interview topic guide was altered to allow for further exploration of constructed codes, themes and categories, and relationships between these (Appendix 2-F includes a copy of the adapted interview topic guide). Data collected from cluster two was then analysed using the same process as for cluster one, with the initial analysis considered in relation to newly constructed codes. Relevant changes were then made to provisional themes and categories to represent the newly formed understanding of constructs explored, and a tentative model of leader-drive change was constructed (Appendix 2-G).

During the final two interviews, participants were shown a diagram of the tentative conceptual model and given an overview of categories and themes included. They were then asked to highlight areas of the model they felt aligned with their experiences, and any discrepancies/limits they felt it would be useful to consider during final analysis. Although the final two leaders reflected consistently on categories surrounding self-exploration in line with TIC, working with threatened staff teams and rewriting historical cultural norms

detrimental to the model, they were less drawn to the category involving operational processes involved in planning for change. As this category had also been questioned by the research team in terms of its relevance to culture change specifically, it was removed from the final model, but will be reflected on further in the critical appraisal. As data collected from cluster three led to no new conceptual themes, no further interviews were undertaken. Appendix 2-H includes an overview of category construction.

Findings

Data analysis led to the construction of three core-categories of leader-driven change deemed imperative to transforming service culture in line with TIC, including one at the leader level, "starting from within", one at the staff team level, "working with the threat response", and one at the system level, "rewriting historical cultural norms". As traumainformed culture change was consistently described by participants as a "journey", rather than a "destination", due to the constant addition of new trauma to the system during every recruitment initiative, admission, or incident, the grounded theory constructed (Figure 1) outlines a continuous process of change, with no clear starting point or end goal.

(FIGURE 1 HERE)

Starting from Within

Throughout their work, leaders experienced emotional responses to stakeholder doubt due to their whole-hearted belief TIC could make a real difference: "You get irritated by people not getting what you want to do ...you're thinking, don't you understand this is for the greater good of children? Get over yourself and get on with it" (Edith). Leaders identified that responding impulsively would only facilitate more challenge and doubt: "[If I said what I was thinking] ...It would be, you can't say that, you're not very supportive" (Bill), thus, refraining and reframing was crucial in the wider context of change: "Being able to step back... there's often nothing any defensive conversation would have helped" (Cathy). The core-category "Starting Within" features a continuous process of leader self-exploration that facilitates the identification and management of personal trauma responses when challenges arise. This includes three contributing themes: "Self-Reflection", "Self-Formulation", and "Self-Development".

Self-Reflection

Participants described feeling dehumanised within typical service cultures due to the assumption that leaders do not experience autonomic human responses within challenging situations, and can therefore make decisions imminently, with little thought: "Of course I feel overwhelmed, overworked, stressed, I have secondary trauma, I have compassion fatigue, and sometimes I have more or less ability to cope with that because I'm also only human" (Edith), "People would be saying, why do you need to think about it? You're supposed to be in charge, you should instantly know all of the answers ...it's like, well I'm human as well you know?" (Bill). Two participants suggested prior leaders perceived humility as "failure", but all leaders acknowledged that without time to reflect, decision-making risked bias and disarray: "If you haven't got time to reflect, you lose perspective, and then you're not really freed up to sort anything out" (Anne), "In the old system I might have reacted instinctively... I would have dealt with it, but in an inappropriate way" (Grant).

As reflection was often perceived as "wishy washy" (Bill) or superfluous in typical organisational cultures, normalising "thought before action" was crucial: "I'm absolutely confident to say, I need to go away and think …but I'll put some time in my diary tomorrow morning" (Edith). This allowed leaders to readjust, and proceed in a more trauma-informed way: "You then just have to loop back around at a time when things are much more settled in people's ears …and say, that was really uncomfortable…let's talk about why that happened" (Cathy).

Self-Formulation

During reflection, identifying the underlying cause of emotional and behavioural urges was key: [If urges present] ...That's usually an indication there's something else playing out in terms of my own resistance, I have to identify what that is so I can hold it in mind" (Cathy). Sometimes, personal distress facilitated urges: "I had a really hard week this week, went to a funeral, it hit me all at once yesterday, work was much more challenging than normal... Those urges are more prevalent if things are happening in your personal life" (Holly). Other leaders identified historical experiences that were impacting autonomic responses: "I was brought up in [retracted], and it was very much, oh, stop crying and get over it, you know, we don't do emotions" (Bill).

Leaders described that this process of consciously applying the model to self set trauma-informed culture change apart from prior approaches to service-development:

"[Previously] ...That reflective thinking was subconscious, how I acted upon that reflection was subconscious, where with this... it really forced me to think about some of the therapeutic principles that I was rolling out and what they meant for me as a leader... That was a learning curve" (Edith).

Self-Development

After ascertaining the presence and precipitators of emotional responses and urges, leaders identified various developmental strategies helpful in facilitating appropriate responses, including supervision, usually from a psychologist: "[Supervision]... It was like pulling teeth at first, but it is useful, it comes down to a talk through reasons and motives for urges ...then putting my brain back together in a way that works" (Bill). Personal and professional support systems were also deemed crucial: "[Support networks] ... If you don't have that in place... you would just be overwhelmed, you would become traumatised by the system" (Cathy). Participants acknowledged that whilst the term "self-care" can "sound like a throw away comment" (Cathy), it can also provide recharge vital to effective decision-making: "I have my own programme of self-care... early morning yoga, meditation, recently started cold showers, it's a killer, but they're the things I know that I need to support myself, my way of being, and my way of leading" (Grant). By reflecting, exploring themselves in line with the model, and putting in place strategies to help buffer against personal trauma responses, leaders felt more able to make decisions in the best interests of the organisation and its stakeholders, which increased capacity for change when working at the staff team and systemic levels.

Working with the Threat Response

Recognising and prioritising the fears and needs of staff teams within change was fundamental in transforming service culture in line with TIC. The core-category "Working with the Threat Response" encapsulates this process, through seven contributing themes: "Recognising and Formulating Systemic Trauma", "Nurturing a Sense of Safety", "Investing in the Right Humans", "Gentle Exposure to Change, "Looking for the Lightbulb Moments", "Modelling and Leading by Example" and "Momentum through Recognition".

Recognising and Formulating Systemic Trauma

In order to meet the needs of the workforce, leaders first attempted to better understand trauma presenting within systems: "It's one of the most traumatised systems I've ever worked in... You've got children who've experienced some of the most traumatic early starts to life... and people who come into this line of work, they've usually experienced more childhood adversity themselves" (Cathy). Staff members' personal trauma experiences were seen to create triggers within their work:

"Staff are dealing with their own trauma... that creates trigger points when they're working with traumatised kids for sustained periods of time... We have someone who was diagnosed with cancer, they fall of the cliff, they're feeling vulnerable, scared, they can't focus on the work... We've got to consider that" (Irene).

Staff members' prior experiences of authority and leadership also acted as traumabased barriers to change: "Staff have generally not always had a great relationship with people in positions of power" (Anne). Leaders recognised that the realisation of presenting trauma often facilitated their own fear and doubt during change: "There was a point I was thinking, what have I done? I am never going to be able to get this where it needs to be" (Holly), but constantly reformulating trauma at the staff team level allowed for a traumainformed approach when planning for change, which established a sense of safety for all:

"I tried to make sense of the trauma, and that's always being reformulated... I'm holding those formulations in mind all of the time about how things will change, and therefore how my approach will change that developing safety" (Jo).

Nurturing a Sense of Safety

Participants identified through formulation efforts that change-driven threat led staff members to cling onto familiar practices out of fear, thus "creating safety in the things that remain stable" (Cathy), was integral. Leaders achieved this through modelling a traumainformed approach to managing the workforce: "It's about connecting, being empathic, listening, supporting even during times of crisis, even when there's difference of opinions, it's making sure they feel heard, and safe, and held" (Anne). Demonstrating consistency was also key: "... When it does get difficult, there is a core group of us that stay with it and see it through" (Fran).

This approach facilitated safety within relationships and the overall environment: "Staff that have been here for a while notice that it's very different, it's much less confrontational, the relationships are so much stronger" (Bill). By modelling safety from the bottom-up, leaders hoped staff teams would bring themselves to their roles: "Part of the process for me is about that 'warts and all' leadership style of just being really authentic, hopefully then they learn that it's safe to be like that" (Cathy). This meant teams felt more able to communicate their opinions and needs more openly: "I think there's a sense of safety, when you suggest something they don't like and they actually speak up and say, I don't agree". (Cathy), which was vital when rolling out a model dependent on human interaction and understanding.

Investing in the Right Humans

Although leaders acknowledged staffing crises presenting across services, having the right humans in post was crucial: "It's 100% about having the right staff... they've got to have the right values... and they've got to be able to make relationships not just with young people, but with people in that wider system" (Diane). To facilitate this, recruitment initiatives assessed trauma-informed competencies: "I go into recruitment, and I know exactly what I want, we're talking about the therapeutic parenting model and trauma-informed working from the off... if that's not something that fits with people, then they don't get recruited" (Jo). Natural loss to personnel was accepted along the way: "There were a few people over time that just left because ...they just weren't ready, or in the right place, it happens" (Grant).

Leaders also made efforts to demonstrate personal (bottom-up) and financial (topdown) investments in their teams: "I look after the humans in my team, and treat them with kindness and treat them with compassion, and I'm available to them if they need me" (Holly). "[After training] ...The workforce said, we feel really valued, we feel like you're investing in us ... So, I think that then helped to build the next layer of trust" (Edith).

Gentle Exposure to Change

Leaders identified that the way changes were introduced significantly impacted threat levels, thus, establishing trust first, and considering the best time to introduce change was fundamental in ensuring a successful reception. Introducing change slowly over time, and bringing people along on the change journey was key: "I give plenty of advance notice, I'll drip things into a team meeting one month, give an update the following month, it's not a bomb drop... it's helping them to feel included in the process, a gentle exposure to things" (Cathy). This gentle exposure was deemed crucial to sustainability, despite pressures to plough ahead: "I've got people on my back watching me, telling me I need to fix this because it's my job, I think sometimes leaders can get so consumed by that that they start to railroad things through, and it's not sustainable" (Edith).

Looking for the Lightbulb Moment

Identifying ways to increase psychological buy-in from teams was crucial: "It's about being really mindful of when you do things, how you present that to the team, how do you get them on board? Because if you don't get those fundamentals right, the rest just fails" (Edith). Leaders recognised the importance of authenticity within their approach: "if people don't think you're genuine, they're not going to come on board" (Edith), "you have to be welded to the idea and really motivated to drive that forwards, it can't just be something you're ambitious about because you think it will look good for Ofsted" (Irene). Sourcing developmental opportunities that inspired teams was key: "I worked with a psychologist who was very inspirational to me, I got her to come and do some training, and that was really the lightbulb moment where I managed to convince the governors" (Grant), "[Staff members] visited other schools, seeing things in practice, it's like, "we could do that in ours", "I don't understand why we haven't done that before", so it's been like, all of these lightbulbs have been lit" (Holly). Inspiring and developing teams was not considered static however, with leaders recognising the need to keep "lightbulbs lit" if staff were to begin carrying change forwards themselves:

"You've got to keep reintroducing it and bringing in new people to talk about it, there needs to be more than one advocate for it, if it was still me on my own, just banging on about it 10 years later, I wouldn't have succeeded, you have to win over the hearts and minds of people so they want to do it for themselves" (Bill).

Modelling and Leading by Example

Another integral strategy used to reduce threat within change involved leaders' use of modelling trauma-informed approaches in their work with staff teams. This often included sharing formulations: "[Formulations] ...I used to keep them to myself, whereas now, whenever I feel there is an opportunity... or when it feels safe to do so in a team meeting, I share my view from a trauma-informed perspective" (Cathy), and supporting staff to explore themselves using the model:

"[During challenge] ...I'd ask, what's that about? Is it about that or are you still suffering trauma that's not resolved for you and you are now projecting that onto a family... that's actually not appropriate, but understandable. So how can we work through that and how can we just own that and recognize it? ...as my best critical friends, I want you to help me unpick this, is it bias? Or is there some relevance to what I'm saying?" (Edith).

Participants recognised that through consistent modelling, team members would begin embarking on self-exploration and formulation independently, contributing to a culture where formulation and self-exploration during challenge became everyday practice.

Momentum through Recognition

Whilst leaders recognised that some staff "instinctively feel it, and believe it, and buy into it" (Bill) following inspirational developmental opportunities, and some staff may "have a great deal of trust in leaders and will try it, ultimately [change] came from seeing the results" (Bill). Whilst long-term outcomes often took years to demonstrate, leaders made conscious efforts to celebrate the "small wins": "We need to think about those small wins... they're missing three days a week, how does that differ from a month ago?, well sometimes we didn't see that person for two weeks, wow, that sounds like fabulous, fantastic progress" (Diane), "One of the schools hasn't excluded anyone for over a year and a half ...you have to keep reminding people of things like that" (Bill).

By cascading success stories throughout the system, leaders identified higher rates of motivation to get involved, building momentum, and further increasing capacity for change:

"[I initiated change in that area] ...so we could gain momentum, I knew there would be buzz around it, they'd be saying it was working well and feeding it back to the wider system, after that I literally went through them all, it was like a rag race" (Edith).

Rewriting Historical Cultural Norms

In their attempts to embed trauma-informed values, leaders commonly found challenge in cultural norms present in services that were completely incongruent with the model's values: "We are fighting against a very authoritarian culture that has been withstanding since services were set up" (Anne), "This idea of the professional in the ivory tower ...serves to protect you from being discovered as maybe not being the all-knowing, allpowerful person that you try to make people believe you are" (Cathy). Such strategies had led to fearful teams, scared of making mistakes, and thus blaming other's when things went wrong: "There's high levels of blame culture that permeates through the whole system" (Edith), "As soon as there's a crisis, everyone falls out, because it's everybody else's fault" (Anne). Ultimately this led to the siloing of professionals and teams, as they fought for survival, instead of thriving as one: "It was like, no, we're going to protect ourselves, we don't want to get drawn into all your stuff, we're going to keep ourselves isolated, keep our heads down" (Irene).

The final core category, "Rewriting Historical Cultural Norms", demonstrates leaders' approach to moving systems away from blame and shame, and towards cohesive compassion

and understanding. This was achieved through four contributing themes: "Reducing the Felt Hierarchy", "Encouraging Autonomy", "Valuing and Prioritising Reflection", and "Using Language as a Catalyst for Change".

Reducing the Felt Hierarchy

Intense power imbalances historically led workforces to associate leader presence with negative regard: "people just assume I'm coming in to be difficult and problematic, and to criticise, no matter how much I explain that I'm here as a supportive measure" (Irene). Participants identified that whilst there is "a place for power in leadership" (Cathy), a reduction in fear comes when leaders "let go of the power and control" (Grant), and come alongside staff: "I take a step down, and step alongside people rather than holding that position... on team days I just plonk my laptop down and sit next to everyone else ...I've worked really hard to model that from the bottom up" (Cathy). By bringing staff members in on decision-making processes, and reducing hierarchical approaches to leadership, participants built a culture where leaders and teams worked as one, instead of against each other: "The staff are involved in every decision that we make about the service... That's how I lead ...Shared goals, and everybody being involved, everybody on the same path and everybody working towards the same objectives" (Jo).

Encouraging Autonomy

Leaders described that authoritarian leadership styles had led to disempowered workforces, terrified of error and responsibility: "somebody said, aren't you going to tell us what to do? ...the last head used to come in every morning and tell everybody what jobs they would have to do" (Bill), "They were like a bunch of scared rabbits, they didn't know how to look, or what to say... there's a real fear of getting things wrong" (Cathy).

Leaders identified conscious efforts to normalise mistake-making and uncomfortable feelings derived from making difficult decisions: "I've made tonnes of errors throughout my

career... now I've got to give other people the opportunity to learn in the same way" (Bill), "A lot of humans struggle with feeling uncomfortable about anything, so it's kind of normalising that it's ok to feel uncomfortable" (Edith).

To assist staff members to build confidence in decision-making, one leader described "coaching": "I can coach them, have you thought about this? Would it work in this circumstance? What's Plan B? Plan C? You'll get some opposition to it? How will you handle that?" (Bill). By trusting teams, and empowering staff to trust themselves, it was identified that not only was task-based responsibility shared, but also the responsibility of getting the system where it needed to be:

"I trust staff... I don't expect them to ask permission to do things... I don't even have to be the visionary anymore; they've become the vision themselves because I've allowed them space to grow... So, my leadership style moving away from that authoritarian style, I'd call it distributive leadership" (Grant).

Valuing and Prioritising Reflection

Valuing and prioritising reflective practice from a systemic level was crucial in changing historical cultural norms that inhibited autonomous thinking and decision-making. Leaders identified that change was not possible without time to think: "They haven't had time to reflect properly that what they're doing is counterproductive, they want it to be different, but don't really know how" (Holly). Prior to change, traditional staff support was deemed more facilitative of threat and blame than reflection: "often supervision is ten minutes, in a space where everyone can see you... it's about, Have you done this? Have you done that? Why didn't you do this?" (Fran). This led staff members to become avoidant and defensive of unhelpful practices, rather than motivated to change: "If you haven't got space to deal with it, you have to deny that it's a problem, how could you call it out, allow it to be a problem and also not have anywhere to deal with it?" (Fran).

Engaging in reflective thinking that prioritised self-awareness and self-development over fear and blame was therefore considered crucial in transforming practice in TIC: "Getting people to look back... this happened, let's think about that, would you have done anything differently? What are your thoughts? So, we can start to talk about people's development and how we support people" (Jo), "Reflective practice... that's the bit for me... it's a bit like safeguarding, it needs to be people's bread and butter, it needs to be in the wallpaper" (Anne).

Using Language as a Catalyst for Change

When navigating culture change, leaders identified barriers enforced by traumadismissive language used in discussions around young people and colleagues, which reflected blame and shame: "The language is very harsh, very punitive, very negative" (Fran), which was counterproductive in the wider context of change: "If we're not using the correct terminology, what could we be creating? More barriers" (Holly). Leaders often took a curious approach to exploring dismissive language in the first instance: "We spent a lot of time thinking about social constructions and where they come from and how they influence us" (Fran). This allowed understanding to be reframed in line with TIC: "[When traumadismissive language presents] ...It's like, where is that coming from? Why might they feel like that? I'm making them reframe what their thoughts and feelings are around that" (Holly).

Rather than taking an authoritative approach to language transformation, leading by example was key: "If you say it enough, it kind of goes in. I think it's modelling rather than telling people not to" (Fran). This approach was identified as equally useful in encouraging trauma-aware language amongst a staff team's description of their own experience: "acknowledging things like compassion fatigue, and that being an everyday narrative" (Edith). Ultimately, the continued use of everyday, compassionate language to describe self, colleagues, and young people increased the capacity for change: "since we've had more language around trauma-informed care, it has opened some of those doors a little bit more" (Fran).

This everyday use of trauma-aware language, alongside the perception of leaders as allies not enemies, an increased confidence and empowerment in decision-making, and permission to reflect, led to the reduction of blame and shame within services, and subsequently an increased sense of safety working together.

Discussion

The present study aimed to explore leader experience in moving health, social care and education systems towards trauma-informed culture change. Findings suggest three corecategories of leader-driven change imperative to service transformation in line with TIC. These include: "starting from within", a process of leader self-exploration in line with the model; "working with the threat response", an enhanced recognition and appreciation for human response to change, and prioritisation of stakeholder needs; and "rewriting historical cultural norms", a commitment to dismantling prior hierarchical approaches to leadership, and building systems maintaining safety and solidarity in the face of challenge. This development of an infrastructure that nurtures personal and systemic growth despite adversity was imperative in embedding trauma-informed approaches throughout systems, and creating organisations that truly help rather than hinder those that work within them.

Links to Existing Literature

Healthcare Leadership Models

The importance of self-exploration in a leader's journey to navigating and managing systems is in line with multiple leadership frameworks that are utilised within the healthcare sector (Dickson et al., 2007; Dickson & Tholl, 2020; NHS Leadership Academy, 2013). Here, scholars suggest that without taking time to understand one's own behaviour and how it impacts individuals and systems, showing compassion for teams during difficult situations

and acting in the best interests of others was less possible, thus decreasing perceived authenticity. Although leadership frameworks do not explicitly describe the importance of self-formulation and self-development, as these may be specific to leadership within a therapeutic model, they do provide support for findings suggesting leader self-exploration is important in increasing leader ability to authentically model change and therefore the willingness of staff teams to do the same. It is therefore recommended that future leaders considering culture change in line with TIC first take time to explore themselves in line with the model, in order to lay the foundations for successful change when working at the staff team and systemic levels.

Cognitive Appraisal Theory

Leaders' understanding that challenge elicited by staff during change was the result of perceived threat is in line with psychological characterisations of resistance (Mareš, 2018). Within their work both personally and at the staff team level, leaders identified innate human responses to perceived threat as facilitative of cultures that fostered continuous blame and shame within systems. Such findings are in line with cognitive understandings of behaviour, which suggest the way in which a person appraises a situation will predict the way they respond, with appraisals often based upon past experiences (Smith & Ellsworth, 1985). As such, in groups of people who have perhaps "not had the best prior experience with people in positions of power" (Anne), the leader themselves becomes the threat during change, halting any authentic progress until appraisals can be adjusted.

Research exploring the role of cognitive appraisal and leadership within work systems has identified that when employees make positive appraisals about their work, performance and motivation increases, whereas negative appraisals have the opposite effect (Wang et al., 2021). Such findings strengthen the need for approaches to leadership that better support staff through change by acknowledging and working with threat presenting. Servant leadership styles, which involve the prioritisation of stakeholder needs and organisational goals within decision-making, have been found to moderate the relationship between high pressure systems and cognitive appraisals (Wang et al., 2021). This suggests that even within extremely high pressure work settings, by putting the organisation and its employees first, leaders are able to change worker perceptions surrounding the system, meaning work is appraised more positively and so human responses at work are also more positive. This increases the ability of teams and individuals to work together towards shared goals and overcome any challenges presenting.

The Sanctuary Model

The approach taken by participants to work with threat responses elicited by staff members and establish safety in systems is in line with cultural commitments put forwards by Bloom & Streedhar (2008) in The Sanctuary Model of Trauma-Informed Organisational Change. Within perhaps the most well-known model of trauma-informed culture change, authors encourage systems to restore social connections, instigate hope and purpose, and eliminate authoritative top-down approaches to care. Such commitments align with processes outlined in the current model, specifically through themes involving "nurturing a sense of safety", "facilitating the lightbulb moments", "modelling and leading by example", "valuing and prioritising reflection" and "reducing the felt hierarchy".

Whilst empirical explorations of The Sanctuary Model have highlighted positive implications for clients and a system's environment (Kramer, 2016), a mixed-methods evaluation of the model in a residential care setting found that perceived modelling of trauma-informed behaviours was less present at the leadership level than any other. Here, staff members reported that leaders felt uptake of the model's principles "wasn't their responsibility" (Esaki et al., 2014). Whilst authors suggested scores provided may have been subject to bias, as staff members consistently awarded higher scores to supervisors whom they held closer relationships with, such reports still suggest a lack of cohesiveness, collaboration and connection between teams positioned at varying levels within systems, which were consistently reported as fundamental by leaders in the current study when aiming to achieve change in culture. It could be seen that difficulties embedding the model in this instance were due to some confusion surrounding who the model was for, as researchers did not report much input from leaders within implementation. Whilst The Sanctuary Model has previously been perceived as a "clinical model", due to its focus on how culture change can benefit service-users (Galvin et al., 2021), the current study solidifies the perspective that whilst TIC is everybody's responsibility, the role of driving it forwards and supporting systems to change culture in line with its values is best placed with the leader.

Limitations and Future Research Directions

A number of limitations need consideration when attempting to generalise findings of the current study, including the sample size utilised. Whilst the decision to terminate data collection was made in line with grounded theory literature surrounding saturation of themes and categories (Birks & Mills, 2023; Olshansky, 2015), 10 participants in the wider context of health research is considered limited. Researchers suggest that although code saturation (identification of now new concepts) can be achieved through nine interviews, meaning saturation (identification of no new dimensions or enhanced understanding) requires up to 24 interviews (Hennink, 2016). Although some scholars consider samples of 12 to be adequate (Guest et al., 2006), reaching saturation through a smaller number of participants requires focused research questions and homogeneity within the group. As leaders in the current study differed in terms of discipline, sector, and hierarchical position, homogeneity of the sample could be considered lacking.

Furthermore, as the current study only explored the views and experiences of leaders, all of whom were self-selecting and advocates for trauma-informed approaches, the potential

2-27

for bias needs consideration. Whilst leaders appeared to reflect openly and honestly in regard to the challenges they faced during service-wide change, it is likely their experience of change, and their perception of the role of leadership, was different from other staff members and individuals accessing services. To allow for a wider perspective surrounding the process of culture change and its impact, future research should explore other stakeholder experiences.

Additionally, as the decision was made during the research process to solely focus on exploring leader experience within child services, findings may not be generalisable to leaders, professionals and systems outside of the child and family sector. Thus, it is recommended findings of the current study be used as a guide rather than a strict agenda when navigating culture change within systems. Future research should look to explore leader experience embedding trauma-informed culture change in services outside the child sector, to allow for comparison of findings and establish differences in approach that may need consideration dependent on the demographic a service aims to support.

Conclusion

Findings of the current study highlight the imperative role of the leader in the context of system-wide culture change across the health, social care and education sector. Leaders embarking on change in line with TIC need to be prepared to explore their own trauma pulls and triggers in order to demonstrate authentic, genuine intentions to those working within systems, whilst also committing to the abolishment of typical authoritarian cultures that facilitate blame and separation. Whilst prior models of trauma-informed culture change highlight areas of service-provision that require adaptation in the movement towards traumainformed working, the conceptual grounded theory proposed provides leaders with a framework for establishing cultures in services that bring everyone along on the traumainformed "journey", and create systems that truly help rather than hinder.

References

ACE Hub Wales. (2020). Trauma and ACE (TrACE) Informed Organisations Toolkit. Wales.

- Afifi, T. O., & MacMillan, H. L. (2011). Resilience following child maltreatment: A review of protective factors. *The Canadian Journal of Psychiatry*, 56(5), 266–272. https://doi.org/10.1177/070674371105600505
- Aykanian, A., & Mammah, R. O. (2022). Prevalence of adverse childhood experiences among frontline homeless services workers in Texas. *Families in Society: The Journal* of Contemporary Social Services, 103(4), 438–449. https://doi.org/10.1177/10443894211063579
- Azeem, M. W., Aujla, A., Rammerth, M., Binsfeld, G., & Jones, R. B. (2011). Effectiveness of six core strategies based on trauma informed care in reducing seclusions and restraints at a child and Adolescent Psychiatric Hospital. *Journal of Child and Adolescent Psychiatric Nursing*, 24(1), 11–15. https://doi.org/10.1111/j.1744-6171.2010.00262.x
- Bailey, C., Klas, A., Cox, R., Bergmeier, H., Avery, J., & Skouteris, H. (2018). Systematic review of organisation-wide, trauma-informed care models in out-of-home care (oohc) settings. *Health & Social Care in the Community*, 27(3).
 https://doi.org/10.1111/hsc.12621
- Bellis, M. A., Lowey, H., Leckenby, N., Hughes, K., & Harrison, D. (2013). Adverse childhood experiences: Retrospective study to determine their impact on adult health behaviours and health outcomes in a UK population. *Journal of Public Health*, 36(1), 81–91. https://doi.org/10.1093/pubmed/fdt038

Birks, M., & Mills, J. (2023). Grounded theory: A practical guide. Sage.

- Bloom, S. L. (2006). Human service systems and organizational stress: Thinking and feeling our way out of existing organizational dilemmas. *Report for the Trauma Task Force*.
- Bloom, S. L. (2010). Trauma-organised systems and parallel process. In Managing Trauma in the Workplace (pp. 159-173). Routledge.
- Bloom, S. L., & Farragher, B. (2010). Destroying sanctuary: The crisis in human service delivery systems. Oxford University Press. https://doi.org/9780195374803.001.0001
- Bloom, S. L., & Sreedhar, S. Y. (2008). The sanctuary model of trauma-informed organizational change. *Reclaiming Youth and Children*, *17*(3), 48–53.
- Brooker, C., Tocque, K., Kennedy, A., & Brown, M. (2016). The Care Programme Approach, sexual violence and clinical practice in Mental Health. *Journal of Forensic and Legal Medicine*, 43, 97–101. https://doi.org/10.1016/j.jflm.2016.07.011
- Brown, S. M., Baker, C. N., & Wilcox, P. (2012). Risking connection trauma training: A pathway toward trauma-informed care in child congregate care settings. *Psychological Trauma: Theory, Research, Practice, and Policy*, 4(5), 507–515.
 https://doi.org/10.1037/a0025269
- Bryan, R. H. (2019). Getting to why: Adverse childhood experiences' impact on Adult Health. *The Journal for Nurse Practitioners*, 15(2). https://doi.org/10.1016/j.nurpra.2018.09.012
- Charmaz, K. (2006). *Constructing grounded theory a practical guide through qualitative analysis*. Sage Publications.

Charmaz, K. (2014). Constructing grounded theory. SAGE.

- Clarke, A. E. (2005). Situational analyses: Grounded Theory Mapping after the postmodern turn. *Symbolic Interaction*, *26*(4), 553–576. https://doi.org/10.1525/si.2003.26.4.553
- Craner, J. R., Lake, E. S., Barr, A. C., Kirby, K. E., & O'Neill, M. (2022). Childhood adversity among adults with chronic pain. *The Clinical Journal of Pain*, 38(9), 551– 561. https://doi.org/10.1097/ajp.000000000001054
- Damian, A. J., Gallo, J., Leaf, P., & Mendelson, T. (2017). Organizational and provider level factors in implementation of trauma-informed care after a city-wide training: An explanatory mixed methods assessment. *BMC Health Services Research*, 17(1). https://doi.org/10.1186/s12913-017-2695-0
- Dickson, G. S., Briscoe, D., Fenwick, S., MacLeod, Z., & Romilly, L. (2007). *The Pan-Canadian Health Leadership Capability Framework Project*. Canadian Electronic Library.
- Dickson, G., & Tholl, B. (2020). The leads in a caring environment framework: Lead self. Bringing Leadership to Life in Health: LEADS in a Caring Environment, 77–97. https://doi.org/10.1007/978-3-030-38536-1_5
- Durant, J. J. (2011). Dissociation and its discontents: an exploration of the role of dissociation in a retraumatisation cycle among victims of repeated trauma. *California Institute of Integral Studies*.
- Elliott, D. E., Bjelajac, P., Fallot, R. D., Markoff, L. S., & Reed, B. G. (2005). Traumainformed or trauma-denied: Principles and implementation of trauma-informed services

for women. *Journal of Community Psychology*, *33*(4), 461–477. https://doi.org/10.1002/jcop.20063

- Esaki, N., Hopson, L. M., & Middleton, J. S. (2014). Sanctuary model implementation from the perspective of Indirect Care Staff. *Families in Society: The Journal of Contemporary Social Services*, 95(4), 261–268. https://doi.org/10.1606/1044-3894.2014.95.31
- Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V.,
 Koss, M. P., & Marks, J. S. (1998). Relationship of childhood abuse and household
 dysfunction to many of the leading causes of death in adults. *American Journal of Preventive Medicine*, 14(4), 245–258. https://doi.org/10.1016/s0749-3797(98)00017-8
- Fernandopulle, N. (2021). To what extent does hierarchical leadership affect health care outcomes? *Medical Journal of The Islamic Republic of Iran*. https://doi.org/10.47176/mjiri.35.117
- Galvin, E., Morris, H., Mousa, A., O'Donnell, R., Halfpenny, N., & Skouteris, H. (2021).
 Implementation of the sanctuary model in residential out-of-home care: Enablers,
 barriers, successes and challenges. *Children and Youth Services Review*, 121, 105901.
 https://doi.org/10.1016/j.childyouth.2020.105901
- Giano, Z., Wheeler, D. L., & Hubach, R. D. (2020). The frequencies and disparities of adverse childhood experiences in the U.S. *BMC Public Health*, 20(1). https://doi.org/10.1186/s12889-020-09411-z
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? *Field Methods*, *18*(1), 59–82. https://doi.org/10.1177/1525822x05279903

- Harris, M., & Fallot, R. D. (2001). Envisioning a trauma-informed service system: A vital paradigm shift. *New Directions for Mental Health Services*, 2001(89), 3–22. https://doi.org/10.1002/yd.23320018903
- Hennink, M. M., Kaiser, B. N., & Marconi, V. C. (2016). Code saturation versus meaning saturation. *Qualitative Health Research*, 27(4), 591–608. https://doi.org/10.1177/1049732316665344
- Holgerson, A. A., Clark, M. M., Ames, G. E., Collazo-Clavell, M. L., Kellogg, T. A.,
 Graszer, K. M., Kalsy, S. A., & Grothe, K. (2018). Association of Adverse Childhood
 Experiences and food addiction to bariatric surgery completion and weight loss
 outcome. *Obesity Surgery*, 28(11), 3386–3392. https://doi.org/10.1007/s11695-018-3370-1
- Huang, L., Flatlow, R., Biggs, T., Afayee, S., Smith, K., Clarke, T., & Blake, M. (2014).SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach. US Department of Health and Human Services.
- Huckshorn, K. A. (2004). Reducing seclusion & restraint use in mental health settings: Core Strategies for Prevention. *Journal of Psychosocial Nursing and Mental Health Services*, 42(9), 22–33. https://doi.org/10.3928/02793695-20040901-05
- Hughes, K., Ford, K., Kadel, R., Sharp, C. A., & Bellis, M. A. (2020). Health and financial burden of adverse childhood experiences in England and Wales: A combined primary data study of five surveys. *BMJ Open*, *10*(6). https://doi.org/10.1136/bmjopen-2019-036374

- Keesler, J. M. (2018). Adverse childhood experiences among direct support professionals. *Intellectual and Developmental Disabilities*, 56(2), 119–132. https://doi.org/10.1352/1934-9556-56.2.119
- Klein, A. S., Wallis, J., & Cooke, R. A. (2013). The impact of leadership styles on organizational culture and firm effectiveness: An empirical study. *Journal of Management & Organization*, 19(3), 241–254. https://doi.org/10.1017/jmo.2013.34
- Kramer, M. G. (2016). Sanctuary in a residential treatment center: Creating a therapeutic community of hope countering violence. *Therapeutic Communities: The International Journal of Therapeutic Communities*, 37(2), 69–83. https://doi.org/10.1108/tc-01-2015-0005
- Leung, T., Schmidt, F., & Mushquash, C. (2022). A personal history of trauma and experience of secondary traumatic stress, vicarious trauma, and burnout in Mental Health Workers: A systematic literature review. *Psychological Trauma: Theory, Research, Practice, and Policy*. https://doi.org/10.1037/tra0001277
- Lupien, S. J., Juster, R.-P., Raymond, C., & Marin, M.-F. (2018). The effects of chronic stress on the human brain: From neurotoxicity, to vulnerability, to opportunity. *Frontiers in Neuroendocrinology*, *49*, 91–105. https://doi.org/10.1016/j.yfrne.2018.02.001
- Mareš, J. (2018). Resistance of health personnel to changes in healthcare. *Kontakt*, 20(3). https://doi.org/10.1016/j.kontakt.2018.04.002
- McAnallen, A., & McGinnis, E. (2021). Trauma-Informed Practice and the Criminal Justice System: A Systematic Narrative Review. *Irish Probation Journal*, *18*(10765), 109–129.

- 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
- Mills, J., Bonner, A., & Francis, K. (2006). The Development of Constructivist Grounded Theory. *International Journal of Qualitative Methods*, 5(1), 25–35.
- Muskett, C. (2013). 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
- NHS Leadership Academy. (2013). Healthcare Leadership Model: The Nine Dimensions of Leadership Behaviour. *Leeds: NHS Leadership Academy*.
- Olshansky, E. F. (2015). Generating theory using grounded theory methodology. *Nursing Research Using Grounded Theory*. https://doi.org/10.1891/9780826134684.0003
- Oral, R., Ramirez, M., Coohey, C., Nakada, S., Walz, A., Kuntz, A., Benoit, J., & Peek-Asa,
 C. (2015). Adverse childhood experiences and trauma informed care: The Future of
 Health Care. *Pediatric Research*, 79(1–2), 227–233.
 https://doi.org/10.1038/pr.2015.197
- Palfrey, N., Reay, R. E., Aplin, V., Cubis, J. C., McAndrew, V., Riordan, D. M., & Raphael, B. (2018). Achieving service change through the implementation of a trauma-informed care training program within a Mental Health Service. *Community Mental Health Journal*, 55(3), 467–475. https://doi.org/10.1007/s10597-018-0272-6

- Payne, J., & Payne, G. (2004). Key informants. *Key Concepts in Social Research*, 135–138. https://doi.org/10.4135/9781849209397.n28
- Sacks, J. Y., McKendrick, K., & Banks, S. (2008). The impact of early trauma and abuse on residential substance abuse treatment outcomes for women. *Journal of Substance Abuse Treatment*, 34(1), 90–100. https://doi.org/10.1016/j.jsat.2007.01.010
- Sexton, T. L., & Griffin, B. L. (1997). *Constructivist thinking in counseling practice, research, and training*. Teachers College Press.
- Shonkoff, J. P., & Garner, A. S. (2012, January 1). The Lifelong effects of early childhood adversity and toxic stress. American Academy of Pediatrics. https://pubmed.ncbi.nlm.nih.gov/22201156/
- Smith, C. A., & Ellsworth, P. C. (1985). Patterns of cognitive appraisal in emotion. Journal of Personality and Social Psychology, 48(4), 813–838. https://doi.org/10.1037/0022-3514.48.4.813
- Steen, J. T., Senreich, E., & Straussner, S. L. (2020). Adverse childhood experiences among licensed social workers. *Families in Society: The Journal of Contemporary Social Services*, 102(2), 182–193. https://doi.org/10.1177/1044389420929618
- Stubbs, B., Leadbetter, D., Paterson, B., Yorston, G., Knight, C., & Davis, S. (2009).
 Physical intervention: A review of the literature on its use, staff and patient views, and the impact of training. *Journal of Psychiatric and Mental Health Nursing*, *16*(1), 99–105. https://doi.org/10.1111/j.1365-2850.2008.01335.x

- 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
- Tansella, M., & Thornicroft, G. (2009). Implementation science: Understanding the translation of evidence into practice. *British Journal of Psychiatry*, 195(4), 283–285. https://doi.org/10.1192/bjp.bp.109.065565
- Teicher, M. H., & Samson, J. A. (2016). Annual research review: Enduring neurobiological effects of childhood abuse and neglect. *Journal of Child Psychology and Psychiatry*, 57(3), 241–266. https://doi.org/10.1111/jcpp.12507
- Thomas, M. S., Crosby, S., & Vanderhaar, J. (2019). Trauma-informed practices in schools across two decades: An Interdisciplinary Review of Research. *Review of Research in Education*, 43(1), 422–452. https://doi.org/10.3102/0091732x18821123
- Thornberg, R., Perhamus, L., & Charmaz, K. (2014). Grounded Theory: A Handbook of Research Methods in Early Childhood Education. *Research Methodologies*, 1, 405– 439.
- Timonen, V., Foley, G., & Conlon, C. (2018). Challenges when using grounded theory. International Journal of Qualitative Methods, 17(1), 160940691875808. https://doi.org/10.1177/1609406918758086
- Treisman, K. (2021). A treasure box for creating trauma-informed organizations: A ready-touse resource for trauma, adversity, and culturally informed, infused and Responsive Systems. Jessica Kingsley Publishers.

- Vaswani, N., & Paul, S. (2019). 'it's knowing the right things to say and do': Challenges and opportunities for trauma-informed practice in the prison context. *The Howard Journal* of Crime and Justice, 58(4), 513–534. https://doi.org/10.1111/hojo.12344
- Verbist, I. L., Allsopp, K., Huey, D., & Varese, F. (2021). Frequency and impact of childhood sexual and physical abuse on people using IAPT services. *British Journal of Clinical Psychology*, 60(4), 504–512. https://doi.org/10.1111/bjc.12310
- Wang, Z., Ren, S., & amp; Meng, L. (2021). High-performance work systems and thriving at work: The role of cognitive appraisal and servant leadership. Personnel Review, 51(7), 1749–1771. https://doi.org/10.1108/pr-10-2019-0561
- Webster-Marketon, J. I., & Glaser, R. (2008). Stress hormones and immune function. *Cellular Immunology*, 252(1–2), 16–26. https://doi.org/10.1016/j.cellimm.2007.09.006
- Wilson, C., Rouse, L., Rae, S., & Kar Ray, M. (2017). Is restraint a 'necessary evil' in mental health care? Mental health inpatients' and staff members' experience of physical restraint. *International Journal of Mental Health Nursing*, 26(5), 500–512. https://doi.org/10.1111/inm.12382
- Young-Southward, G., Svelnys, C., Gajwani, R., Bosquet Enlow, M., & Minnis, H. (2019).
 Child maltreatment, autonomic nervous system responsivity, and psychopathology:
 Current state of the literature and Future Directions. *Child Maltreatment*, 25(1), 3–19.
 https://doi.org/10.1177/1077559519848497

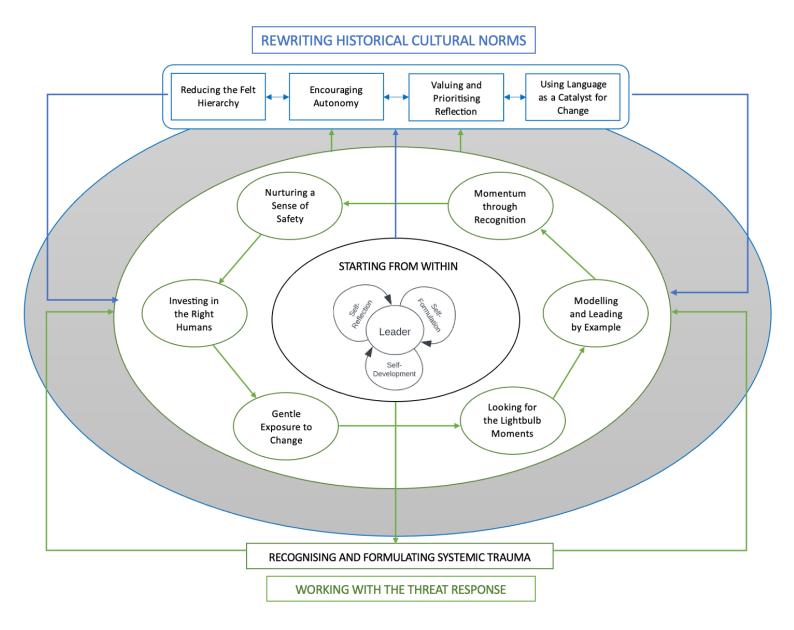
Pseudonym	Professional Background	Gender	
Anne	Mental Health Nurse	Female	
Bill	Teacher Male		
Cathy	Clinical Psychologist Female		
Diane	Social Worker	Female	
Edith	Social Worker	Female	
Fran	Clinical Psychologist Female		
Grant	Teacher Male		
Holly	Teacher Female		
Irene	Residential Worker Female		
Jo	Social Worker Female		

Table 1: Participant Demographics

EMPIRICAL PAPER

Figure 1.

Final Conceptual Model of Leader-Driven Trauma-Informed Culture Change



Appendix 2-A

Author Submission Guidance for the Journal of Traumatic Stress Submission and Peer Review Process

Once the submission materials have been prepared in accordance with the Author Guidelines, manuscripts should be submitted online at https://mc.manuscriptcentral.com/jots.

For help with submissions, please contact <u>JOTS@bu.edu</u>. This journal does not charge submission fees.

Article Preparation Support

<u>Wiley Editing Services</u> offers expert help with English Language Editing, as well as translation, manuscript formatting, figure illustration, figure formatting, and graphical abstract design – so you can submit your manuscript with confidence. Also, check out our resources for <u>Preparing Your Article</u> for general guidance about writing and preparing your manuscript.

Free format submission

Journal of Traumatic Stress now offers **Free Format submission** for a simplified and streamlined submission process.

Before you submit, you will need:

Your manuscript: this should be an editable file including text, figures, and tables, or separate files—whichever you prefer. All required sections should be contained in your manuscript, including abstract, introduction, methods, results, and conclusions. Figures and tables should have legends. Figures should be uploaded in the highest resolution possible. References may be submitted in any style or format, as long as it is consistent throughout the manuscript. Supporting information should be submitted in separate files. If the manuscript, figures or tables are difficult for you to read, they will also be difficult for the editors and reviewers, and the editorial office will send it back to you for revision.

Title Page

The title page should contain:

- A brief informative title containing the major key words. The title should not contain abbreviations (see <u>Wiley's best practice SEO tips</u>);
- 7. A short running title of less than 40 characters;
- 8. The full names of the authors;
- 9. The author's institutional affiliations where the work was conducted, with a footnote for the author's present address if different from where the work was conducted;
- 10. Acknowledgments.

Important: the journal operates a double-blind peer review policy. Please anonymize your manuscript and prepare a separate title page containing author details.

Main Text File

Please ensure that all identifying information such as author names and affiliations, acknowledgements or explicit mentions of author institution in the text are on a separate page.

The main text file should be in Word format and include:

- A short informative title containing the major key words (the title should not contain abbreviations).
- Abstract
- Up to seven keywords
- Main body, formatted as:
 - Method
 - Participants
 - Procedure
 - Measures
 - Data Analysis
 - Results
- References
- Tables (each table complete with title and footnotes)

• Figure legends: Legends should be supplied as a complete list in the text. Figures should be uploaded as separate files (see below).

Reference Style

Journal of Traumatic Stress uses APA reference style. However, because *JTS* offers Free Format submission, you do not need to format the references in your article until the revision stage when your article is more likely to be accepted.

Figures and Supporting Information

Figures, supporting information, and appendices should be supplied as separate files, preferably in Word. You should review the <u>basic figure requirements</u> for manuscripts for peer review, as well as the more detailed post-acceptance figure requirements. View <u>Wiley's</u> FAQs on supporting information.

Appendix 2-B

Screening Conversation Prompts (Cluster 1)

Please check with participants that the organisation they assisted in moving towards trauma-informed working at least attempted:

 \cdot Support for and investment in (e.g., time or finances) implementing and sustaining a trauma-informed approach.

 \cdot Where appropriate, the consideration and adaptation of organisational policies and procedures which demonstrate commitment to and reflect values of trauma-informed practice.

 \cdot An emphasis on enhancing knowledge and skills within the workforce, enabling trauma-informed principles to be embedded within everyday practice.

 \cdot A recognition of the importance of the wellbeing of the workforce, and the possible impact of trauma on staff and teams.

 \cdot Where appropriate/possible, the consideration and adaptation of physical and social environments of the service, to promote safety and wellbeing for all involved

 \cdot Emphasis on ensuring trauma-informed principles have been considered within several aspects of service-delivery, and this is not limited to one area of provisions e.g., in solely staff training

· Ongoing monitoring and evaluation of the above

ANSWER ANY QUESTIONS RE PARTICIPATION

Appendix 2-C

Interview Topic Guide (Cluster 1)

Interview Topic Guide

Key Research Question:

What are the general experiences of service-leads trying to support their respective organisations to become more trauma-informed?

<u>Context</u>

- Can you tell me about the organisation you work for?
- What is your role within the organisation?
- What does your role involve?

Background to movement towards trauma-informed way of working

- How did the decision to move to a more trauma-informed way of working come about?
- Why did you feel it was important to try to embed trauma-informed care within your organisation?
- What was your role in the decision-making process around moving towards traumainformed care?
- What was your role day-to-day in moving towards and managing the implementation of trauma-informed strategies and initiatives?

Impact of a Trauma-Informed Model of Care

- How do you feel your organisation's attempt at a trauma-informed way of working is going thus far?
- What impact do you feel the changes you have made are having on staff and service-users within your service?

Challenges within the Movement to Trauma-Informed Care

- What structural challenges has your organisation faced in the movement towards a more trauma-informed way of working?
- What organisational challenges has your organisation faced in the movement towards a more trauma-informed way of working?

Role of Leadership in Trauma-Informed Culture Change

- I'm interested in understanding what it was like to lead your organisation in the strive towards trauma-informed working. Could you tell me a bit about this?
- What challenges have you (as a leader) faced in your experience of moving an organisation towards a Trauma-informed model of care?
- Could you tell me about the key challenges you faced when trying to embed traumainformed culture-change within your organisation?
- What qualities of yours (as a leader) do you feel have been key when facing these challenges?

- What is it that you feel is crucial when looking to lead a workforce towards traumainformed working?
- How would you say your leadership style has adapted during your organisations journey towards becoming more trauma-informed?
- What lessons have you learnt from your experiences leading an organisation towards a more trauma-informed way of working?
- Looking back, are there any events that you feel stand out in your mind when you think about your experience of leading your organisation towards trauma-informed culture change?

Where Next?

- What do you feel is next for your organisation in terms of its strive towards a traumainformed way of working?
- What work still needs to be done?
- What will your role be in looking to achieve this?
- What advice would you give to other professionals looking to start embedding trauma-informed care within their own organisation? Why do you feel it would be important for them to know that?

Appendix 2-D

Excerpt from Transcript with 'Edith' Demonstrating Initial and Focused Coding

Data	Initial Coding	Focused Coding
Researcher:So, It feels as though what you're talking about is almost building the foundations in terms of trust within an organization, so things feel easier in terms of changing culture, people are more wanting to work with other people because they feel as though their opinions are trusted and that people are being compassionate towards them and their position, whatever that may be. Maybe some organisations lose focus of that a little bit when the overall aim is to meet a certain deadline or to get something over the line, like that's maybe where we tend to lose a focal part of the process, possibly the more important part?		
P5: Yes, or we focus wholly on meeting the needs of the children, which is right really, but we don't think about the reality that if we don't meet the needs of the wider team, we can't best meet the needs of children. And again, you know, acknowledging that it isn't easy for staff at times, and they do struggle, whether you're giving them 40, 50 or 100 grand a year, it's semantics. They're only human beings, that are fallible, when	Tendency to focus solely on children's needs Meeting staff needs to meet children's needs Monetary reward is	Modelling a trauma- informed approach to managing the staff team
they experience things, it impacts them, the same as we say it does with children, when they see something play out, like I say, it retriggers something that happened to them before when they worked with a different family that didn't go well, and that memory is	"semantics" Trauma responses rife within staff teams	Rehumanising staff teams
often underpinned by something that wasn't good for children. So, they're frightened, they don't want to go back there, being able to say that, then safely unpick it and think about what this is actually about, me, it's not about this situation, so how do I resolve	Urges driven by fear and bias based in prior experience of failure	Showing compassion for trauma responses elicited by staff
that and not show bias? Maybe have a session with somebody like [consultation service] and talk that through with them and say, I had this, some carers did this, it	Supporting staff to seek resolve	members
reminded me of the time I had with these carers, I've reflected on it, this is where I'm at now, or I'll talk to my team about it, but I'm gonna own it. Whereas I think in a lot of professions, no one would even, that wouldn't even come to the surface of a	Owning responses Seeking consultation Encouraging reflection	Facilitating staff reflective discussion during times of conflict
conversation with some people, admitting, I have got compassion fatigue, no one		or challenge/ Making

would even say, they might say "well I'm sick of telling them, they ain't listening",	Open communication re	trauma-informed terms
but they wouldn't realise that's because of something that they've internalised and it's	struggles	part of everyday system
having an impact potentially on the way there might respond.	Incongruence between	narrative
	professions re ability to	
R: So, it's bringing that into the consciousness as well, then isn't it?	open up	
	Bringing impact of	
P5: Yeah, and owning it. So, we can be curious and be each other's, what I would call	trauma into conscious	Being each other's "best
best critical friends, but in a way that feels safe, and I think that's the key bit, because if	awareness	critical friends"
you just think well, you shouldn't have spoken to that carer like that, you're the	Bringing people in on	
supervising social worker, or you're the manager, that isn't helpful.	trauma formulations	
	Being each other's "best	
Researcher: No. Maybe that's increasing the threat as well, isn't it? If staff feel as	critical friends"	
though they're going to get targeted or hounded for an emotional response that just	Blame and shame not	
happens in a moment, it just brings the threat right up? And then that travels	helpful	
P5: Yes, and I think that in the world of social work as well, from my experience,		
there's high levels of blame culture that permeates through the whole system. So, for	Traditional culture of	
example, if a fostering family were struggling with a child and they may have	services facilitates blame	
responded in a way that wasn't necessarily the best way. So, they might have said to a	and shame	Recognising historical
child "I've had enough of you", well, that that's not helpful response to a child that's	Carer's experience	presence of blame and
suffered trauma, is it? Who's now going to feel rejected as a result and worthless	trauma-driven responses	shame
because they're thinking "why has my carer had enough of me? My mum had enough	Carer's responses cause	
of me or my dad or whatever". But actually, the carers only a fallible human being, but	trauma for child	
you could imagine if you had that conversation with the local authority and the child	Rehumanising carers	
had said to their local authority social worker "[retracted] said to me she had enough of	Compassionate view of	
me", the local authority would be on the ceiling, saying "why have your foster carers	trauma responses	
spoke to our child like that? Why aren't they coping? They're supposed to be	Lack of compassion	
therapeutically trained?" You know all that, blame and shame. "We're paying you £900	shown by external	Identifying how the
a week for this. We don't expect that for our children". The whole pace principle	authorities	system facilitates
doesn't thread anywhere in that, did you not maybe consider that he smashed her house	Local authority solely	trauma experiences
up yesterday, kicked the dog, told her to **** ***. Said he hopes she dies, her grandma	interested in child's	
has cancer, he said I hope your gran dies next week as well, it's about time she dropped	needs/dismissive of staff	

dead. No one thinks about the fact that in that moment, the carer might say I've had enough of you because what the child said has had an impact on them and they're only human. Have we thought about applying pace principles to that? Do you know I mean, I'm not saying what they did was right, but then how do we then work with the fostering family and the child to enable a repair, so the fostering family can reflect on, I shouldn't have done that, I know what's underpinning it, in a safe space, I've been able to pick that apart, and you can now support me to repair that with the child, so they're able to say to the child, "you know, when I said that, I didn't actually mean it, I'm sorry, how can we work through this together?" Where again, if you don't apply that, you'll find a fostering family to say, "well I tell you what, he's smashed me house up, kicked the dog, said he wants my bloody mother to die, take him then, bloody take him, get someone else to look after him, go on, because I am up to here". That's the alternative, do you know what I mean? And now poor [child], who apart from that comment, was living with a family who genuinely loved him, were trying to support him, he's now going to have to move. And also, the fostering family haven't been able to reflect, all they're left with is that they had this kid from hell, no one listened to me and supported me, so he had to go, so they're also not learning, so when the next kid comes, how do we then help them to not repeat the same behaviour when they're heightened themselves?	needs/ show blame and shame towards staff Applying the trauma- informed model to the carers Compassion facilitates repair Reflection facilitates development Supporting repair Lack of reflection leads to lack of awareness Lack of awareness means continued trauma- dismissive behaviour Lack of reflection and repair reduces child outcomes	Holding people accountable in a way that facilitates learning and development
So, it's a complicated system. It is a complicated system, so I think you also think that to try and hold your whole culture and service, in a cocoon of, this is how we operate when sometimes the outside world doesn't, is also complicated, when you're trying to roll out a trauma informed model because you might get it, and in fact, even your admin workers working to it because she understands pace principles because we've threaded it out across the whole organization, the cleaner he probably knows about it too. But as soon as you have a conversation, you step outside the circle of safety, they don't know what you're talking about, not buying into it either. Researcher: What's that like then?	"Complicated system" Commitment within system to develop EVERYONE Difficult to uphold trauma-informed values when external system doesn't support this Incongruent levels of safety within/outside system - causes problems	Recognising reasons teams avoid working together

P5: Difficult, really difficult, because again, then you're having conversations with	in multi-agency	
local authority social workers who haven't been trained, don't know what you're talking	conversations	Increasing opportunities
about, commissioners who aren't even social workers who are driven by how we're	Leader struggle to	for networking
gonna save as much money as we can because the government keeps cutting our	manage internal culture	
money. It's a difficult one and I think, with the model, the good thing about that was,	in context of external	
through examples when they would do clinical formulations for children, they would	culture	
try and get as many professionals as possible around the child involved, so we could try	Formulations involving	Unsiloing teams and
and permeate outside the circle, ultimately, to have the best success rate for the child.	everyone	services
So, we would invite school, would invite the local authority social worker, sometimes	Using multi-agency	
it might have a team manager there or someone else that's working with the child to try	meetings as an	
and say, you know, welcome to the circle. This is how we're looking at it. This is how	opportunity for	
we're gonna deal with it and so I think that that was some of the successes and that	education/development	
didn't always happen, but where it did happen, you've got one more ally who	Trying to "permeate	
understands, and that helps.	outside the circle"	
	More allies means better	
	outcomes for child	

Appendix 2-E

Examples of memo-writing surrounding the "reducing the felt hierarchy" conceptual theme (included in the category "rewriting historical cultural norms")

Memo 1 (written during coding of P1 transcript):

P1 probably a good leader to have interviewed first, she seems to be positioned quite highly within her organisation and more involved in that strategic, operational decisionmaking that goes on during planning and facilitating whole system change. It feels useful to be getting a birds eye view of how this type of change starts before we focus more closely on how that looks on the ground. She talks a lot about resistance driven by threat, this threat seems to be inevitable during change, regardless of context.

There's something really important to consider in terms of the historical cultural narratives running through these systems, e.g., this hierarchical framework that positions leaders really high above systems. Interesting that P1 identifies this as a challenge despite describing herself as being "above" the systems she supports, I don't think this was deliberate, there has to be hierarchy for services to be operational, there is definitely a place for hierarchy, however there is something about the abuse of hierarchy, and how this has historically made people feel that is the challenge.

Memo 2 (written during analysis of cluster 1):

All four leaders describe some level of fear elicited by staff members in response to leaders, due to prior approaches to hierarchical leadership that have meant leaders are only present when things go wrong, they are there to blame, criticise, point the finger, this leaves staff members terrified of making mistakes and therefore lacking independence. P1 and P3 describe this really well, the hierarchical framework of how services are set up, the behaviourist approach for managing young people and staff members (hierarchical approaches used by leaders lead to hierarchical approaches used by staff members), the lack of autonomy, the use of power in leadership (dictatorship). For cultural change to commence, the leader is key because the prior problem has been top down, so change needs to come from the top, staff need to see a difference in the leader so threat is reduced to a level where change feels manageable, and people believe that things can be different.

P3 describes a lot of effort to model behaviour that reduces felt hierarchy, even though actual hierarchy remains present, such as through sitting with the team during team days, not in an office, "moving away from this idea of the professional in the ivory tower". She feels this reduces the threat that staff teams associate with leadership, and allow for stronger trusting relationships to develop, so staff feel safer within change. Although P1 identified that this needs to be modelled top-down, P3's description seems to involve more the leader coming down on the ground and modelling bottom-up, so still coming from the person at the top, but maybe it feels safer and more authentic if the leader is trying to model non-hierarchical working in a way that is non-hierarchical.

Memo 3 (written during analysis of cluster 2):

Methods surrounding addressing hierarchical approaches to leadership are becoming a lot clearer through more specific questioning. It seems most leaders have recognised the presence of prior hierarchical approaches, and feel committed to rewrite people's understanding of what a leader is or should be, for some leaders this seems to be a conscious process, but for others, they describe doing things that would have this effect but not necessarily having an awareness that this is what is changing.

This process seems to involve a lot of modelling, but not just of physical nonhierarchical approaches, there is something about showing compassion to staff member's human responses to threat and trauma as well, P5, P7 and P8 talk a lot about this, taking a non-judgmental stance, and demonstrating through action that they value the humans and wants things to be better, not just for young people, but for everyone. This approach taken by leaders allows them to be perceived as one of the team by staff members, "reducing the felt hierarchy", because they are showing understanding surrounding the difficulties, rather than blaming, which has previously led the leader to be viewed as the enemy. If the leader is viewed as someone who understands, and wants the best for the team, staff members are more likely to trust in them, and the model, engaging more in change processes and increasing their own capacity to show the same compassion and understanding when managing the presentation of young people's distress.

Appendix 2-F

Interview Topic Guide (Cluster 2)

Interview Topic Guide - Cluster 2

Key Research Question:

What are the general experiences of service-leads trying to support their respective organisations to embed trauma-informed culture change?

Process

- I'm interested in hearing a little more about the process of transforming an organisation to adopt a trauma-informed culture... could you tell me about your personal experience of the process? E.g., initial experiences at the start, the process of planning, early challenges and decision-making
- What steps are involved in an organisations strive to embed trauma-informed culture?
- What role do understanding and formulating trauma play in the strive to making a system more trauma-informed?

Challenges within the Movement to Trauma-Informed Care

- What structural challenges has your organisation faced in the movement towards a more trauma-informed way of working?
- What organisational challenges has your organisation faced in the movement towards a more trauma-informed way of working?
- Do challenges presenting differ dependent on the level at which they present? E.g. young person level, staff team level, managerial level, operational level?
- Does your approach to exploring and managing challenges differ, dependent on which level of the organisation they present at?

Culture Change

- What is different about your organisations culture now, compared to how you experienced culture when you first started moving towards change?
- What has helped to facilitate culture change?
- What have been the key barriers when thinking about culture change?

Exploring Leader Journey

- I'm interested in understanding what it was like to lead your organisation in the strive towards trauma-informed working. Could you tell me a bit about this?
- How would you describe your style of leadership?
- What are your experiences of modelling the change you want to see in your organisation?
- How does your leadership style impact upon the people that you work with and the culture of your organisation?
- How does your leadership style differ from past approaches to leadership? What difference do you think that makes?

- Do you think you as a leader are impacted in any way by the trauma that is present within the organisation that you work for?
- How do you manage this?

Exploring Threat and Resistance

- What is your experience of resistance as a response to change in the strive towards more trauma-informed organisations?
- What do you think resistance in response to change is driven by?
- What is the impact of resistance in the strive for an organisation to become more trauma-informed?
- How has resistance impacted you as a leader in your organisations strive to become more trauma-informed?
- How do you overcome/reduce resistance as someone trying to elicit change within an organisation?

Safety and Relationships

- How important are relationships in the strive towards trauma-informed organisations?
- What impact do relationships have on the felt safety of staff members within an organisation?
- How do you personally contribute to the development of safety? (either in terms of relationships or in other ways?
- How can we go about building relationships that maintain and support a traumainformed culture within organisations?
- Are there any other ways of establishing safety within organisations outside of relationships? E.g., Environmental changes? Strategic changes?

EMPIRICAL PAPER

Appendix 2-G

Overview of category construction, including focused codes, conceptual themes and final core-categories

Core-Category	Conceptual Theme	Focused Codes
Starting From Within	Self-Reflection	Reflecting on challenges faced at work, Feeling dehumanised by the system, Noticing emotional responses to the work, Noticing urges to act on emotion, Considering own role during conflict, Refraining from acting on impulse, Giving self permission to think and reflect, Contemplating the need for self-change in line with the trauma-informed model
	Self-Formulation	Undertaking "personal research" in line with TIC, Identifying historical experiences impacting emotional responses and urges, Identifying current personal crises impacting emotional responses and urges, Identifying own triggers and biases, Developing a new understanding of self, Bringing formulations into conscious awareness
	Self-Development	Considering personal needs when things become too much, Developing self-care routine, "Putting on your own oxygen mask before you reach for anyone else's", Using supervision to process stress and emotion, Putting on the leader "mask", Attending courses for self-development, Building and maintaining positive support systems
Working with the Threat Response	Recognising and Formulating Systemic Trauma	Recognising staff member's personal trauma, Identifying how the system facilitates trauma experiences, Noticing the "push and pull", Building a compassionate understanding of staff trauma responses, Considering how trauma presentation impacts capacity for change, Considering the needs of the workforce, Using formulations when planning for change

	Investing in the Right Humans	Commencing trauma-informed conversations at recruitment, Prioritising staff values and morals in line with TIC over knowledge and experience, Non-negotiable staff standards surrounding kindness and care, Accepting staff sacrifices when the fit isn't right, Financial commitment in developing the right staff, Taking time to get to know the team, Treating staff members with compassion and kindness, Supporting the team to support the system
	Nurturing a Sense of Safety	Establishing mutual trust and respect, Building relationships that foster safety, Encouraging integration, Rehumanising staff teams, Creating an environment with a "family feel", Taking a light hearted approach, Staff feeling safe to bring themselves, Staff feeling safe to speak out
	Facilitating the Lightbulb Moments	Educating every person within the system around the impact of trauma, ACEs, and attachment, Seeking training from those who inspire, Facilitating practical learning opportunities, Consistent repetition of education initiatives, Winning "hearts and minds", Increasing psychological buy-in to the model and the vision, Keeping TIC "fresh in people's psyche"
	Gentle Exposure to Change	Considering the needs of the staff team within change, "Slow and steady wins the race", Infiltrating one layer of a system at a time, Valuing staff involvement in change Giving plenty of notice, Empowering staff members to feel involved in change decisions, Graded exposure, Maintaining a balance between safety and progress
	Modelling and Leading by Example	Modelling a trauma-informed approach to managing the staff team, Modelling approaches to emotion management and conflict resolution, Letting staff in on formulation processes, Modelling consciously
Rewriting Historical Cultural Norms	Reducing the Felt Hierarchy	Recognising previous authoritative leadership styles and their impact, "Letting go of the power and control", Coming "alongside" rather than "above", Moving away from dictatorship and towards democracy, Supporting instead of blaming, Encouraging the contributions of others

Encouraging Autonomy	Owning not knowing Giving people ownership of their work, "Distributive leadership", Normalising and modelling mistake-making, Empowering staff members to make decisions autonomously, Encouraging self-regulation during decision-making, Building confidence through coaching, Facilitating development and accountability, Allowing the staff to carry the vision
Valuing and Prioritising Reflection	Challenging narratives surrounding reflection as a "fluffy" concept, Acknowledging the role of reflection within learning and development, Modelling reflective processes, Increasing opportunities for staff reflection on-action, Supporting staff to develop skills reflecting in-action, Being each other's "best critical friends", Prioritising supervision for everyone, , Using reflection as a vehicle for progress
Using Language as a Catalyst for Change	Exploring staff member's use of trauma-dismissive language, Highlighting barriers created through trauma-dismissive language, Supportively challenging trauma- dismissive terms, Creating a shared language that recognises holistic distress, Making trauma-informed terms part of everyday system narrative, Modelling use of trauma- informed language

Chapter Three: Critical Appraisal

Reflections on the Research Process and Considering Further Implications

Word Count: 3,639

Nicole Thordarson

Doctorate in Clinical Psychology

Division of Health Research, Lancaster University

June 2023

All correspondence should be sent to:

Nicole Thordarson

Doctorate in Clinical Psychology

Health Innovation One

Sir John Fisher Drive

Lancaster University

Lancaster

LA1 4AT

n.thordarson@lancaster.ac.uk

Critical Appraisal

The following critical appraisal includes a reflective overview of the research process as a whole alongside consideration of links between Chapters One and Two. First, further context is offered surrounding topic selection before the researchers' epistemological position is explored in more detail and reflexivity considered. Then, to orientate the reader, key findings derived from the Systematic Literature Review (SLR) and Empirical Paper (EP) are provided, with reflections offered surrounding challenges faced. Additional findings from the EP not included in Chapter Two due to them being identified as peripheral to the main focus of the study are then explored in light of the final conceptual model and relevant literature. Finally, links between the papers are made explicit, with clinical implications of the thesis as whole, both in terms of practice and clinical psychology as a profession considered.

Research Focus

I chose to focus the current research project on Trauma-Informed Care (TIC) as a means to contribute something meaningful to an evidence-base that seemed over-researched and yet somehow still consistently misunderstood within practice. After spending time prior to training working and volunteering in Secure Services, the term "Trauma-Informed Care" was one I heard quite regularly but had only encountered in practice a handful of times. See, more often than I worked with staff teams committed to understanding the distress behind client behaviour, I worked with staff teams so distressed themselves that getting through the day was an achievement in itself. Whilst posters on the office walls spoke of "Safe Wards", "Attachment Focused Approaches" and "Trauma-Informed Care", staff teams were faced with long hours, low pay, and little to no support, whilst spending most days working in environments where physical assault and verbal abuse was an everyday norm. The truth is, whilst TIC was something to talk about in an interview, something included but overlooked on every team meeting agenda, something to mention in conversation when the Care Quality

Commission (CQC) came to visit, it certainly wasn't something used or considered within everyday practice. In contrast to the writing on the walls, on the website, and on the letterheads, nobody felt safe, nobody felt connected, and nobody knew what TIC was.

As I started to learn more about TIC when moving into psychology-based roles, the challenges in embedding its principles became clear. When observing "bad practice", where perhaps a staff member shouted because they were assaulted, or didn't take a service-user on leave because only three team members made it to work that day, it was so easy for frustration to be directed towards those already suffering, but was passing blame a trauma-informed approach? Why were human responses to fear, hurt, and distress responded too in such inhumane ways? How could services expect staff members to show complete compassion and understanding to service-users when nobody showed them the same courtesy? I wasn't sure whose responsibility it was to take all of this forwards, and if I'm honest, I doubted at the time whether services could ever get to a place where things were markedly different. However, when the opportunity arose to explore some of this further, identify what the challenges were, how they could be addressed, and what needed to change in the wider context of health systems for service-users to receive care they deserved and staff members to feel safe delivering that care, it was an opportunity I had to take, not just for research purposes, but for my own personal and professional development.

Considering my Epistemological Position

As a researcher who presents a quantitative systematic review alongside a Grounded Theory paper, reflecting on my epistemological position feels important. The simple answer when considering my own beliefs around the way in which knowledge is acquired is that it depends on the nature of what is trying to be understood. Though qualitative and quantitative approaches to research feature significantly opposing viewpoints in what constitutes understanding and valid obtainment of information, pragmatism has been suggested as a philosophical standpoint that embraces arguments put forwards by both approaches (Fishman, 2020; Tashakkori & Teddlie, 2009). Within the framework of pragmatism, the key objectives of positivist and constructivist research are not viewed as contradictory, but rather the approach to acquiring and validating knowledge appropriate for each differ (Yardley & Bishop, 2007).

As such, in the SLR, whereby the aim was to identify factors associated with Secondary Traumatic Stress (STS) and synthesise the literature to date, an objective means of data collection and analysis was deemed beneficial, thus papers adopting a positivist approach to acquiring knowledge and verifying hypotheses were sought. However in the EP, where the aim was to explore leader experience within a social world where understanding surrounding topics of interest was inherently based upon participants' interpretation of their experiences, a social constructivist approach to acquiring knowledge was deemed more appropriate. In line with acknowledging interpretation as a key part of constructivist approaches, Constructivist Grounded Theory (CGT; Charmaz, 2014) was selected as it also recognised the role of the researcher in deriving meaning from interpretations provided and constructing a model representative of that process.

Although taking a pragmatic stance to research has been outlined as particularly beneficial when undertaking organisational studies (Farjoun et al., 2015), a key challenge faced involves the potential for skills and techniques used appropriately in one method to be inappropriately applied within another e.g., data collected within qualitative designs to be taken at face value rather than explored and critiqued with participants, or contradictory findings derived from quantitative research to lead to two hypotheses being accepted as potential possibilities. As such, consistently referring to the literature surrounding best practice guidance for each opposing approach (Charmaz, 2014; Popay et al., 2006), and seeking consultation from Faculty Librarian's, and both my field and research supervisors

3-4

was crucial in order to maintain the validity of both papers as separate entities, and the thesis as one.

Reflexivity

Reflexivity refers to "An awareness of the ways in which the researcher as an individual with a particular social identity and background has an impact on the research process" (Robson, 2011; pg. 22). As such, in the context of CGT, which places particular emphasis on the researcher's role in the construction of meaning, engaging in a reflective process that allowed me to acknowledge pre-conceived understanding surrounding the topic area and how that might impact my approach to data collection and analysis was particularly important. As outlined above, whilst TIC was a model I was familiar with and intrigued by prior to undertaking the EP, it certainly wasn't a topic I felt to be an expert in. I was aware of the theoretical underpinnings and held experience working in services that had attempted to adopt its principles (not by any means successfully), but at the time I felt in no way knowledgeable about why trauma-informed culture change was proving so difficult and how challenges were being approached/overcome within the field.

Additionally, as the EP specifically focused on leader experience of trauma-informed change, and all of my experiences in the field had been working on the ground in Support Worker and Assistant Psychologist roles, I didn't consider myself to have particular expertise within leadership processes deemed imperative to the research questions. Nonetheless, my commitment to maintaining that stance for as long as possible within the research process meant only commencing the literature review for the EP after almost all data had been collected, which is in line with recommended practice for a CGT methodology (Dunne, 2011). Further, at the point of commencing a final year placement which involved providing consultation to management surrounding their use of TIC within a Child and Adolescent Step Down Service, it felt important to engage in continuous reflection throughout the research

process of how my understanding and experience of TIC was transforming, and how such changes might impact my approach to the research. In essence though, such reflections usually involved consideration not related to how my experiences were impacting the research, but rather how much I was learning by embracing the opportunity to interview leaders revolutionising the field of an area we held mutual interest in.

Summary of Key Findings

Chapter One

Chapter One provides an overview of a systematic review undertaken exploring risk and protective factors of Secondary Traumatic Stress (STS) in Mental Health Professionals'. The decision was made to focus on this area after leaders identified during interviews that a key consequence of trauma-informed change overlooked by most leaders during early stages of service transformation involved the impact enhanced engagement with trauma had on workforces. Whilst leaders described feeling excited to embark on a journey of change in line with their values and hopes for the future of mental health services, they were not prepared for the impact trauma training would have on teams. Without having the relevant support and wellbeing initiatives in place, initial attempts at training staff members in trauma and its consequences had detrimental effects on some individuals due to the retriggering of their own trauma experiences as they explored the trauma narratives of their clients. As such, staff absence increased and hope and containment that leaders hoped to provide was compromised, significantly impacting the organisations' capacity for change. It was identified however that this did not apply to all staff, with some team members responding particularly well to training offered. As such, identifying factors that predict STS, or protect from STS, was considered an important review to undertake in conjunction with the EP.

A number of factors were observed to increase risk of STS, including being younger, holding less experience, lower income, personal trauma history, higher levels of empathy and/or altruism, tendency to engage authentically with emotions within work with clients, larger caseloads, experiences of racism, and higher rates of exposure to details of client trauma. Protective factors included having a higher sense of psychological capital and/or empowerment, purpose in life, use of coping strategies, higher levels of perceived psychosocial support, more frequent and more effective supervision processes, sense of belongingness, and having access to organisational strategic information.

Whilst exposure to details of client trauma is inevitable in the context of mental health work, findings provide a number of areas for individuals and organisations to consider in the process of better supporting healthy engagement in their work. It seems to keep staff members well in their work with traumatised clients, organisations need to increase opportunities for reflection, connection and personal exploration and make them a priority, whilst taking a transparent approach to communication when making strategic decisions. Furthermore, professionals working in the mental health sector need to take responsibility for their own wellbeing during work with traumatised clients, adopting proactive approaches to self-care and seeking support from others where needed. Despite challenges faced by mental health services at present, specifically a lack of funding/resources, lengthy waiting lists, and staffing vacancies, it seems increasing the workload of those in post in order to meet strategic goals may be counterproductive in the hopes of retaining staff teams, thus furthering problems faced. Whilst prioritising reflection, connection and self-care may seem superfluous in the wider context of service need, they appear to be a key requirement in keeping professionals well within their roles.

Chapter Two

The aim of Chapter Two was to create a conceptual model representative of leader's experiences moving organisations towards trauma-informed culture change. Although vast amounts of research exploring TIC are available in the literature, until now the leader's voice

has been relatively absent, which is surprising considering the vital role leaders play in influencing system change. Findings from Chapter Two outline a continuous process of leader-driven change imperative in transforming service culture in line with TIC. This involves leader self-exploration in line with the model ("Starting from Within"), a change in approach to managing staff teams that recognises and meets their wants and needs ("Working with the Threat Response"), and the reduction of hierarchical, power-driven approaches to influencing change that are seemingly counter-productive in the wider context of change ("Rewriting Historical Cultural Norms"). Findings provide a clear outline of how leaders of future health, social care and education systems can begin to adopt a trauma-informed ethos within service development, highlighting the imperative role of the leader at every step of an organisation's journey.

Whilst findings from the EP provide a framework for future leaders looking to establish trauma-informed change within health and social care systems, a number of discipline and specialism specific distinctions need consideration. In terms of discipline, although the current research focused on leaders from various professional backgrounds, most non-psychologist-leaders described needing consultation from psychologists throughout their attempts to initiate trauma-informed culture change. As such, psychologist leaders fronting change attempts will likely need less process-related support than their nonpsychologist colleagues when applying the conceptual model constructed through the EP. Likewise, leaders from non-psychology backgrounds are recommended to seek guidance from psychologists in their endeavour to utilise the model suggested to establish traumainformed change.

Furthermore, whilst all leaders from the current study worked in child services, where trauma-informed approaches are particularly sought-after due to research outlining the benefits of early intervention (Dwyer et al., 2012; Fredrickson, 2019), differences in adopting

the constructed model in other specialisms also need consideration. Whilst little research is available outlining specific differences between trauma-informed practice in child, adult, or other services, any organisation aiming to adopt TIC is urged to tailor their approach to meet specific need. As such, all leaders, but especially those working in organisations serving adult populations, are urged to consider the needs of all stakeholders when adapting and applying the conceptual grounded theory constructed. Further research is needed to establish specific differences needing consideration when eliciting leader-driven culture change within services outside the child and family sector.

Key Challenges

The biggest challenge faced in the research process was adopting a qualitative approach to research design after only having undertaken quantitative research previously. Particularly during data collection and analysis, understanding key techniques utilised within CGT and applying these within interviews and construction of the model was an overwhelming process. During early phases of the project, when faced with hours of interview recordings, finding focus and feeling assured that CGT was being applied correctly was difficult. This often led me to revisit the evidence-base surrounding CGT, finding comfort in consistent reports that novice qualitative researchers, and even accomplished scholars often can feel overwhelmed, tired and disappointed during early phases of CGT, due to the large amounts of data often produced and amount of work and time needed to progress within the research process (Backman & Kyngas, 1999; Olesen et al., 2007; Timonen et al., 2018). As such, a number of approaches were adopted during times of overwhelm to reground myself within data collected and find focus. This included revisiting early interviews with the coding database in mind and reconsidering codes and categories in relation to raw data, as well as undertaking continuous memo-writing and diagrammatic sketching throughout the research process. Such strategies have been found to assist with

strengthening the development of categories and concepts, and integrating them together to form a model (Clarke, 1987; Corbin & Strauss, 2015).

Further Findings

In line with challenges faced during the process of learning how to adopt a GT approach, it often felt hard to let go of findings which may not have been directly relevant to the main focus of the research, but felt important in the wider context of change. As such, even prior to undertaking the final two interviews, the model constructed from data was extensive, representative of as much detail from interviews that would fit, rather than focused on the details that were important in the context of culture change. When discussing this with the research team, it was identified that one category in particular, "Building the Foundations for Change" might have conceptualised important experiences surrounding leaders' initial experiences planning trauma-informed approaches, but that these didn't necessarily relate to changing culture. As the final two participants were also less drawn to this concept over others, the decision was made to remove the category from the final model, however an overview is provided below.

Building the Foundations for Change

During data collection, leaders described an overwhelming sense of fear and doubt when starting out within their roles: "how did it feel? It felt completely overwhelming, I did feel really frightened about it" (Cathy). This was grounded in a lack of basis for comparison, and subsequent imposter syndrome: "I didn't have anything to compare too... there was a point I was thinking, what have I done? I am never going to be able to get this where it needs to be" (Holly). Leaders identified that to overcome overwhelming feelings, a better understanding of the task, the model, and its place within a wider context was needed. This led to the construction of the category, "Building the Foundations for Change", encapsulating the leaders' work underneath the system in early stages of change, featuring two contributing themes: "Consultation and Networking", and "Planning the Route Ahead".

Consultation and Networking

Leaders identified that to overcome overwhelm grounded in confusion and uncertainty, consultation and networking was key: "You need to work with people with different expertise to you to support this, it's not primary" (Edith). This often involved consultation with psychologists, experts across the field of TIC and stakeholders with a vested interest in the organisation's success: "I set up a whole series of meetings with a clinical psychologist, as well as people from health, people from children's social care, someone from CAMHS, to really think about how our organisation could become more trauma-informed" (Diane), "Each service elected two young people to consult with their peers and provide an update each month on things going really, really well, and also something they might be stuck with or not happy about" (Diane).

Leaders also sought opportunities to network with other leaders and systems of a similar nature, to reduce isolation and allow a basis for comparison/support: "I started to look around for similar schools that were outstanding, what were they doing that we're not doing?" (Bill), "I'm always looking for opportunities to network with other leaders in similar positions ...to try and share ideas for how to tackle trauma at an organisational level and be resilient enough to keep each other going when it's really tough" (Cathy).

Planning the Route Ahead

Once leaders had formulated systemic trauma, and commenced consultation and networking, they described a process of meticulous planning in line with their learning:

"It's about managing change... not just rolling out a therapeutic model... my strategy was I'll work in order of who shows me the least resistance first... we had a service... they were local, I had good relationships with management, and the team and service lead were really on board and interested, so I started there" (Edith).

Participants identified that having a planned change restored hope and relief: "I heard a saying once, traveling hopefully, rather than hoping for the best, so, traveling hopefully means I thought about this, I've got a plan in place, I think it's going to work, and I am traveling hopefully in that direction, rather than just thinking, right, let's just go and hope for the best" (Diane)

Implications of Further Findings

Although not included in the final analysis, the category "Building the Foundations for Change" was deemed an important process in leader's early approach to change that allowed them to overcome overwhelming feelings through commitments to better understand systems and change needed. One of the key findings to come out of the category was leaders' consistent seeking of consultation from "the experts", usually psychologists, in terms of better understanding therapeutic approaches to service development, planning for change and gaining support generally with challenges faced and how they impacted the leaders' own trauma responses. Whilst consultation is a key part of any psychologists' role, within typical service-provision this usually involves in-house offering of sessions to staff in other disciplines surrounding areas of difficulty that may be helped by an increased psychological understanding. As leaders described psychologist input as fundamental in the success of TIC, and yet many leaders worked within systems in which psychologists were not employed directly but rather commissioned externally, it must be considered why more psychologists are not placed as leaders of such settings if they are the ones holding the expertise. When initially searching for an SLR focus, a topic relating to psychologists as leaders was initially sought, however a lack of research in this area meant synthesis of findings was not possible. Whilst a huge part of a psychologist's training involves the development of leadership skills,

it seems healthcare settings are hesitant in some way to employ psychologists in leadership roles. As such, future research should seek to explore the experiences of psychologists as leaders, or potentially even the reasons psychologists are not employed within managerial roles.

Making Explicit Links

When taking the SLR and EP together, it becomes clear that the key to truly embedding trauma-informed practice within services comes through better supporting the staff teams that work within them. Processes outlined by leaders within the EP highlighted commitments to nurture a sense of safety within systems, increase and prioritise opportunities for reflection, build mutual trust and healthy relationships, and invest time and money into the health workforce. As findings of the SLR also identified that key factors decreasing the likelihood of STS are the presence and use of effective and frequent supervision processes, positive psychosocial support arrangements, self-care, mindfulness, and engagement in hobbies and activities, it seems providing staff teams with opportunities to reflect on their own journey, connect with each other and take time to keep themselves well is crucial to building trust that enhances change initiatives. As such, when considering initial reflections surrounding my earliest experiences of TIC in secure settings, it becomes clear that TIC is about actions instead of words, actions that need to start with those in charge in order for change to infiltrate the system.

References

Backman, K., & Kyngas, H. A. (1999). Challenges of the grounded theory approach to a novice researcher. Nursing and Health Sciences, 1(3), 147–153. https://doi.org/10.1046/j.1442-2018.1999.00019.x

Charmaz, K. (2014). Constructing grounded theory. SAGE.

- Clarke, M. (1987). From practice to grounded theory: Qualitative research in nursing. International Journal of Nursing Studies, 24(3), 271–272. https://doi.org/10.1016/0020-7489(87)90009-5
- Corbin, J., & Strauss, A. (2015). Basics of qualitative research: Techniques and procedures for developing grounded theory. Sage.
- Dunne, C. (2011). The place of the literature review in Grounded Theory Research. International Journal of Social Research Methodology, 14(2), 111–124. https://doi.org/10.1080/13645579.2010.494930
- Dwyer, J., O'Keefe, J., Scott, P., & Wilson, L. (2012). Literature review: A trauma sensitive approach for children aged 0–8 years. Trauma and young children.
- Farjoun, M., Ansell, C., & Boin, A. (2015). Perspective—pragmatism in organization studies: Meeting the challenges of a dynamic and complex world. Organization Science, 26(6), 1787–1804. https://doi.org/10.1287/orsc.2015.1016
- Fishman, D. (2020). The Case for Pragmatic Psychology. https://doi.org/10.18574/nyu/9780814769584.001.0001
- Fredrickson, R. (2019). Trauma-informed care for infant and early childhood abuse. Journal of Aggression, Maltreatment & Trauma, 28(4), 389-406.

- Olesen, V. L. (2007). Feminist qualitative research and grounded theory: Complexities, criticisms, and opportunities. The SAGE Handbook of Grounded Theory, 417–435. https://doi.org/10.4135/9781848607941.n19
- Popay, J., Roberts, H., Sowden, A., Petticrew, M., Arai, L., Rodgers, M., Britten, N., Roen,K., & Duffy, S. (2006). Guidance on the Conduct of Narrative Synthesis inSystematic Reviews. ESRC Methods Programme, 1.
- Robson, C. (2011). Real World Research. Wiley.
- Tashakkori, A., & Teddlie, C. (2009). Integrating qualitative and quantitative approaches to research. The SAGE Handbook of Applied Social Research Methods, 283–317. https://doi.org/10.4135/9781483348858.n9
- Timonen, V., Foley, G., & Conlon, C. (2018). Challenges when using grounded theory. International Journal of Qualitative Methods, 17(1), 160940691875808. https://doi.org/10.1177/1609406918758086
- Yardley, L., & Bishop, F. (2008). Mixing qualitative and quantitative methods: A Pragmatic Approach. The SAGE Handbook of Qualitative Research in Psychology, 352–369. https://doi.org/10.4135/9781848607927.n20

Chapter Four: Ethics Section

Nicole Thordarson

Doctorate in Clinical Psychology

Division of Health Research, Lancaster University

June 2023

All correspondence should be sent to:

Nicole Thordarson

Doctorate in Clinical Psychology

Health Innovation One

Sir John Fisher Drive

Lancaster University

Lancaster

LA1 4AT

n.thordarson@lancaster.ac.uk

Faculty of Health and Medicine Research Ethics Committee (FHMREC)

Lancaster University

Application for Ethical Approval for Research

Title of Project: Striving for Trauma-Informed Organisations: What it Takes to Take the Lead

Name of applicant/researcher: Nicole Thordarson

ACP ID number (if applicable)*:

Funding source (if applicable)

Grant code (if applicable):

*If your project has *not* been costed on ACP, you will also need to complete the Governance Checklist [link].

Type of study

Involves existing documents/data only, or the evaluation of an existing project with no direct contact with human participants. **Complete sections one**, *two* and four of this form

Includes *direct* involvement by human subjects. **Complete sections one**, *three* and four of this form

SECTION ONE

 Appointment/position held by applicant and Division within FHM: Trainee Clinical Psychologist/Student
2. Contact information for applicant:
E-mail: n.thordarson@lancaster.ac.uk Telephone: XXX
Address: Doctorate in Clinical Psychology, Health Innovation One, Sir John Fisher Drive, Lancaster University, Lancaster, LA1 4AT
3. Names and appointments of all members of the research team (including degree where applicable)
Nicole Thordarson, Trainee Clinical Psychologist/Student, Lancaster DCLINPSY Programme
3. If this is a student project, please indicate what type of project by marking the relevant box/deleting as appropriate: (please note that UG and taught masters projects should complete

box/deleting as appropriate: (please note that UG and taught masters projects should complete **FHMREC form UG-tPG**, following the procedures set out on the <u>FHMREC website</u>

PG Diploma

Masters by research	
---------------------	--

PhD Thesis

PhD Pall. Care

ETHICS SECTION

PhD Pub. Health 🗌	PhD Org. Health & Well Being 🗌	PhD Mental H	ealth 🗌	MD
DClinPsy SRP 📃 [if SR	P Service Evaluation, please also indica	te here: 🔲]	DClinPsy T	hesis 🔀
4. Project supervisor(s), *retracted*	if different from applicant:			
5. Appointment held by *retracted*	<pre>v supervisor(s) and institution(s) where</pre>	e based (if applic	:able):	
SECTION TWO				

Complete this section if your project involves existing documents/data only, or the evaluation of an existing project with no direct contact with human participants

1. Anticipated project dates (month and year)
Start date: End date:
Please state the aims and objectives of the project (no more than 150 words, in lay-person's language):
Data Management
For additional guidance on data management, please go to <u>Research Data Management</u> webpage,
or email the RDM support email: <u>rdm@lancaster.ac.uk</u>
3. Please describe briefly the data or records to be studied, or the evaluation to be undertaken.
4a. How will any data or records be obtained?
4b. Will you be gathering data from websites, discussion forums and on-line 'chat-rooms' no
4b. Will you be gathering data from websites, discussion forums and on-line charlooms into 4c. If yes, where relevant has permission / agreement been secured from the website moderator? no
4d. If you are only using those sites that are open access and do not require registration, have you
made your intentions clear to other site users? no
4e. If no, please give your reasons
5. What plans are in place for the storage, back-up, security and documentation of data (electronic, digital, paper, etc)? Note who will be responsible for deleting the data at the end of the storage period. Please ensure that your plans comply with General Data Protection Regulation (GDPR) and the (UK) Data Protection Act 2018.

6a. Is the secondary data you will be using in the public domain? no6b. If NO, please indicate the original purpose for which the data was collected, and comment on whether consent was gathered for additional later use of the data.

Please answer the following question *only* if you have not completed a Data Management Plan for an external funder

7a. How will you share and preserve the data underpinning your publications for at least 10 years e.g. PURE?

7b. Are there any restrictions on sharing your data?

8. Confidentiality and Anonymity

a. Will you take the necessary steps to assure the anonymity of subjects, including in subsequent publications? yes

b. How will the confidentiality and anonymity of participants who provided the original data be maintained?

9. What are the plans for dissemination of findings from the research?

10. What other ethical considerations (if any), not previously noted on this application, do you think there are in the proposed study? How will these issues be addressed?

SECTION THREE

Complete this section if your project includes direct involvement by human subjects

1. Summary of research protocol in lay terms (indicative maximum length 150 words):

Trauma-Informed Care (TIC) is increasingly being introduced into services that support people facing difficulties in their lives that are linked to past or current experiences of trauma. Making these services 'trauma informed' involves helping all parts of a service more aware of the trauma-related needs of the people they support. Despite the growing evidence highlighting benefits of trauma-informed working however, embedding culture change within organisations can be difficult.

The current study will explore the experiences of professionals who have taken the lead in making their organisations more trauma informed. Such professionals will include social workers, psychologists and nurses leading TIC in services such as probation, residential care, secure services etc. Interviews will be used to capture their views on what is needed to embed TIC in an organisation and the barriers to this. The information from these interviews will be analysed using grounded theory. A model will be developed from this which helps us understand what is involved in making an organisation more trauma-informed.

2. Anticipated project dates (month and year only)

Start date: January 2022 End date: March 2023

Data Collection and Management

For additional guidance on data management, please go to <u>Research Data Management</u> webpage, or email the RDM support email: <u>rdm@lancaster.ac.uk</u>

3. Please describe the sample of participants to be studied (including maximum & minimum number, age, gender):

The study will aim to recruit 8-12 participants from a range of organisations that have introduced a trauma-informed approach within their services in line with recommended numbers for a grounded theory approach. Participant age and gender is not deemed important within recruitment for this study.

Individuals approached will include, for example:

- Strategic Manager (Social Worker) of Children in Care Services, Local Authority
- Clinical Lead (Psychologist) of a National Residential Care provision (private provider)
- Children's Secure Care Nurse (NHS England)
- Founder / Lead (Social Worker background) of National Specialist Educational Provision
- Lead for Adoption and Foster Care England (Social Worker background), Children's Charity
- Service Lead (Social Work background), National Children's Charity for Care Leavers
- Lead Clinician (Psychologist or Psychiatrist) Adolescent Inpatient Service
- Lead / Manager of Youth Offending Services
- Clinical Lead of Secure Children's Home

Exclusion Criteria includes leaders of services whereby trauma-informed care has not been attempted at an appropriate level. Potential participants will be asked to take part in a screening conversation with the researcher prior to participation to confirm their organisation is attempting a trauma-informed approach at an appropriate level. This conversation will involve discussion around elements of trauma-informed service-delivery that have been put forwards as key in the movement towards TIC (Triesman, 2021).

Specific areas of discussion will include things such as:

• Overall support for and investment in (e.g., time or finances) implementing and sustaining a trauma-informed approach.

• Where appropriate, the consideration and adaptation of organisational policies and procedures which demonstrate commitment to and reflect values of trauma-informed practice.

• An emphasis on enhancing knowledge and skills within the workforce, enabling trauma- informed principles to be embedded within everyday practice.

• A recognition of the importance of the wellbeing of the workforce, and the possible impact of trauma on staff and teams.

• Where appropriate/possible, the consideration and adaptation of physical and social environments of the service, to promote safety and wellbeing for all involved

Emphasis on ensuring trauma-informed principles have been considered within several aspects of service-delivery, and this is not limited to one area of provisions e.g., in solely staff training
Ongoing monitoring and evaluation of the above

All components above have been taken from the Trauma and ACE (TrACE) Informed Organisations Toolkit, which was collated to support organisations to embed ACE awareness and Trauma Informed Practice.

4. How will participants be recruited and from where? Be as specific as possible. Ensure that you provide the *full versions* of all recruitment materials you intend to use with this application (eg adverts, flyers, posters).

Although potential participants are being recruited due to the nature of the role they hold within their respective organisations, recruitment will be undertaken external to these services. Individuals employed in the roles listed above are known professionally to the field supervisor involved in the project.

Purposive sampling will be used for this study as the inclusion criteria Is so specific e.g., must have taken the lead in attempting to embed TIC within their respective organisation. Potential participants will be contacted via e-mail and asked if they would like to take part in a study exploring leadership in the process of embedding trauma-informed culture change. Attached to the e-mail will be a participant information sheet and consent form. Participants interested in taking part will be asked to review the participant information sheet attached and contact the lead researcher with any questions that may arise from this.

Following the opportunity to ask questions related to the project, individuals who indicate they would be interested in participating in the study will be asked to partake in a screening conversation with the key researcher as a means to review the trauma-informed model they created/incorporated within services. This conversation will be centred around elements listed in the above exclusion criteria which are seen as key when moving towards trauma-informed working. A prompt guide for screening has been created in relation to these. If the outcome of this conversation is that the individual led on a trauma-informed project whereby the majority of key elements needed were at least attempted, they will then be asked to provide informed consent by returning the relevant form included in the first e-mail.

All professionals that provide consent following a successful screening conversation will then be included within the study and invited for interview.

5. Briefly describe your data collection and analysis methods, and the rationale for their use.

The study will collect data utilising semi-structured interviews taking place via either Microsoft Teams or face-to-face lasting approximately 60 minutes per participant. At the start of each interview, demographic information will be collected from each participant. This will include gender, age, ethnicity, professional background and length of time spent in current role. It has been decided that this information will be collected during interview to ensure that consent has been provided and participation has been organised before any data is collected from participants. It is hoped holding such demographic information will allow more contextual inferences to be drawn about leadership style, establishing culture change and the role of the individual within this process.

An interview topic guide will be utilised within each interview, providing the researcher with key areas to cover in the interview and some ideas for open-ended questions related to these key areas. A qualitative approach has been selected for the study as the research question looks to explore experience, with each interview looking to capture the subjective world of the participant, allowing them to be led by their reflections and criticisms here.

Following every cluster of interviews (3 or 4) the interview schedule will be revised based upon information transcribed and interpreted thus far. This will mean the next cluster of interviews will be undertaken using an interview schedule representative of reflections, experiences and observations already provided.

Grounded Theory will be used for the purposes of this study (Charmarz, 2014). Grounded theory places sole focus on the participant's own knowledge, experiences and solutions concerning a particular subject area and allows the researcher to form the emerging concepts and intuitive thoughts into a theory which outlines the process of acquiring such knowledge.

This approach to data analysis looks to understand the participants' main concern and suggested solution. The task from this point is to test the hypothesis gained from this participant by exploring

other people's experiences and assessing whether the hypothesis stands within this next person's experiences. As the current study aims to draw out as much information as possible related to participants' experience implementing TIC, what they think works and what they think the challenges are, grounded theory is thought to be the best way to draw out this knowledge and place emphasis on the solutions put forward by participants themselves.

Data analysis will involve transcribing the interviews undertaken in clusters. After the first few interviews have been undertaken and transcribed, codes present will be identified, and provisional categories will be developed from this. These provisional categories will then be further tested and developed through future interviews as the interview schedule is adapted to allow for this. This process of constant analysis will be completed until all interviews have been transcribed and coded and theoretical sufficiency has been reached.

6. What plan is in place for the storage, back-up, security and documentation of data (electronic, digital, paper, etc.)? Note who will be responsible for deleting the data at the end of the storage period. Please ensure that your plans comply with General Data Protection Regulation (GDPR) and the (UK) Data Protection Act 2018.

From the commencement of the study, all data collected will be stored in a OneDrive folder which will only be accessible by the key researcher and research supervisor. All data will be encrypted to ensure it is stored securely. Data containing personal details related to participants will be deleted as soon as possible after data collection. Furthermore, once participants have taken part in the research, any details used to contact them for recruitment/screening/invitation to interview will be deleted.

Interviews conducted via Microsoft Teams will be recorded as a video recording using the Teams record function. Interviews conducted face-to-face will be recorded using a Dictaphone. Prior to transcription, interview recordings will be stored as video/audio clips in a university approved secure cloud storage file. Once transcription is completed, these documents will be saved in the same OneDrive folder as audio/video recordings.

Once the outcome of the thesis has been awarded, all audio/video recordings will be permanently deleted and remaining research data will be shared with the research coordinator for long-term storage. This will include consent forms, interview transcripts and coded data produced during analysis. This data will be transferred electronically using a secure method that is supported by the University. Such data will then be stored for 10 years, before being permanently destroyed.

7.	Will audio	or video	recording	take	place?	
----	------------	----------	-----------	------	--------	--

🔀 audio

🖂 video

a. Please confirm that portable devices (laptop, USB drive etc) will be encrypted where they are used for identifiable data. If it is not possible to encrypt your portable devices, please comment on the steps you will take to protect the data.

no

As recordings will be collected via Microsoft Teams, they will be made available to the researcher via e-mail shortly after each recording has been completed. As soon as this e-mail is received, the researcher will save the recording to a university approved secure cloud storage file that is password protected. Once this has been done, the researcher will then immediately delete the original e-mail from both their university inbox and deleted e-mails folder. Only the researcher and the research supervisor will have access to the file containing the recordings and transcriptions throughout the course of the study. Once the study has been completed and the researcher is no longer a student at Lancaster university, all data will be securely transferred to the Lancaster University Campus for long-term storage using an encrypted and password protected portable device.

b What arrangements have been made for audio/video data storage? At what point in the research will tapes/digital recordings/files be destroyed?

Video/audio recordings will be kept in university approved secure cloud storage until the outcome of the thesis is awarded. At this point, all video/audio recordings will be permanently deleted.

Please answer the following questions *only* if you have not completed a Data Management Plan for an external funder

8a. How will you share and preserve the data underpinning your publications for at least 10 years e.g. PURE?

Once the outcome of the thesis has been awarded, the research data will be shared with the research coordinator for long-term storage. This will include consent forms, interview transcripts and coded data produced during analysis. This data will be transferred electronically using a secure method that is supported by the University.

Due to the small sample size included in the study and potentially sensitive nature of the data, data will not be made publicly available by PURE. However, data will be stored by the programme for 10 years, so if access is requested this can be considered on a case-by-case basis.

8b. Are there any restrictions on sharing your data?

None

9. Consent

a. Will you take all necessary steps to obtain the voluntary and informed consent of the prospective participant(s) or, in the case of individual(s) not capable of giving informed consent, the permission of a legally authorised representative in accordance with applicable law? yes

b. Detail the procedure you will use for obtaining consent?

As soon as a participant is approached for participation in the study they will be provided with the participant information sheet and consent form. The participant will then be given time to consider whether they would like to take part, and the opportunity to ask any questions which will help them to make an informed decision here. Following a screening conversation, participants will be asked to complete and return the consent form electronically (indicating their consent to take part) to the researcher via e-mail if they are willing to partake in the study. This e-mail will then be saved as part of the consent.

10. What discomfort (including psychological e.g., distressing or sensitive topics), inconvenience or danger could be caused by participation in the project? Please indicate plans to address these potential risks. State the timescales within which participants may withdraw from the study, noting your reasons.

One issue considered here is the potential for a safeguarding concern related to practice within an organisation to be mentioned within an interview. Although this is considered unlikely due to the focus of the interview and role of the participant, planning for such an event is important. To mitigate against this, the participant information sheet clearly states to participants the limits of

confidentiality, including the need to report any information provided which indicates a risk to the participant or any other person mentioned. If a participant were to provide information causing a perceived safeguarding concern, the key researcher has agreed to initially discuss the information provided with both the research and field supervisors and agree a plan of next steps.

Participants will be able to withdraw from the study from the moment of consent until 2 weeks following their interview. This is because each cluster of interviews will be used to inform future interview schedules and therefore withdrawal will not be possible once the interpretation of the cluster has commenced. The timescale for withdrawal will be made clear from the moment of approaching participants for recruitment. If withdrawal is requested prior to interview, the interview will not be undertaken, and any data related to that participant will be permanently deleted. If withdrawal is requested in the 2 weeks post interview, the video recording obtained from the interview in question and any transcription undertaken as a result of this will be permanently deleted also.

A debrief sheet will be provided to participants 2 weeks post interview, thanking them for participation, reminding them of the cut-off date for withdrawal requests and providing information for where they can access results of the study and when these will be available. In the unlikely event that interviews or participation in the study causes distress to any participant, the debrief sheet also provides contact details for support services available to health and social care workers if required.

11. What potential risks may exist for the researcher(s)? Please indicate plans to address such risks (for example, noting the support available to you; counselling considerations arising from the sensitive or distressing nature of the research/topic; details of the lone worker plan you will follow, and the steps you will take).

For recruitment purposes, potential participants will be provided with the researcher's university email address, participants will not be provided with any alternative way to contact the researcher. As most interviews will likely be undertaken virtually, the researcher is not expecting to at any point be working lone with any participant. Should a participant request a face-to-face interview. This will be offered during office hours at the offices of the charity where the field supervisor is currently employed. Any face-to-face interviews will therefore be scheduled during times when other professionals are present and working in the vicinity of the office whereby the interview is taking place.

12. Whilst we do not generally expect direct benefits to participants as a result of this research, please state here any that result from completion of the study.

There will be no direct benefit to participation in the study. That said, individuals identified as potential participants will likely have a direct interest in the outcome of the study, as essentially it is being undertaken to help professionals in similar roles to them enhance their understanding of trauma-informed culture change and leading organisations to achieve this. Furthermore, participants may find taking part in the study helpful as it will allow them time to reflect upon their experiences and contribute to a field that is of interest to them.

13. Details of any incentives/payments (including out-of-pocket expenses) made to participants:

No incentives or payments will be made to participants as part of this study.

14. Confidentiality and Anonymity

a. Will you take the necessary steps to assure the anonymity of subjects, including in subsequent publications?

Yes

b. Please include details of how the confidentiality and anonymity of participants will be ensured, and the limits to confidentiality.

To ensure confidentiality, Only the researcher and research supervisor will have access to the file containing the recordings and transcriptions throughout the course of the study. This is so that the research supervisor can review an interview in the early stages and provide feedback related to the interview process. It also means access is granted should the researcher want further advice regarding interviews at any time throughout the study. At no point during the study will the field supervisor have access to this raw data as all potential participants are known to her and therefore it is not seen as appropriate that she would have access to data collected until this is no longer identifiable i.e. in later stages of data analysis.

In terms of limits to confidentiality, in the unlikely event that any potential safeguarding concern is highlighted within an interview related to practices within an organisation, confidentiality may need to be broken to ensure the safety of individuals discussed. Potential participants are informed in the participant information sheet that should any information be provided in interview which suggests the participant, or any other person is at risk, confidentiality may need to be broken to address this. It is highlighted to participants that within this process, a discussion between the research team will be had in relation to the information provided, and an action plan to address this will be formed based upon potential risks, which could involve reporting such information to relevant authorities.

In terms of publication, although the write up of the thesis may include quotes from participants as a means to highlight examples which led to the theoretical understanding reached, readers will be unable to identify any participant from these as no identifiable information related to person or organisation will be included here. This is to ensure anonymity.

Although most interviews will likely be undertaken online, the researcher will ensure that the room in which she conducts the interviews is not somewhere where others will be able to overhear conversations had. In addition, all data will be stored on university approved secure cloud storage from the moment of data collection until it is deleted. This is to ensure confidentiality.

15. If relevant, describe the involvement of your target participant group in the *design and conduct* of your research.

The target participation group have not been involved in the design and conduct of the research, as all individuals seen as appropriate for participation will be approached to take part in the study.

16. What are the plans for dissemination of findings from the research? If you are a student, include here your thesis.

Findings from the research will be compiled to form a report. This will be submitted as the thesis for the researcher's current course of study. As a result, data collected from interviews may be viewed by the research supervisor so that support and advice can be provided as to the best direction to take in terms of data collection and analysis. In addition, the report produced from the findings will be viewed by research team members in order for the thesis to be marked. In addition, publishing may be pursued as part of dissemination of this report, although this cannot be guaranteed. In

addition, findings from the study may be presented at conferences related to trauma-informed ways of working.

17. What particular ethical considerations, not previously noted on this application, do you think there are in the proposed study? Are there any matters about which you wish to seek guidance from the FHMREC?

The key issue considered here is the potential for a safeguarding concern related to practice within an organisation to be mentioned within an interview. Although this is considered unlikely due to the focus of the interview and role of the participant, planning for such an event is important. To mitigate against this, the participant information sheet clearly states to participants the limits of confidentiality, including the need to report any information provided which indicates a risk to the participant or any other person mentioned. If a participant were to provide information causing a perceived safeguarding concern, the key researcher has agreed to initially discuss the information provided with both the research and field supervisors and agree a plan of next steps.

SECTION FOUR: signature

Applicant electronic signature: Nicole Thordarson

Date 29.10.2021

Student applicants: please tick to confirm that your supervisor has reviewed your application, and that they are happy for the application to proceed to ethical review

Project Supervisor name (if applicable): *retracted* Date application discussed 02.11.2021

Submission Guidance

 Submit your FHMREC application <u>by email</u> to Becky Case (<u>fhmresearchsupport@lancaster.ac.uk</u>) as two separate documents:

i. FHMREC application form.

Before submitting, ensure all guidance comments are hidden by going into 'Review' in the menu above then choosing *show markup>balloons>show all revisions in line*.

ii. Supporting materials.

Collate the following materials for your study, if relevant, into a single word document:

- a. Your full research proposal (background, literature review, methodology/methods, ethical considerations).
- b. Advertising materials (posters, e-mails)
- c. Letters/emails of invitation to participate
- d. Participant information sheets
- e. Consent forms
- f. Questionnaires, surveys, demographic sheets
- g. Interview schedules, interview question guides, focus group scripts
- h. Debriefing sheets, resource lists

Please note that you DO NOT need to submit pre-existing measures or handbooks which support your work, but which cannot be amended following ethical review. These should simply be referred to in your application form.

- 2. Submission deadlines:
 - i. Projects including direct involvement of human subjects [section 3 of the form was completed]. The *electronic* version of your application should be submitted to <u>Becky Case</u> by the committee deadline date. Committee meeting dates and application submission dates are listed on the <u>FHMREC website</u>. Prior to the FHMREC meeting you may be contacted by the lead reviewer for further clarification of your application. Please ensure you are available to attend the committee meeting (either in person or via telephone) on the day that your application is considered, if required to do so.
 - ii. The following projects will normally be dealt with via chair's action, and may be submitted at any time. [Section 3 of the form has not been completed, and is not required]. Those involving:
 - a. existing documents/data only;
 - b. the evaluation of an existing project with no direct contact with human participants;
 - c. service evaluations.
- 3. <u>You must submit this application from your Lancaster University email address, and copy</u> your supervisor in to the email in which you submit this application

Research Protocol

Title: Striving for Trauma-Informed Organisations: What it Takes to Take the Lead Researcher: Nicole Thordarson Research Supervisor: *retracted* Field Supervisor: *retracted*

Since Felitti et al. (1998) empirically associated childhood adversity with poorer laterlife health outcomes, much research has looked to identify methods successful in countering the effects of early trauma (Maschi et al., 2013; Wiseman et al., 2013). Evidence emerging here has questioned the efficacy of some services providing care to individuals with trauma narratives (Harris & Fallot, 2001; Ko et al., 2008; McElvaney & Tatlow-Golden, 2016). These studies suggest that individuals seeking the support of various welfare services often experience further traumatisation due to somewhat counterproductive clinical practices utilised within current care models. Oral et al. (2015) suggest that many community-based support services overlook the personal trauma histories of individuals utilising their services and subsequently fail to provide appropriate referrals and meaningful treatment pathways. Other scholars have questioned the use of physical interventions within inpatient mental health services, suggesting that rather than preventing individuals from harming themselves/others, the techniques themselves further traumatise an already vulnerable patient group (Stubbs et al., 2009). As a result of these suggestions, many organisations providing support services to the public are being urged to adopt a new model of care, which attempts to drive services towards a more trauma-informed way of working.

Embedding trauma-informed care (TIC) within any organisation involves attuning all levels of service-provision to the trauma-related needs of its clientele, motivating the development of a substructure which provides contextually perceptive care (Treisman, 2021). To achieve this, a high level of knowledge surrounding trauma must be embedded throughout an organisation, and this understanding should influence all decisions made regarding service-delivery, especially when developing policies, procedures and the future vision. In addition, any potentially retraumatising practices should be actively reduced and halted where possible, and the organisation should acknowledge its own narrative and the impact that any parallel processes may have (Sweeney & Taggart, 2018). TIC emphasises the importance of staff support, reflective practice, transparent communication and social responsibility within services, to ensure safety and understanding throughout an organisation. However, despite the growing evidence-base highlighting trauma-informed working as something to be strived for (Hale, 2019), truly embedding it continues to cause difficulty (Champine et al., 2019).

Early research related to TIC looked to establish areas of service-delivery requiring modification in order to enhance an organisation's trauma-informed nature (Elliott et al., 2005). From this, general models of TIC have been proposed, including 'The Six Core Strategies of Trauma-Informed Care' (Huckshorn, 2004). Whilst such models present evidence-based initiatives aiming to bridge the gap between research and practice, the majority of proposed improvements are vague, placing emphasis on what needs to change and providing little indication of how to achieve this. Recent advances in the field have been markedly more useful however, providing resources designed specifically to assist in weaving a deep understanding of trauma and adversity into the daily practice and general entity of any organisation (Treisman, 2021). However, it must be considered whether lack of resource has been the only barrier present in the strive to achieve a truly trauma-informed way of working.

Whilst vast amounts of research regarding theory and practice are present in the literature, many studies appear to have underestimated the magnitude of change involved in

truly embedding trauma-informed care within an organisation. As an example, some services have seemingly simplified TIC in an attempt to embody its principles, claiming to have 'implemented' a trauma-informed way of working whilst utilising solely education-based strategies within their approach (Hale, 2019). Subsequently, such studies have struggled to achieve change that lasts longer than a few months (Palfrey et al., 2019), providing further evidence for the need for a holistic approach to TIC. Even within more holistic approaches however, researchers have identified that regardless of strategies used within the strive towards TIC, what really matters is the nature of the environment present within a service, such as general atmosphere and service culture (Williams and Smith, 2017). The combination of such studies indicates that whilst strategy-based changes to services are important within the movement towards TIC, to achieve lasting and meaningful change within services, much focus needs to be placed on the environment present within an organisation and whether it is facilitative towards trauma-informed culture change (Brown et al., 2012; Bell, 2019).

Despite the growing consensus that culture change is a crucial element of any organisation's journey to trauma-informed working, limited research is present directly exploring its place within the process. Considering this gap in the literature, and the lack of qualitative studies exploring the experiences of individuals directly involved in the daily strive to embed TIC in services, the thesis will aim to qualitatively explore culture change in this context. The proposed study will seek to investigate the experiences of individuals who have taken some form of leadership role in moving their respective organisation towards a trauma-informed way of working. By exploring experience here, researchers will hope to identify the key factors needed to embed trauma-informed culture change among services and barriers that are commonly faced along the way. Furthermore, by directly exploring this experience in organisation leads for TIC, it is hoped a new perspective will be considered which outlines what it takes to be that person pushing for change in services whereby culture present may be counterproductive in terms of embedding a trauma-informed way of working. Utilising grounded theory to establish processes likely involved in trauma-informed culture change will hopefully allow for future leaders in such projects to consider ways in which they can embed such change within their own organisation, enhancing the trauma-informed nature of services overall.

Research Questions

What are the general experiences of service-leads trying to support their respective organisations to become more trauma-informed?

Method

Design

The study will utilise a qualitative approach involving semi-structured interviews - as the study looks to understand contextual processes involved in embedding culture change within TIC, grounded theory (Charmaz, 2014) will be utilised for the study.

Embedding trauma-informed culture is a huge task which requires much planning and constant review. It is felt a qualitative approach will allow researchers to capture the experience of individuals tasked with leading this process. These individuals will likely have a detailed understanding of the key factors required to drive culture change and will have first-hand experience of the challenges faced whilst seeking this.

The study will feature an iterative process whereby initial interviews are undertaken using basic prompts related to the research questions, these will be transcribed then analysed. The interview schedule will then be revised based upon data derived, and the next set of interviews will be facilitated using the revised schedule. This process will be repeated until findings become salient. The study will aim to recruit 12 participants, with interviews being completed in 4 clusters of 3 participants.

Participants

The study will aim to recruit 8-12 participants from a range of organisations that have introduced a trauma-informed approach within their services. This number of participants is selected as it is in line with recommended numbers for a grounded theory approach (Charmaz, 2014).

Individuals approached will include, for example:

- Strategic Manager (Social Worker) of Children in Care Services, Local Authority
- Clinical Lead (Psychologist) of a National Residential Care provision (private provider)
- Children's Secure Care Nurse (NHS England)
- Founder / Lead (Social Worker background) of National Specialist Educational Provision
- Lead for Adoption and Foster Care England (Social Worker background), Children's Charity
- Service Lead (Social Work background), National Children's Charity for Care Leavers
- Lead Clinician (Psychologist or Psychiatrist) Adolescent Inpatient Service
- Lead / Manager of Youth Offending Services
- Clinical Lead of Secure Children's Home

Individuals employed in these posts have been identified as potential participants as they are known to the field supervisor involved in the project. All individuals identified as potential participants are known to have taken the lead in looking to embed TIC within their respective organisations.

Exclusion Criteria

Exclusion Criteria includes leaders of services whereby trauma-informed care has not been attempted at an appropriate level. As seen in the literature available, organisations looking to embed trauma-informed working have vastly differed in their approaches. Whilst some organisations have looked to completely transform every area of service-provision to reflect the trauma-based needs of the people they work with; other services have limited adaptation to only one area of service-delivery. It is felt that perhaps services opting for minor shifts towards trauma-informed working will not have trouble establishing culture change as such, because no attempt to change culture has been attempted. Therefore, including the experiences of leaders working in such organisations may result in a perspective reflecting some level of ease in establishing culture change, not because this was straightforward but because it was never attempted. To avoid data becoming diluted as a result of this, potential participants will be asked to take part in a screening conversation with the researcher prior to participation to confirm their organisation is attempting a traumainformed approach at an appropriate level. This conversation will involve discussion around elements of trauma-informed service-delivery that have been put forwards as key in the movement towards TIC (Triesman, 2021).

Specific areas of discussion will include things such as:

- Overall support for and investment in (e.g., time or finances) implementing and sustaining a trauma-informed approach.
- Where appropriate, the consideration and adaptation of organisational policies and procedures which demonstrate commitment to and reflect values of trauma-informed practice.
- An emphasis on enhancing knowledge and skills within the workforce, enabling trauma- informed principles to be embedded within everyday practice.

- A recognition of the importance of the wellbeing of the workforce, and the possible impact of trauma on staff and teams.
- Where appropriate/possible, the consideration and adaptation of physical and social environments of the service, to promote safety and wellbeing for all involved
- Emphasis on ensuring trauma-informed principles have been considered within several aspects of service-delivery, and this is not limited to one area of provisions e.g., in solely staff training
- Ongoing monitoring and evaluation of the above

All components above have been taken from the Trauma and ACE (TrACE) Informed Organisations Toolkit, which was collated to support organisations to embed ACE awareness and Trauma Informed Practice. Conversation prompts for this screening discussion are included in Appendix 1. As seen in the TrACE checklist, the combination of such components within an organisation demonstrates an attempt at trauma-informed working which aims to alter the culture present within a respective service. Therefore, the individual leading this strive towards a more trauma-informed approach is deemed to have an appropriate level of experience steering an organisation towards culture change, which is why they are deemed suitable for participation.

Recruitment

Participants will be recruited using significantly purposive sampling, whereby appropriate participants have already been identified by the field supervisor involved in the project. The field supervisor of the project leads a team of Clinical Psychologists who work with a range of organisations across different settings for children, young people and families (particularly those with trauma-related needs), and she has contacts with leads from a range of organisations both through her work and through wider networking and previous roles. In terms of recruitment, individuals who have been identified as potential participants will be approached by the field supervisor for potential participation through an initial informal discussion with a follow up email. This e-mail will include details regarding the nature of the project, along with the participant information sheet (included in Appendix 2), inclusion checklist and consent form (included in Appendix 3). The e-mail will also provide potential participants with contact details for the key researcher, encouraging any questions regarding the study to be directed to her. From there, any individual who is interested in taking part in the study will be asked to take part in an initial screening discussion as described above. If following these they are deemed suitable for participation and remain willing to take part in the study, they will be asked to complete and return the consent form attached to the original e-mail.

Data Collection and Analysis

Grounded Theory will be used for the purposes of this study (Charmarz, 2014). Grounded theory places sole focus on the participant's own knowledge, experiences and solutions concerning a particular subject area and allows the researcher to form the emerging concepts and intuitive thoughts into a theory which outlines the process of acquiring such knowledge. Within the study, in-depth semi-structured interviews will be used to explore participants' experiences of leading organisations towards trauma-informed ways of working. This method of data collection is in-line with recommendations for studies utilising a grounded theory approach (Charmaz, 2014).

Once participants have contacted the key researcher and provided consent to take part in the study, a virtual interview will be set up via Microsoft Teams at a time convenient for both participant and researcher. Interviews are expected to take anywhere from 60-90 minutes and will follow a brief schedule. Appendix 5 includes a copy of the initial interview topic guide, which includes open-ended questions the researcher will use to ensure the

ETHICS SECTION

interview remains focused on areas related to the broad research question. The key aim of these interviews is to explore the subjective world of the participant and to be led by their experiences (Charmaz, 2014). To adhere to this, further questions may be asked by the researcher which are not on the interview topic guide, as a means to further explore and allow reflection on information of interest provided by participants within the interview.

At the start of each interview, demographic information will be collected from each participant. This will include gender, age, ethnicity, professional background and length of time spent in current role. It has been decided that this information will be collected during interview to ensure that consent has been provided and participation has been organised before any data is collected from participants. It is hoped holding such demographic information will allow more contextual inferences to be drawn about leadership style, establishing culture change and the role of the individual within this process.

Interviews will take part in 4 clusters (including 3 or 4 interviews per cluster), with transcription and analysis taking place in an ongoing nature in between clusters. After the first cluster of interviews has taken place, the researcher will transcribe and analyse the data collected so far, developing themes and categories for further exploration. From there, the interview topic guide will be revised based on these emerging themes and categories, allowing the researcher to focus on these in more detail during the next cluster of interviews. The study research question will also be refined to reflect this focus. The second cluster of interviews will then take place utilising this reviewed interview topic guide, with this process then repeated in the same manner for the remaining clusters. The aim of this method of data collection is to continue collecting data until theoretical sufficiency has been reached, that is until the data being collected can be adequately explained by the theoretical categories that have been developed.

4-21

Once all clusters of interviews have been completed, the researchers will then review the theoretical model to ensure it represents the data and explains the processes involved in leading an organisation to embed trauma-informed culture change.

Practical issues (e.g., costs/logistics)

The project presents no practical issues in terms of cost. Interviews will be offered via Microsoft Teams, although the option for a face-to-face interview will be available for participants closer to the research team in terms of geographical location. The offices where the field supervisor currently works in Warrington will be offered for this purpose.

Within the participant information sheet participants are informed of the need to record interviews using the Microsoft Teams record function. As the organiser of the meeting, only the researcher will receive a copy of the recording via e-mail once the interview has finished. As soon as this e-mail is received, the researcher will save the recording to a university approved secure cloud storage file that is password protected. Once this has been done, the researcher will then immediately delete the original e-mail from both their university inbox and deleted e-mails folder.

In the case of a face-to-face interview, the interview will be audio recorded and similarly once the interview has finished this recording will be saved in the same university approved secure cloud storage file.

Only the researcher and research supervisor will have access to the file containing the recordings and transcriptions throughout the course of the study. This is so that the research supervisor can review an interview in the early stages and provide feedback related to the interview process. It also means access is granted should the researcher want further advice regarding interviews at any time throughout the study. Once the study has been completed and the researcher is no longer a student at Lancaster University, video recordings of interviews will be permanently deleted, and transcripts and any other electronic data arising

from the study will be securely transferred to the DClinPsy Programme Research Coordinator for long-term storage in the University's cloud-based storage.

In addition, it must be noted here that although participants will be identified as suitable for recruitment due to the nature of the roles they hold within their respective organisations, recruitment is not being undertaken through these organisations. Potential participants are being approached for participation outside of their respective services, and no two participants are being recruited from the same service. As a result of this, it is not deemed necessary for researchers to obtain additional approval protocols for each participant's respective organisation.

Ethical Concerns

One issue considered here is the potential for a safeguarding concern related to practice within an organisation to be mentioned within an interview. Although this is considered unlikely due to the focus of the interview and role of the participant, planning for such an event is important. To mitigate against this, the participant information sheet clearly states to participants the limits of confidentiality, including the need to report any information provided which indicates a risk to the participant or any other person mentioned. If a participant were to provide information causing a perceived safeguarding concern, the key researcher has agreed to initially discuss the information provided with both the research and field supervisors and agree a plan of next steps.

Participants will be able to withdraw from the study from the moment of consent until 2 weeks following their interview. This is because each cluster of interviews will be used to inform future interview schedules and therefore withdrawal will not be possible once the interpretation of data from each cluster of interviews has commenced. The timescale for withdrawal will be made clear from the moment of approaching participants for recruitment. If withdrawal is requested prior to interview, the interview will not be undertaken, and any

data related to that participant will be permanently deleted. If withdrawal is requested in the 2 weeks post interview, the video recording obtained from the interview in question and any transcription undertaken as a result of this will be permanently deleted also.

Once the participant has taken part in the interview process and the two-week timescale for withdrawal has passed, they will be e-mailed a copy of the debrief sheet (provided in Appendix 4). This will thank the participant for their participation, provide details of who to contact should they have any concerns related to participation and outline how results will be used and where they can be accessed. This document will also provide information regarding where to access further support in the unlikely event that interviews have been experienced as difficult in any way.

In addition, as potential participants for the current study are known in a professional manner by the field supervisor involved, the field supervisor will not have access to video recordings or transcripts of interviews at any time during the study. Therefore, it has been decided that supervision related to undertaking interviews /transcription and analysing data directly from these will be provided by the research tutor. The field supervisor will then be able to provide further supervision during later stages of analysis when data reviewed is in a non-identifiable form.

Timescale

The below table outlines the proposed plan in terms of time scale for the project. This gives a loose indication of planned start and completion dates for various stages of the project. It must be noted that should ethical approval not be granted in time or recruitment take longer than expected, some of these planned dates may need to be pushed back to allow additional time here. That said, the timescale provided for some elements of the project (e.g., data collection/analysis) are seen as more than realistic in terms of time and therefore if

things are held up due to the ethics application/recruitment it is felt the goal for completing data collection/analysis will still be reachable.

PLANNED TIMELINE

Task	Planned Start	Planned
	Date	Completion Date
Thesis Contract/Action Plan Meeting	25.10.2021	01.11.2021
Draft Ethics Application Sent to Supervisors	16.08.2021	15.10.2021
Submit Ethics Application	November 2021	
Obtain Ethical Approval for Study	January 2022	
Draft Introduction and Method of Systematic	10.01.2021	18.02.2022
Literature Review Chapter		
Draft Introduction and Method for Empirical	28.02.2022	04.04.2022
Paper		
Recruitment	10.01.2022	07.02.2022
Data Collection: Cluster 1	07.02.2022	28.02.2022
Cluster 1 Transcription and Analysis and	07.02.2022	25.03.2022
Review Interview Topic Guide		
Data Collection: Cluster 2	04.04.2022	25.04.2022
Cluster 2 Transcription and Analysis and	04.04.2022	20.05.2022
Review Interview Topic Guide		

Data Collection: Cluster 3	30.05.2022	20.06.2022
Cluster 3 Transcription and Analysis and	30.05.2022	08.07.2022
Review Topic Guide		
Data Collection: Cluster 4	11.07.2022	29.07.2022
Cluster 4 Transcription and Final Analysis	11.07.2022	12.08.2022
Review Literature for Systematic Review and	15.08.2022	16.09.2022
Identify Topic for Critical Chapter Appraisal		
Draft Results and Discussion of Systematic	26.09.2022	04.11.2022
Literature Review Chapter		
Finalise Analysis of Data and Draft Results and	07.11.2022	16.12.2022
Discussion of Empirical Paper		
Draft Critical Appraisal	09.01.2023	03.02.2023
Final Drafts of other Chapters	09.01.2021	24.02.2023
Final Formatting of Thesis	06.03.2023	17.03.2023
Submit Thesis	March 2023	
Dissemination: Feedback study to participants	August 2023	

References

- Bell, L. B. (2019). Developing and Implementing Trauma Informed Care Principles: A Pilot Project.
- Brown, S. M., Baker, C. N., & Wilcox, P. (2012). Risking connection trauma training: A pathway toward trauma-informed care in child congregate care settings. Psychological Trauma: Theory, Research, Practice, and Policy, 4(5), 507.
- Champine, R. B., Lang, J. M., Nelson, A. M., Hanson, R. F., & Tebes, J. K. (2019). Systems measures of a trauma-informed approach: A systematic review. American journal of community psychology, 64(3-4), 418-437.
- Elliott, D. E., Bjelajac, P., Fallot, R. D., Markoff, L. S., & Reed, B. G. (2005). Traumainformed or trauma-denied: Principles and implementation of trauma-informed services for women. Journal of community psychology, 33(4), 461-477.
- Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. American journal of preventive medicine, 14(4), 245-258.
- Hale, R. D. (2019). Implementation of a Trauma-Informed Care Program for the Reduction of Crisis Interventions.
- Harris, M., & Fallot, R. D. (2001). Envisioning a trauma-informed service system: a vital paradigm shift. New directions for mental health services, 2001(89), 3-22.
- Huckshorn, K. A. (2004). Reducing seclusion & restraint use in mental health settings: Core strategies for prevention. Journal of psychosocial nursing and mental health services, 42(9), 22-33.
- Ko, S. J., Ford, J. D., Kassam-Adams, N., Berkowitz, S. J., Wilson, C., Wong, M., ... &Layne, C. M. (2008). Creating trauma-informed systems: Child welfare, education,

first responders, health care, juvenile justice. Professional psychology: Research and practice, 39(4), 396.

- Maschi, T., Baer, J., Morrissey, M. B., & Moreno, C. (2013). The aftermath of childhood trauma on late life mental and physical health: A review of the literature. Traumatology, 19(1), 49-64.
- 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.
- Oral, R., Ramirez, M., Coohey, C., Nakada, S., Walz, A., Kuntz, A., & Peek-Asa, C. (2016). Adverse childhood experiences and trauma informed care: the future of health care. Pediatric Research, 79(1), 227-233.
- Palfrey, N., Reay, R. E., Aplin, V., Cubis, J. C., McAndrew, V., Riordan, D. M., & Raphael,
 B. (2019). Achieving service change through the implementation of a traumainformed care training program within a mental health service. Community mental health journal, 55(3), 467-475.
- Stubbs, B., Leadbetter, D., Paterson, B., Yorston, G., Knight, C., & Davis, S. (2009).
 Physical intervention: a review of the literature on its use, staff and patient views, and the impact of training. Journal of Psychiatric and Mental Health Nursing, 16(1), 99-105.
- Sweeney, A., & Taggart, D. (2018). (Mis) understanding trauma-informed approaches in mental health.
- Treisman, K. (2021). A Treasure Box for Creating Trauma-informed Organisations: A Ready-to-use Resource for Trauma, Adversity, and Culturally Informed, Infused and Responsive Systems. Jessica Kingsley Publishers, 2021.

- Williams, T. M., & Smith, G. P. (2017). Does training change practice? A survey of clinicians and managers one year after training in trauma-informed care. The Journal of Mental Health Training, Education and Practice.
- Wiseman, T., Foster, K., & Curtis, K. (2013). Mental health following traumatic physical injury: an integrative literature review. Injury, 44(11), 1383-1390.

Ethical Approval Letter



Applicant: Nicole Thordarson Supervisor: Dr Suzanne Hodge Department: DHR FHMREC Reference: FHMREC21034

30 November 2021

Re: FHMREC21034 Striving for Trauma-Informed Organisations: What it Takes to Take the Lead

Dear Nicole,

Thank you for submitting your research ethics application for the above project for review by the **Faculty of Health and Medicine Research Ethics Committee (FHMREC)**. The application was recommended for approval by FHMREC, and on behalf of the Chair of the Committee, I can confirm that approval has been granted for this research project.

As principal investigator your responsibilities include:

- ensuring that (where applicable) all the necessary legal and regulatory requirements in order to conduct the research are met, and the necessary licenses and approvals have been obtained;
- reporting any ethics-related issues that occur during the course of the research or arising from the research to the Research Ethics Officer at the email address below (e.g. unforeseen ethical issues, complaints about the conduct of the research, adverse reactions such as extreme distress);
- submitting details of proposed substantive amendments to the protocol to the Research Ethics Officer for approval.

Please contact me if you have any queries or require further information.

Email: fhmresearchsupport@lancaster.ac.uk

Yours sincerely,

1 Morlay

Tom Morley, Research Ethics Officer, Secretary to FHMREC.

Appendix 4-A: Participant Information Sheet



Doctorate in Clinical Psychology Lancaster University

Participant information sheet

Project Title: Striving for Trauma-Informed Organisations: What it Takes to Take the Lead

For further information about how Lancaster University processes personal data for research purposes and your data rights please visit our webpage: www.lancaster.ac.uk/research/data-protection

I am a trainee on the Doctorate in Clinical Psychology at Lancaster University, and I would like to invite you to take part in a research study about the role of leadership in embedding trauma-informed culture change within organisations.

Please take time to read the following information carefully before you decide whether you would like to take part.

What is the study about?

The study has been undertaken as a means to explore the experiences of professionals who have taken some form of leadership role in moving an organisation towards a trauma-informed way of working. Although early research in the area has identified aspects of service-delivery which require modification in the journey towards trauma-informed care (TIC; Huckshorn, 2004), recent studies suggest that truly embedding TIC within a service requires change in culture, which poses some challenges (Middleton et al., 2019). Some researchers have explored this through employees working at ground level within organisations, looking to identify the reasons that achieving and maintaining organisational change is so difficult (Isobel et al., 2021). However, such studies have usually resulted in findings focused on the problems present causing difficulty rather than how these can be overcome. It is hoped that by exploring the views of professionals who have taken the lead in some form of trauma-informed movement, such as yourself, more can be learned about how leadership is involved in the process of establishing trauma-informed culture change.

Why have I been invited?

I have approached you because you have been highlighted as somebody with either current or prior experience taking a leadership role in embedding trauma-informed

culture change within an organisation. As this is the research area I am trying to further explore, your views and reflections on the topic would be greatly beneficial.

I would be very grateful if you would agree to take part in this study.

What will I be asked to do if I take part?

If you decide to take part, you will be invited to attend an online interview with myself via Microsoft Teams. If you would prefer, there is an option to attend the interview face-to-face, in Warrington. During the interview, firstly I will ask you to provide some demographic information about yourself, including age, gender, ethnicity, professional background and length of time in current role. I will then ask you to reflect on your experiences and outline your views on what it takes to lead an organisation towards trauma-informed working. This may involve some discussion around what you feel helps to achieve culture change here and what may cause challenges to this process. Interviews will last approximately 60-90 minutes depending on the amount of information you provide. Interviews will be recorded either as a video clip (for interviews via Microsoft Teams) or as an audio clip (for face-to-face interviews).

What are the possible benefits from taking part?

There are no direct benefits to you from taking part. However, the insights you share will contribute to an understanding of trauma-informed culture change from a leadership perspective. It is hoped that the study will establish what processes are involved here including what helps and what is a hindrance.

Do I have to take part?

No. It's completely up to you to decide whether or not you take part. Your participation is voluntary, and you are free to withdraw at any time up until 2 weeks post interview.

What if I change my mind?

As explained above, you are free to withdraw at any time up until two weeks after you have been interviewed. If at any point up until this point you decide to withdraw from the study, please contact me directly and I will extract any data you contributed to the study and permanently delete it. Data means any information that you have shared with me including any recording or transcript of your interview. It is difficult and often impossible to take out data from one specific participant when this has been pooled together with other people's data. This is the reason why you can only withdraw up to 2 weeks after taking part in the study, as after this time your interview data will have been pooled with other participants' data and analysed.

What are the possible disadvantages and risks of taking part?

It is unlikely any major disadvantage will be caused to you as a result of your taking part in the study, although please consider that you will have to take 60-90 minutes

out of a weekday to take part in the interview process. This may interfere with other commitments.

Will my data be identifiable?

After the interview, only I and my research supervisor, Dr Suzanne Hodge, will have access to the data you share with me. I will keep all personal information about you (e.g. your name and other information about you that can identify you) confidential, that is I will not share it with others. I will anonymise any audio or video recordings and transcripts of your data. This means that I remove any personal or identifying information, including information that would identify the organisation you work for. All reasonable steps will be taken to protect the anonymity of the participants involved in this project.

It is important to note the limits to confidentiality at this point. If any information provided in interview or other communication with participants indicates a risk to the participant, or any other person, confidentiality may need to be broken. In such an event, the research team will discuss the information provided causing concern and agree appropriate means to address this. This may involve reporting such information to relevant authorities.

How will my data be stored?

Your data will be stored in encrypted files (that is no-one other than me, the researcher will be able to access them) and on password-protected computers.

I will keep data that can identify you separately from non-personal information (e.g., your views on a specific topic).

In accordance with University guidelines, at the end of the study, the data will be kept securely for a minimum of ten years by the Lancaster University Doctorate in Clinical Psychology.

How will we use the information you have shared with us and what will happen to the results of the research study?

The data you provide in your interview will be analysed with that of other participants and will be written up as part of my doctoral thesis and in other publications, for example journal articles. I may also present the results of my study at academic conferences.

When writing up the findings from this study, I would like to reproduce some of the views and ideas you shared with me. When doing so, I will only use anonymised quotes (e.g., from the interview with you), so that although I will use your exact words, you will not be identified in any publications.

Who has reviewed the project?

This study has been reviewed and approved by Lancaster University's Faculty of Health and Medicine Research Ethics Committee.

What if I have a question or concern?

If you have any queries or if you are unhappy with anything that happens concerning your participation in the study, please contact myself, Nicole Thordarson, <u>n.thordarson@lancaster.ac.uk</u> or my supervisor, Dr Suzanne Hodge, <u>s.hodge@lancaster.ac.uk</u>

If you have any concerns or complaints that you wish to discuss with a person who is not directly involved in the research, you can also contact:

Dr Bill Sellwood, Professor of Clinical Psychology, b.sellwood@lancaster.ac.uk

If you wish to speak to someone outside of the Doctorate in Clinical Psychology Programme, you may also contact:

Dr Laura Machin Tel: +44 (0)1524 594973 Chair of FHM REC Email: I.machin@lancaster.ac.uk Faculty of Health and Medicine (Lancaster Medical School) Lancaster University Lancaster LA1 4YG

Thank you for considering your participation in this project.

Appendix 4-B: Consent Form

CONSENT FORM

Project Title: Striving for Trauma-Informed Organisations: What it Takes to Take the Lead Name of Researchers: Nicole Thordarson Email: <u>n.thordarson@lancaster.ac.uk</u>

Please read the following carefully:

- 1. 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.
- 2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason. If I withdraw within 2 weeks of interview my data will be removed.
- 3. I understand that any information given by me may be used in future reports, academic articles, publications or presentations by the researcher/s, but my personal information will not be included and I will not be identifiable.
- 4. I understand that my name/my organisation's name will not appear in any reports, articles or presentation without my consent.
- 5. I understand that any interviews will be video-recorded and transcribed, and that data will be protected on encrypted devices and kept secure.
- 6. I understand that data will be kept according to University guidelines for a minimum of 10 years after the end of the study.
- 7. I agree to take part in the above study.

Name of participant:	Date:	Signature:

I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

Signature of Researcher/person taking the consent

Date _____ DD/MM/YYYY

One copy of this form will be given to the participant and the original kept in the files of the researcher at Lancaster University

Appendix 4-C: Participant Debrief Sheet



Department of Clinical Psychology Lancaster University

Participant Debrief Sheet

Dear Participant,

Thank you for taking part in the study titled '*Striving for trauma-Informed Organisations: What it Takes to Take the Lead*'. Your time and contribution to the research is greatly appreciated.

What is the purpose of this study?

The study has been undertaken as a means to explore the experiences of professionals who have taken some form of leadership role in moving an organisation towards a trauma-informed way of working. Although early research in the area has identified aspects of service-delivery which require modification in the journey towards trauma-informed care (TIC; Huckshorn, 2004), recent studies suggest that truly embedding TIC within a service requires change in culture, which poses some challenges (Middleton et al., 2019). Some researchers have explored this through employees working at ground level within organisational change is so difficult (Isobel et al., 2021). However, such studies have usually resulted in findings focused on the problems present causing difficulty rather than how these can be overcome. It is hoped that by exploring the views of professionals who have taken the lead in some form of trauma-informed movement, such as yourself, more can be learned about how leadership is involved in the process of establishing trauma-informed culture change.

How will data collected from the study be used?

Your responses within interview will be explored alongside that of other participants. Common themes and processes will then be drawn from all data as a whole and used to form a theory related to how trauma-informed culture change could be achieved considering both positive and negative contributors to the process.

Results from the study will feature a visual aid encompassing key factors that leaders of various welfare organisations have found helpful when looking to embed culture change within such services, as well as barriers that may be present which cause difficulty. It is hoped this will allow future leaders in organisations looking to become more trauma-informed to have a prior understanding of the processes involved in altering culture within an organisation to ensure it is facilitative towards a trauma-informed way of working.

How will results from the study be used?

Results from the study will be complied into a report aimed at outlining the project as a whole, its findings and clinical implications. This report will act as the thesis for the key researcher's studies at Lancaster University.

The report may then also be submitted for publishing as a form of dissemination. It is also possible that findings from the study may be presented by the researcher at a relevant conference.

If you wish to receive a copy of the findings from the study once the report has been compiled, submitted and marked, please contact the researcher to request this via the e-mail address provided below.

What if I found participation difficult and require further support?

If you have found participation in the current study difficult in any way, and feel emotionally distressed as a result of this, you can contact the following charities for immediate emotional support:

Samaritans

The Samaritans are a registered charity aimed at providing emotional support to anyone in emotional distress or struggling to cope.

General Samaritans Helpline (116 123)

Samaritans Helpline for Wellbeing Support for Health and Social Care Workers (0800 069 6222)

What if I have a question or concern?

If any questions or concerns arise as a result of participation in the study, please contact myself **Nicole Thordarson**, <u>n.thordarson@lancaster.ac.uk</u> **or my supervisor**, **Dr Suzanne Hodge**, <u>s.hodge@lancaster.ac.uk</u>

If you have any concerns or complaints that you wish to discuss with a person who is not directly involved in the research, you can also contact:

Dr Bill Sellwood, Professor of Clinical Psychology, <u>b.sellwood@lancaster.ac.uk</u>

If you wish to speak to someone outside of the Doctorate in Clinical Psychology Programme, you may also contact:

Dr Laura Machin Tel: +44 (0)1524 594973 Chair of FHM REC Email: I.machin@lancaster.ac.uk Faculty of Health and Medicine (Lancaster Medical School) Lancaster University Lancaster LA1 4YG

Again, thank you for your participation in this project.