Systemic factors in compassionate healthcare: predictors and organisational interventions

being a thesis submitted in partial fulfilment of the

requirements for the degree of

Doctor of Clinical Psychology

in the University of Hull

by

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June 2024

Acknowledgements

Firstly, to everyone who took time out of their day to complete the survey, a huge thank you. I really would not have been able to do this research without you all. Thank you to the many, many individuals in the NHS who supported with the distribution of the survey, thank you for your eager support and enthusiasm.

To my research supervisors, Philip, and Tim, thank you for your calm and steadfast support throughout the research process. A huge thank you to Zoe McAndrews for taking time out of your day in supporting with the statistics.

To all the kind, caring and compassionate NHS colleagues that I've had the pleasure to work alongside over three years of clinical training, thank you for helping me to see what is important.

A huge thank you to all my course mates, especially Lucy, Alyx, and Tia, I could not have gotten through the last three years without your love, support, and humour. A very, very big thank you to Niamh.

And finally, to my family, Lou, Steve, Sally, Eve, Martin, Conleth, Freddie and the very little Bertie (born within one week of me writing this!). Thank you for your constant support and encouragement, even though you were 'not quite sure what it was I was doing'.

Overview

This thesis portfolio comprises three parts: a systematic literature review, an empirical paper, and appendices. This thesis aims to explore the systemic factors in compassionate healthcare, namely predictors of submissive compassion and healthcare staff experiences of organisational interventions.

Part One: Systematic Literature Review

This systematic literature review explores healthcare staff experiences of organisational interventions for compassionate care. Following a systematic search, eighteen studies met the inclusion criteria and therefore were included in the review. Qualitative data were synthesised using thematic synthesis. The National Institute for Health and Care Excellence (NICE) Methodological Quality Checklist for Qualitative Studies was used to assess the quality of included studies. Four overall themes were identified: (1) holding back, (2) humanising healthcare, (3) values are instilled, and (4) it needs to be sustainable. Organisational interventions have an important role in facilitating compassionate healthcare. Implications and recommendations discuss how challenges to implementation can be traversed.

Part Two: Empirical Paper

The empirical paper explores the concept of submissive compassion and its predictors and moderators in a healthcare setting. A quantitative methodology was utilised, using an online survey to collect the following information: age, gender, ethnicity, time spent working in the NHS, profession, line manager status, submissive compassion, moral injury, emotional climate, and the flow of compassion. Healthcare staff had higher levels of submissive compassion in comparison to the general population. A multiple linear regression model demonstrated that younger participants who had worked in the NHS for less time, who were working in threat based emotional climates, and experienced greater moral injury and greater fear of compassion from others are more susceptible to submissive compassion. No moderation effects were found.

Part Three comprises the Appendices.

Total word count (excluding appendices): 15,410

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Part One – Organisational interventions for compassionate healthcare: the perspectives of healthcare professionals

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This paper is written in the format ready for submission to the Journal of Clinical Nursing. Please see Appendix A for the Guidelines for Authors.

Word count = 7500

Conflicts of interest: None

Abstract

Background A range of organisational interventions have been implemented within healthcare settings as a way to promote compassionate care. Whilst syntheses have summarised the quantitative outcomes of these interventions, an overall synthesis of qualitative data, including the perspective and experiences of healthcare staff, has not yet been reviewed. The present review aimed to synthesise existing research exploring how healthcare staff experience organisational interventions for compassionate care.

Methods A qualitative systematic review method was conducted. In August 2023, five databases were searched: MEDLINE, Academic Search Premier, CINAHL, APA PsycInfo and APA PsycArticles. Articles needed to meet all of the following criteria: (a) reported on the experiences of healthcare staff who had participated in organisational interventions for compassionate care, (b) taken place in a healthcare setting, (c) use of a qualitative or mixed-methods methodology, (d) published in English, and (e) published since 2010. To synthesise the findings, a thematic synthesis was conducted using NVivo software. Data from the complete 'findings/results' sections were included in the synthesis. The final search protocol and search strategy was registered on PROSPERO (ID: CRD42023472404).

Results Eighteen qualitative or mixed-methods studies were included in the review, encapsulating the experiences healthcare staff across eight countries. Four overall themes were identified: 1) holding back, 2) humanising healthcare, 3) values are instilled, and 4) it needs to be sustainable.

Conclusion Organisational interventions for compassionate healthcare foster reflection and connection amongst healthcare staff and have important positive impacts on staff wellbeing, relationships and patient care. Interventions should take into account organisational cultures and should be driven by organisational values. It is recommended that interventions are embedded with sustainability in mind.

Keywords

Healthcare; compassion; organisational intervention; systematic review; qualitative evidence synthesis

Introduction

Compassionate healthcare has been defined as '*a virtuous and intentional response to know a person, to discern their needs, and ameliorate their suffering through relational understanding and action'* (Sinclair et al., 2018). However, the concept holds various definitions in the literature, with some emphasising empathy and sensitivity to others' distress (Jeffrey, 2016; Perez-Bret et al., 2016), and others prioritising the 'action' that is needed for compassionate healthcare (Taylor et al., 2017). Recent research with healthcare professionals identified compassionate healthcare as a concept that is driven by personal and professional values and pertains more to a feeling that cannot easily be described (Marshman et al., 2024; Ortega-Galán et al., 2021).

Despite various definitions, compassionate healthcare is consistently instilled in the values, policy and ethos of global healthcare systems, and is fundamental to ethical practice (Fotaki, 2015). Its contributions to high-quality patient care are well-documented; compassionate care leads to improved patient outcomes, shorter recovery times and enhanced safety (Cochrane et al., 2019a; Van der Cingel, 2011). It gives patients greater responsibility and control over their health (Cochrane et al., 2019a). For healthcare staff, the provision of compassionate healthcare leads to improved wellbeing, lower levels of burnout and greater job satisfaction (de Zulueta, 2021a; Roberts et al., 2019a).

Yet, despite compassion being prioritised at every level by all key stakeholders in healthcare, it is becoming increasingly challenging to provide. Global healthcare systems have endured perpetual underinvestment over long periods (Organisation for Economic Co-operation and Development,

2023) which has contributed to difficulties in addressing unmet healthcare needs that are exacerbated by ageing populations, widening healthcare inequalities and increasing rates of long-term health conditions (Medici, 2021). Already-stretched healthcare systems were put under inconceivable strain throughout the Covid-19 pandemic, leading to high levels of staff turnover and burnout (Mercado et al., 2022). Furthermore, greater emphasis is often placed on efficiency, metrics and economics, creating cultures that prioritise outcomes and targets rather than the compassionate healthcare that patients need and staff wish to provide (Malenfant et al., 2022a; Robinson et al., 2023). Such underfunded and target-driven healthcare systems threaten the attempts to provide care according to individual need, which is often the motivation for healthcare professionals entering their chosen profession. All of these factors have contributed to alarming outcries of poor patient care, both in the UK and globally, and what has been termed a '*compassion crisis*' (de Zulueta, 2021a).

Organisational interventions for compassionate healthcare

In response to this so-called crisis, efforts have been made to facilitate compassionate care in contemporary healthcare environments through a range of interventions. These interventions all have the consistent aim of promoting and cultivating compassionate healthcare. However, they vary in their approaches.

Some interventions utilise staff training sessions with the aims of cultivating compassion within staff, and therefore for patients. Compassionate Mind Training, developed by Paul Gilbert, emphasises the importance of both noticing suffering in others and in us, and of taking action to prevent or alleviate it. Systemic barriers to action can leave staff frustrated and burnt out, which in turn can have an impact on the motivation to notice suffering. Interventions attempt to normalise human fallibility whilst also emphasising the courage required to act with compassion (Gilbert, 2009a). Self-compassion training, developed by Kristin Neff, aims to build upon participants'

capacity to respond to difficulties with self-compassion. Both interventions incorporate practices such as attention and mindfulness training, and compassion-focused imagery (Beaumont & Martin, 2016). It has been suggested that cultivating compassion towards oneself has an important impact on our ability to be compassionate towards others (Beaumont & Martin, 2016) although this is contested (Gilbert et al., 2017a; Sinclair et al., 2017).

Other interventions prioritise relational approaches, providing space for reflection, connection, and perspective taking. As an example, Schwartz Rounds – first introduced by the Schwartz Center for Compassionate Healthcare in Boston - consist of a staff panel discussion based on a topic from clinical experience. Each panellist shares their story and this is followed by a confidential discussion with the audience (Adamson et al., 2018a). Reflection on clinical practice, alongside perspective taking is associated with compassionate healthcare (Lown, 2016).

Similar relational approaches look towards compassionate leadership and cultures, supporting those in leadership to understand and empathise with the teams they work alongside (West, M. A., 2021). In the UK, staff working in the National Health Service (NHS) have associated the absence of compassionate leadership with higher levels of work overload and less influence over decision-making (West, T. H. et al., 2022). According to systemic and organisational approaches, in order to develop a compassionate culture, compassion should be embedded within the infrastructure, vision and values of healthcare organisations (Pavlova et al., 2023a; Sinclair et al., 2021).

Researchers have explored organisational interventions and their impact on staff wellbeing, care quality and patient outcomes. Reviews of quantitative studies have generally indicated positive outcomes of interventions for compassionate care (Blomberg et al., 2016; Sinclair et al., 2021) however the mechanisms behind these outcomes are unclear. Poor methodological quality of quantitative studies has been highlighted, alongside a recognition that compassion is notoriously

difficult to capture in a quantitative measure. There is a growing body of qualitative evidence in the area, and it is important for the perspectives of healthcare professionals to be explored when considering how organisational interventions are experienced and can best be implemented. When healthcare staff are involved in organisational interventions, they are more likely to succeed (Levine et al., 2007; Nilsen et al., 2020). Qualitative methods are able to shed light on the 'softer side' of healthcare (Busetto et al., 2020), this is especially the case when exploring compassionate healthcare, a concept that is notoriously hard to define and even harder to measure (Sinclair et al., 2016a).

The present review

A qualitative evidence synthesis is capable of providing a deeper insight into the thoughts and feelings of healthcare staff and can contribute towards meaning and understanding which in turn can educate those wishing to implement interventions (Thomas & Harden, 2008). This review aims to synthesise the qualitative research, exploring how healthcare staff experience organisational interventions for compassionate care. Currently, no review exists that explores this.

Research Question

How do healthcare staff experience organisational interventions for compassionate healthcare?

Method

This review aimed to explore how healthcare staff experience organisational interventions for compassionate healthcare. To aid transparency, the PRISMA guidelines (Page et al., 2021) were used in the reporting of this review.

Search Strategy

A systematic search of the literature was conducted in August 2023, using the EBSCOhost research platform to search five electronic databases: Academic Search Premier, CINAHL Complete, MEDLINE, APA PsycArticles, and APA PsycInfo.

The search terms were generated by exploring abstracts and titles of existing literature to identify key terminologies that are commonly used. Multiple iterations of search terms were conducted. The search terms were reviewed and revised by two research supervisors, and a research librarian with experience in conducting systematic literature reviews. The final search terms were:

> (compassion* N4 (train* OR development OR education OR intervention OR course OR programme OR program* OR therap* OR workshop* OR culture)) AND (“healthcare worker*” OR “healthcare professional” OR “healthcare staff” OR healthforce* OR nurse* OR doctor* OR practitioner* OR psychologist* OR therapist* OR midwife OR midwives OR paramedic* OR physiotherapist* OR "occupational therapist*" OR clinician* OR medic* OR psychiatr* OR physiotherapist OR radiographer OR radiologist OR physician OR “general practitioner” OR pharmacist* OR podiatrist* OR phlebotomist)

The final search strategy and protocol was registered on Prospero (ID: CRD42023472404) to enable transparency and reduce unplanned duplication.

Screening and selection criteria

After limiters were applied and duplicates were removed, the titles and abstracts of 3,220 articles were screened for inclusion. The inclusion and exclusion criteria are shown in Tables 1 and 2. At this stage, common reasons for exclusion included: quantitative studies; not primary or peer-reviewed research; not conducted in a healthcare setting or where no intervention was conducted. Research on this topic has often been in the form of service evaluations and published in the grey literature. Grey literature was not included in this review due to variability in the quality of grey literature, including small sample sizes, limited depth in qualitative data and lack of peer review. Poor quality studies and methodological issues may reduce the validity of the review's findings (Paez, 2018). Moreover, there are no accepted standards or guidelines for conducting rigorous grey literature searches (Paez, 2018).

The full texts of 73 identified articles were then screened. At this stage, particular focus was given to the aims and results sections of the articles, to look for evidence of how the intervention either aimed to, or did, promote compassionate healthcare. After full text screening, 57 articles were excluded. Reasons for exclusion are outlined in Figure 1. One study was excluded due to the intervention being self-funded (van Wietmarschen et al., 2018), another was excluded due to the intervention delivered being additional study days available for staff rather than a specific intervention (Soper, 2022). Studies published prior to 2010 were excluded from the review. This was to ensure that findings were relevant for current healthcare settings, and in line with the publication of compassionate healthcare policy in the UK (Department of Health and Social Care, 2015). Two additional papers were identified through scanning the reference lists of included articles. The screening process was completed by the primary researcher, and discrepancies were discussed and resolved with two research supervisors. The full article selection process is outlined in a PRISMA flow diagram (Page et al., 2021) in Figure 1.

Table 1.

Inclusion criteria and rationale

Inclusion criteria	Rationale
Sample: Healthcare staff Studies where facilitators of interventions were participants themselves if they were also healthcare staff.	This review sought the experiences of healthcare staff.
Context: All healthcare settings. No geographical limiters were applied.	The review explores healthcare staff experiences, and excludes students and trainees, therefore education settings were excluded. Although global healthcare systems vary, both in their funding models and provision of care, this review takes an exploratory approach, and so all healthcare settings were included.
Intervention: Organisational interventions for compassionate healthcare. Interventions must be facilitated and funded by the healthcare organisation and must either (1) aim to promote compassionate healthcare, or (2) where the outcomes examined changes in compassionate healthcare.	This review aims to collate experiences of staff who have attended organisational interventions that have the aim or show outcomes of promoting compassionate healthcare.
Study design: Qualitative or mixed methods where the qualitative component was recorded separately.	This review sought to explore the in-depth experiences of staff; therefore, qualitative data were deemed suitable in answering the research question.

Peer-reviewed journal	To increase the likelihood of high-quality rigorous studies being included in the review.
Language: Studies written in English	English is the only language the researcher is able to read and understand. The research budget was not sufficient for translation services.
Date: Studies published between 2010 and 2023	To ensure relevance to current healthcare contexts and in line with the publication of compassionate healthcare policy (Department of Health and Social Care, 2015).

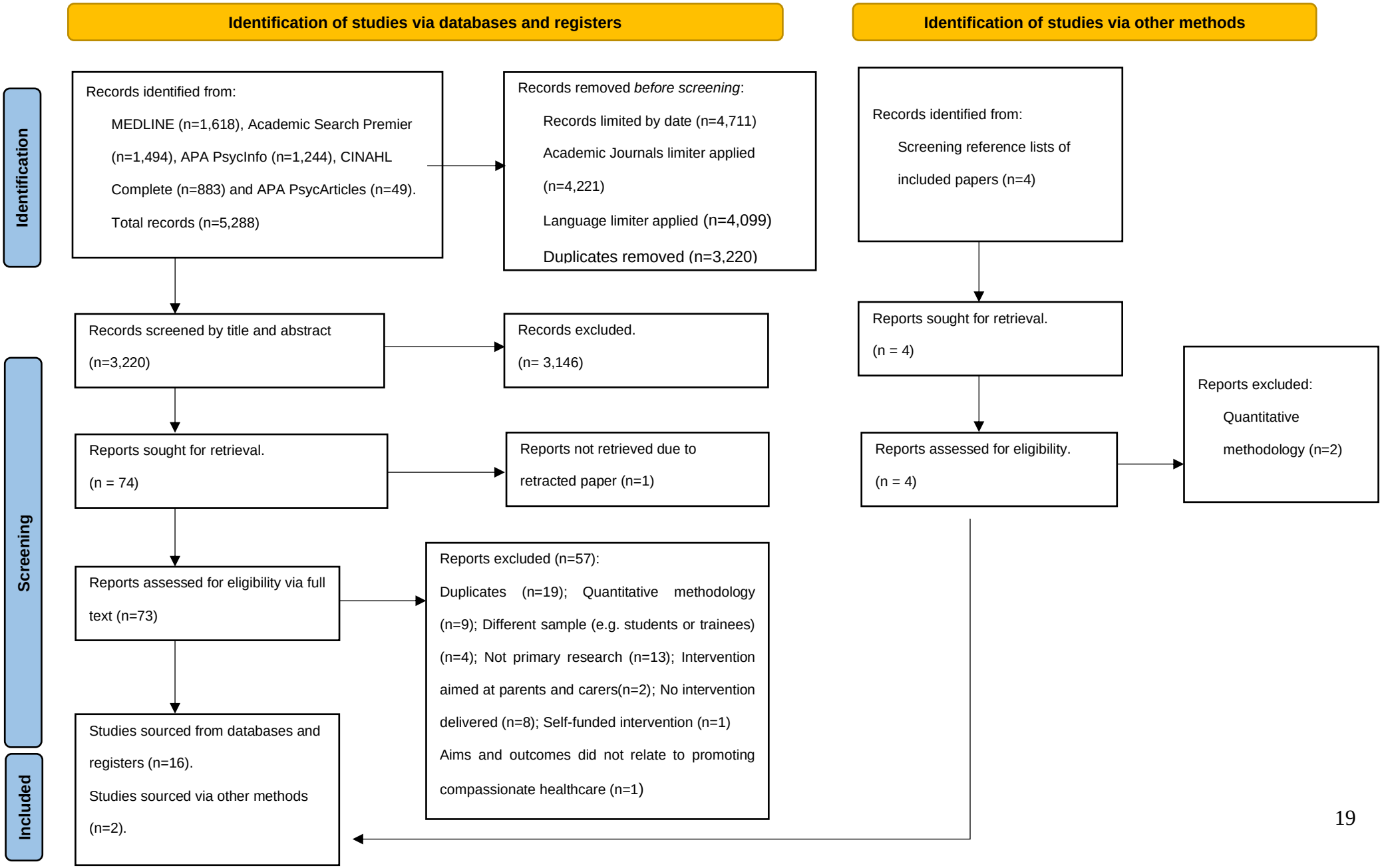
Table 2.

Exclusion criteria and rationale.

Exclusion Criteria	Rationale
Sample: Studies where the majority of the sample were students, trainees, parents, family caregivers or patients.	This review sought the experiences of healthcare staff. The experiences of students or trainees are likely to differ from healthcare staff who are immersed in the same healthcare environment day-to-day, and therefore were excluded from the review.
Context: Education settings	The review explores healthcare staff experiences, and excludes students and trainees, therefore education settings were excluded.
Intervention: No intervention(s) delivered. Interventions that neither aim to, nor showed outcomes of, promoting compassionate healthcare. Studies where interventions were self-funded by participants.	This review sought the experiences of an organisational intervention for compassionate healthcare. Studies where interventions were self-funded are likely to show different experiences.
Study design: Quantitative studies. Mixed methods studies where it was not possible to separate qualitative from quantitative findings.	Quantitative data does not provide the in-depth, rich data that is required to explore the experiences of healthcare staff.
Non-peer-reviewed studies	To increase the likelihood of including high-quality articles, only peer-reviewed articles were included.
Language: Studies written in a language other than English	English is the only language the researcher is able to read and understand. The research budget was not sufficient for translation services.
Date: Studies published prior to 2010	It is important for findings to be relevant for a modern healthcare setting and its context, therefore studies published prior to 2010 were excluded.

Figure 1.

Preferred Reporting Items for Systematic Reviews and Meta-Analyses [PRISMA] flowchart for article selection process (Page et al., 2021)



Data Extraction

Articles were imported into the NVivo software (2020, 1.7.1), and all data in the 'findings/results' sections were included in the analysis. Where studies used a mixed-methods approach, all data included in the qualitative component were included in the analysis. Data were excluded where they did not relate to the research question. This was the case for one article where participants were asked an additional question about touching experiences at work prior to the start of the intervention (Dobrina et al., 2023). Additional data were extracted manually into a bespoke data extraction form (See Appendix C).

Quality Appraisal

The quality of the included articles was conducted using the National Institute for Health and Care Excellence methodology checklist for qualitative studies (NICE, 2012, Appendix B p2-12). Each article is given an overall assessment (++, + or -). Five papers were rated by a peer reviewer to ensure inter-rater reliability. Initial ratings agreed on 79% of occasions, and disagreements were discussed and reviewed until a consensus decision was reached. The majority of disagreements were regarding data analysis. One reviewer had been more critical and the other more lenient when appraising the reporting of data analysis procedures, including when articles had been too brief about how many coders were involved and how disagreements were resolved.

Data Synthesis

Thematic synthesis (Thomas & Harden, 2008) was deemed appropriate for this qualitative evidence synthesis. This method of synthesis has commonly been used to explore intervention perspectives and experiences in systematic reviews (Matney, 2018) and enables the integration of both "thick" and "thin" data (Flemming & Noyes, 2021). NVivo software was used to assist with the analysis, and to keep an accurate and transparent record of the synthesis.

The three steps of thematic synthesis are outlined as follows:

1) *Inductive line-by-line coding.* All included data were read through line by line and assigned codes inductively. Each sentence was assigned at least one code and at times, more than one code was assigned to the same piece of text. New codes were assigned where data did not fit within existing codes, and codes were not merged in the initial coding to avoid prematurely ruling out distinctive themes.

2) *Generation of descriptive themes.* During this stage, similar codes were grouped together to form descriptive themes. The descriptive themes were compared with other themes, to identify similarities and differences both within and across different studies. Codes and descriptive themes that were similarly meaningful were combined.

3) *Generation of analytical themes.* Analytical themes were inductively and deductively developed by considering descriptive themes in light of the research question and relevant theoretical frameworks, whilst also considering the implications for future interventions. Top-down and side-to-side comparison was conducted to consider similarities and differences between descriptive themes. This was a cyclical process – which involved reflexive discussions with the two research supervisors - and was repeated until the final analytical themes answered the research question and explained all descriptive themes. An example of the development of one theme can be found in the appendix (See Appendix F).

Research Positioning

The first author identifies as a white-British female, employed as a trainee clinical psychologist within the NHS. The first author is therefore an insider in that they work within a healthcare setting and have attended and facilitated organisational interventions for compassionate healthcare.

Results

Article characteristics

All studies included a qualitative element, either through interviews, focus groups or evaluation forms. Six studies had a mixed-methods design (Chadwick, Raymond J. et al., 2016; Dobrina et al., 2023; Marx et al., 2014; Meyer et al., 2022; Orellana-Rios et al., 2018; Pfaff et al., 2017). An overview of the included studies can be found in Table 3.

A range of interventions were evaluated across the 18 articles. The most commonly evaluated was Schwartz Rounds (Adamson et al., 2018b; Chadwick, Raymond J. et al., 2016; Goodrich, 2012; Meyer et al., 2022). Other interventions incorporated reflective practice groups, team days and team learning, and narrative or writing exercises (Bridges et al., 2017; Dobrina et al., 2023; Donald et al., 2019; Landers et al., 2020; Masterson et al., 2014; Romano et al., 2022). One article implemented Compassionate Mind Training (McEwan et al., 2020a), and one implemented self-compassion training (Lathren et al., 2021). Two articles utilised the Compassion Fatigue Resiliency Program (Pehlivan & Güner, 2022; Pfaff et al., 2017). Mindfulness, guided meditation, and self-compassion practice were woven into multiple interventions (Marx et al., 2014; Nissim et al., 2019; Orellana-Rios et al., 2018; Slatyer et al., 2018).

In most cases, interventions were implemented with teams within which participants worked. The length of interventions varied from a single one hour intervention (Adamson et al., 2018b) to an hour per week for 10 weeks (Orellana-Rios et al., 2018). Others were delivered as a block, with

participants attending all day for between two and four days (Donald et al., 2019; Masterson et al., 2014; McEwan et al., 2020a; Pehlivan & Güner, 2022).

Sample characteristics

Due to the nature of mixed-methods studies, it is not possible to produce an accurate total sample size for included studies. However, approximately 407 healthcare staff contributed, either through interviews or feedback forms, to 15 of the articles. One article did not include a sample size (Romano et al., 2022) and two studies utilising evaluation forms collectively analysed 457 comments sourced from 1,615 evaluation forms (Chadwick, Raymond J. et al., 2016; Meyer et al., 2022).

The majority of research took place in the UK (*n*=7) and Canada (*n*=4), with others from the USA (*n*=2), Italy (*n*=1), Ireland (*n*=1), Germany (*n*=1), Turkey (*n*=1) and Australia (*n*=1). All UK-based studies took place within an NHS context.

Most study samples included staff across all roles (*n*=11), and five studies focused solely on the nursing profession (Bridges et al., 2017; Landers et al., 2020; Lathren et al., 2021; Pehlivan & Güner, 2022; Slatyer et al., 2018). Two studies did not record the profession of participants (Goodrich, 2012; Romano et al., 2022). Seven articles recorded participants' age (Landers et al., 2020; Lathren et al., 2021; Marx et al., 2014; Orellana-Rios et al., 2018; Pehlivan & Güner, 2022; Pfaff et al., 2017), nine recorded gender (Adamson et al., 2018b; Dobrina et al., 2023; Landers et al., 2020; Lathren et al., 2021; Marx et al., 2014; McEwan et al., 2020a; Orellana-Rios et al., 2018; Pehlivan & Güner, 2022; Pfaff et al., 2017), and two recorded ethnicity (Lathren et al., 2021; Masterson et al., 2014).

Table 3.

Overview of included studies

Author(s), date of publication	Description of intervention	Length of intervention	Participant characteristics	Setting; Country	Methodology	Identified themes relating to participants' experiences of intervention	Quality appraisal score
Adamson et al, 2018	Schwartz Rounds	Participants attended 1, 2 or 3 rounds	n=29; 15 clinicians and 14 non-clinicians; 5 male and 24 female.	Paediatric rehabilitation hospital; Canada	Interviews; framework analysis	(1) Impact on Professional Practice; (2) Impact on Individuals; (3) Impact on Relationships with colleagues; (4) Most valuable aspects about what occurred within Schwartz Rounds; (5) The Impact of Schwartz Round beyond the actual event itself; (6) Dose Effect	+
Bridges et al, 2017	Creating Learning Environments for Compassionate Care; regular meetings between ward manger and matron; ward manager action learning sets, team learning activities, peer observations of practice, team study days, mid-shift 5min cluster discussions	4 month implementation period	n=47; with ward managers (n=4), staff nurses (n=8), HCAs (n=7), senior hospital nurses (n=2) and PDNs (n=2).	Wards of two general hospitals, 3 specialising in older people's medicine and 1 in orthopaedics; UK	Semi-structured interviews	(1) CLECC as limited set of concrete practices versus underpinning philosophy; (2) staff keen to participate but not sure who should drive it forward; (3) participation shaped by organisational context; (4) valued by staff but challenging to sustain.	+

	and twice weekly reflective discussions.						
Chadwick et al, 2016	Schwartz Rounds	18 1-hour rounds delivered over a 3 year period.	n=158 qualitative comments from 795 evaluation forms; 39% nurses; 18% doctors; 9.5% allied health professionals; 15% administrative/management; 16.5% other.	District general hospital and community services; UK	Evaluation form; thematic analysis	(1) Insight; (2) Appreciation; (3) Conduct of the meeting; (4) Suggestions for improvement	+
Dobrina et al, 2023	Narrative Medicine Training; Narration of experiences, reflections, interpretation of experiences.	5x 3-hour sessions weekly	n=19 responded to the supplementary qualitative question at the end of the survey. n=193 participated in the intervention (94.8% female; 58.3% nurses).	Maternal and child hospital; Italy	Evaluation form; thematic analysis	(1) Learning to externalise feelings; (2) Team-building; (3) Helpful in re-working personal/professional journey; (4) Developing professional empowerment; (5) Programme organisation; (6) Participants difficulty in sharing experiences.	+
Donald et al, 2019	Reflective course on compassion-based care; supporting and cultivating compassion for self and others, celebrating successes and telling stories of personal	4 day course	n=12; 8 nurses, 1 HCA, 1 occupational therapist, 1 social worker and 1 therapy assistant.	Mental health staff in a hospital in North-West England; UK	Semi-structured interviews; thematic analysis	(1) Meeting a need; (2) Creating the space; (3) Reorientation; (4) Prioritising self-care; (5) Influencing team dynamics.	+

	experiences of compassionate care.						
Goodrich et al, 2012	Schwartz Rounds	10 rounds per site, spread over a 12-13 month period	n=18; no participant characteristics provided	Two hospitals providing acute care; UK	Interviews before and after the intervention and pre- and post-pilot surveys; framework analysis. Thirteen participants were interviewed at both before and after.	(1) Establishing Schwartz Center Rounds in two English trusts; (2) Impact of Rounds on (a) Individuals; (b) Teams/Relationships between staff; (c) Wider hospital/culture.	-
Landers et al, 2020	Leaders for Compassionate Care program; Explored concepts of 'presence', 'compassionate care' and 'impact on self'. Group activities, discussing	3 day programme spread over 3 months	n=15; age 35-63 (mean=49); 14 female, 1 male; 6 Clinical Nurse/Midwifery Manager, 4 Director of Nursing / Midwifery, 3	Email sent to all eligible participants across Ireland, inviting them to take part; Ireland	Interviews; thematic analysis	(1) Conceptualising compassionate care; (2) Transference; (3) Transforming; (4) Sustainability	++

	quality improvement, leadership, networking and presentation skills.		Chief Directors of Nursing/Midwifery, 2 Program Facilitators.				
Lathren et al, 2021	Self-compassion training; Guided meditations, in-the-moment practices. Experiential exercises, skill-building practices, didactics and discussions designed to increase self-compassion.	8x 2.5-hour sessions weekly	n=22; 22 female; all certified nursing assistants; 81.8% African American, 4.5% White, 4.5% Asian, 4.5% American Indian/Alaskan Native and 4.5% Native Hawaiian.	Nursing home; USA	Focus groups; thematic analysis	(1) Changes in stress management; (2) Changes in support and appreciation; (3) Changes in the caregiver role; (4) Changes in connections to others.	+
Marx et al, 2014	Mindfulness-based cognitive therapy	8x 1.5-hour sessions weekly	n=18; mean age=42 (SD=11 years); 81% female; 44% nurses, 12% ward managers 12% CBT therapists, 8% HCAs, 8% OTs, 8% clinical or counselling psychologists, 4% recovery support workers, 4% trainee psychological wellbeing practitioners.	Inpatient, primary, secondary and community adult mental health services in one NHS trust; UK	Interviews; thematic analysis	(1) Increase in mindfulness; (2) Improvement in wellbeing; (3) Changes to work life.	+

Masterson et al, 2014	Enabling Compassionate Care in practice programme; Reflection on leadership, quality improvement and how to put the 6Cs into practice.	2 day residential and 1-day follow up after 6 weeks	n=111 (95%) of participants completed the evaluation form; 26.5% Black and minority ethnic; 97.5% of participants were nurses.	120 places were made available across each of the four NHS England regions: North, Midlands and East, London, and South, with 30 places in each area; UK	Evaluation form; analysis not provided	(1) Increased knowledge, understanding and practical application of the 6Cs; (2) Gaining the courage and confidence to lead; (3) Getting back in touch with core nursing values; (4) Delivering change in practice	-
McEwan et al, 2019	Compassionate Mind training; defining compassion, psychoeducation, and practices.	2 day course	n=17; 15 mental health nurses and one team manager; 12 female, 5 male.	3 NHS teams (2 inpatient and 1 crisis intervention); UK	Focus groups; content analysis	Training experience – (1) Useful framework; (2) Thought-provoking and exciting; (3) Appreciation of person-centered approach; (4) Need for ongoing training/supervision. Implementation experience – (1) Applied approach with patients and staff; (2) Environmental challenges; (3) Attitudinal challenges	++
Meyer et al, 2022	Schwartz Rounds	Almost half of participants attended 2 or more sessions; 23 sessions ran over a period of 4.5 years.	n=299 participant written comments from 820 evaluation forms. 1096 participants attended (32.1% physicians; 22.9% nurses; 19.4% medical students and other disciplines such as social workers, chaplains, child life	Tertiary Children's Care hospital; USA	Evaluation form; content analysis	(1) Understanding other people's perspectives; (2) Importance of communication; (3) Empathy and Compassion; (4) Awareness of Personal Biases; (5) Maintaining Boundaries.	+

			specialists and administrative staff.				
Nissim et al, 2019	Compassion, Presence and Resilience Training; mindfulness and facilitator-led discussions and mindfulness micropractices.	8x 1.5-hour session weekly	n=10; interprofessional oncology team	Two oncology teams within a large cancer centre; Canada	Semi-structured interviews; thematic analysis	<u>Participant-Identified Benefits</u> – (1) Learning to pause; (2) Acquiring a working definition of stress and self-care; (3) Becoming fully present; (4) Building self-compassion; (5) Receiving organisational acknowledgement and recognition of stress. <u>Participant-Identified Challenges</u> – (1) Sharing vulnerability within Interprofessional teams; (2) The culture of a "stiff upper lip"; (3) Managing vulnerability in the sessions; (4) The paradoxical benefits of sharing vulnerability within the team; (5) Committing to a Sitting Meditation Practice; (6) Participant-identified barriers to sustaining a sitting meditation practice; (7) Participant-identified solutions to sustaining a sitting meditation practice.	+

Orellana-Rios et al, 2018	Mindfulness intervention; meditation sessions and integration into daily work activities.	10-week programme	n=28; age range 37-57 (mean= 46.4); 21 female, 7 male; 19 nurses, 1 physician, 2 social workers, 1 psychologist, 1 physiotherapist, 3 administration and 1 volunteer.	Community hospital; Germany	Semi-structured interviews; integrative interview analysis	(1) Self-care Empowerment; (2) Mindful pauses in the midst of stress; (3) Reduction of Rumination; (4) Reduction of empathic distress; (5) Enhancing interpersonal connection skills; (6) Team communication; (7) Self-positioning as compassionate.	++
Pehlivan & Guner, 2022	Compassion Fatigue Resiliency Program	Short team programme was 2 days; long term programme was over 5 weeks	n=24; mean age= 25.7; 91.7% female; 24 nurses; working in oncology for a mean of 2.1 years.	Oncology-haematology inpatient services, outpatient chemotherapy units and transplant units in two private hospitals; Turkey	Focus groups; content analysis	(1) Awareness; (2) Coping; (3) Not for others, for me; (4) Training design	++
Pfaff et al, 2017	Compassion Fatigue Resiliency Program	6 week program	Mid-intervention n=13; Post-intervention n=8; characteristics reported as whole sample combined with quantitative data (96.9% female; 25% clerks, 12.5% managers, 34.4% nurses, 6.3% physician, 9.4% radiation therapist, 9.4% other.	Regional cancer centre; Canada	Focus groups and interviews; line-by-line coding and categorical aggregation to identify themes.	(1) Heightened awareness of compassion fatigue in day-to-day interactions; (2) Collaborative practice and caring for the team; (3) Compassion satisfaction through self-care strategies.	+

Romano et al, 2022	Virtual, organisational intervention via online workshops; 10 min music introduction, followed by didactic learning on resilience, self-compassion and incorporating mindfulness into daily work activities.	25 min sessions over a 4-week period	Not provided; 66 participants attended the first session	University-affiliated catholic healthcare network; Canada	Evaluation form; content analysis	Key learnings - (1) Importance of self-care; (2) The value of small, incremental changes or practices to bolster resilience; (3) the need for self-compassion.	+
Slatyer et al, 2018	Brief mindful self-care and resiliency programme; one-day educational workshop on compassion fatigue resiliency and introduction to mindfulness; followed by a series of mindfulness skills seminars.	Total of 12h in duration; 1-day workshop followed by 4 weekly sessions.	n=16; 16 female; 16 nurses; 11 held senior registered nurse roles. 12h total in duration, one-day educational workshop followed by series of weekly mindfulness seminars over 4 weeks.	Tertiary acute care hospital; Australia	Interviews; thematic analysis	(1) Gaining perspective and insight; (2) Developing feelings of inner calm; (3) Taking time to care for self; (4) Feasibility and acceptability of the MSCR Program; (5) Using self-care strategies.	++

Critical Appraisal

A review of included studies according to the NICE methodology checklist for qualitative studies generally found a good standard of research. Five studies were rated as '++" (Landers et al., 2020; McEwan et al., 2020a; Orellana-Rios et al., 2018; Pehlivan & Güner, 2022; Slatyer et al., 2018). Studies with this rating demonstrated reflexivity in addressing the role of the researchers, and took additional steps to ensure trustworthiness, for example through triangulation and audit trails. Two studies utilised member checking to explore the credibility of final themes (Adamson et al., 2018b; Slatyer et al., 2018). Eleven studies were rated as '+', predominantly due to limited detail regarding the role of the researcher. Two studies were rated as '-' (Goodrich, 2012; Masterson et al., 2014) due to insufficient detail of how data were analysed, including how many researchers were involved. One study did not report sample size or participant characteristics (Romano et al., 2022). Five studies were exempt from an ethical review process (Chadwick, Raymond J. et al., 2016; Masterson et al., 2014; Meyer et al., 2022; Orellana-Rios et al., 2018; Romano et al., 2022). Critical appraisal was not used for exclusion purposes, rather to provide reflexivity during data synthesis (Tod et al., 2022). Study quality was considered throughout the synthesis and interpretation of findings. The contribution of each study to each theme was considered to check the robustness of the synthesis (See Appendix G), and to ensure that themes did not consist of data only from studies rated as '-'. Furthermore, limitations of included studies are considered in the interpretation of findings; it is not possible to provide an accurate sample size or participant characteristics, impacting how the findings of this review can be generalised.

Thematic synthesis

Four analytical themes were identified, relating to how healthcare staff experience organisational interventions for compassionate care: 1) holding back, 2) humanising healthcare, 3) values are instilled, and 4) it needs to be sustainable. The first three themes consist of two sub-themes each. See Table 4 for a summary of themes and sub-themes.

Table 4.

Summary of themes and sub-themes.

Themes and sub-themes	Description
Theme 1: Holding back	**Staff holding back from participating in the intervention(s)**
Systemic barriers	Staff were held back from participating by organisational barriers and the environment that they worked in.
Personal barriers	Staff were held back from participating by personal fears, blocks and resistances of compassion.
Theme 2: Humanising healthcare	**Intervention(s) humanised healthcare**
In the moment experiences	Being able to pause and recognise difficulties in the intervention.
Impacts outside the intervention	The benefits that staff noticed outside the intervention when it had ended.
Theme 3: Values are instilled	**There is a place for values in the intervention.**
Connecting with personal values	Aligning with personal guiding values.
A way to demonstrate organisational values	The organisation can show their values and what is important to them.

Theme 4: It needs to be sustainable	**Organisations need to invest in long-term interventions rather than create a 'quick-fix' or 'tick-box exercise.'**

To aid sensitivity and robustness of the review, the contribution of each study to overall themes was explored (Thomas & Harden, 2008) (See Appendix G). Where themes were not present in individual studies or contributed little comparatively to others, this was where (a) the studies took place in private healthcare settings, so contextual difficulties did not come to light, (b) studies left little time between the intervention and evaluation, so long term impacts were not seen, and (c) where qualitative feedback was limited to a single question in mixed-methods studies, and therefore did not provide depth in responses.

Themes

Theme 1: Holding back.

Systemic barriers

The culture of the organisation stood as a barrier to staff participation in the intervention. Embedded cultures of a 'stiff upper lip' (Nissim, 2019, p36) meant that healthcare staff were concerned about showing true emotions or removing their professional mask, for fear of jeopardising their image as a reliable and competent professional. This was particularly the case when senior managers or leadership were present during the intervention, and in organisations where steep hierarchies are embedded.

> *"Any expression of emotionality is seen as a weakness. You have to be really careful of that…it's an unspoken thing. We don't display vulnerability…These are the threads that wind through any department, the subtleties, the modus operandi; nobody talks about it…it's subtle. People sometimes can't even verbalise it because it's in the fabric, it's the culture…it sets the tone."*
>
> (Nissim et al., 2019; p36; participant).

Moreover, the atmosphere of the intervention felt inconsistent with the reality of the work environment, and this held staff back from participating. Staff found it difficult to switch between the persistent on-the-go mentality of the workplace - where they were constantly busy, overlooked and felt unsupported – to the environment in the intervention which was warm and supportive. It took time to adjust to being able to share vulnerabilities and emotions. This was particularly challenging when it was just a one-off intervention. The mixed signals from these two very different environments led to conflicting feelings in staff, and a reluctance to engage due to returning to a potentially threatening environment afterwards.

'*I think the Trust sends out mixed signals to a certain degree – yep, this is compassion, about looking after ourselves, looking after each other, being kind – but at the same time, you have the other side of the organisation, which we need, in terms of disciplinary action, targets, performance, all those kind of things, but I think there's a feeling that things don't marry up that well really'.*

(McEwan et al, 2019; p724; Participant "Emily")

Inconducive environments were also noted when staff were unable to participate due to practical barriers, namely staff shortages, a lack of time and chaotic environments. It was challenging for staff to carve time out of their day to attend.

Personal barriers

Prior to the intervention starting, there was a sense of scepticism, with staff approaching the sessions with some resistance and cautiousness. For some, this reluctancy stemmed from not seeing themselves as naturally emotional people or feeling guilty and undeserving of the intervention. Therefore, the intervention was seen as something that was not for them.

"One participant described journeying from a place of scepticism to one appreciating the benefits that the course experience had had for him: "… to be honest when I first went, I was a bit sceptical … I guess at work my role is caring but, outside of work, I'm not really a touchy-feely person, I don't really talk about emotions and stuff … and, on the first day, I did think 'I'm not going to enjoy this'… but I actually found it really worthwhile in the end."

(Donald et al., 2019; p1022; participant and author)

Others were fearful of the feelings and emotions that could surface as a consequence of the intervention, and their ability to manage those afterwards. Sharing emotions and vulnerabilities was a huge step outside of the comfort zone for some. Alongside this was a concern of how staff would be perceived by colleagues; participants were reluctant to be upset in front of colleagues that they would be working alongside afterwards.

Fears, blocks and resistances to compassion inhibited engagement. Some expressed the desire to cope independently and did not want to burden colleagues with their difficulties. Others felt misunderstood in the group and saw themselves as outsiders. Consequently, people censored what they shared or chose not to share at all. Briefly mentioned were how some participants engaged 'offline' (Nissim et al., 2019; p37; participant), reflecting on their experiences individually.

Theme 2: Humanising healthcare

This theme related to the way in which staff felt that the interventions brought a sense of common humanity between staff, patients and the organisation. The interventions reiterated the human aspects of healthcare that everybody needs. The first subtheme is related to experiences within the intervention itself, whereas the second subtheme relates the impacts the intervention had after it had finished, when healthcare staff returned to work.

In the moment experiences

The intervention was seen as an opportunity for staff to pause and take stock of how they were feeling. Staff could take time to think about their experiences, name what they were feeling, and reflect with others. This was a very rare opportunity for participants, that so infrequently happens within the day-to-day busyness of healthcare. The intervention became a space for staff to name the emotions they were experiencing and had been experiencing for a long time.

> *"Participants also described using emotional awareness to process and cope with difficult situations. One participant discussed how the practice of pausing and naming her emotions helped her to realise that grief was underlying her sense of aggravation."* (Lathren et al., 2021).

Difficult emotions and experiences became a common thread that connected groups. Staff felt validated in the realisation and recognition that colleagues were having similar experiences – even those in senior roles - and that they were not alone in their difficulties. Instead, difficult feelings and challenges came to be seen as part of the normal, human experience. Sharing experiences enabled alternative perspective taking, and therefore staff had greater appreciation and empathy for those they worked alongside.

> *"It is very grounding. It is humbling. You think – Christ, this is what they do! It reminds you of the profound ethical decisions people take."* (Goodrich et al., 2012; Participant, site 2, phase 2).

Interventions enabled participants to have insight into the pressures other colleagues were under, especially colleagues from different professions and disciplines, as they would rarely work directly alongside each other. Perspective taking took place at a deeper level; staff were not only thinking about *what* others were feeling, but *why* they were feeling that way, and began to take into account the context in which someone was working.

Impact outside the intervention.

The theme of *humanising healthcare* continued outside of the actual intervention, and ongoing positive impacts were noticed. A greater sense of humanity and compassion was brought to the relationships between patients and staff, and the compassion that staff had for themselves.

Changes to clinical practice were not radical, yet healthcare staff noticed subtle changes in the way in which they saw and interacted with patients. These subtle changes were brief in duration but important and noticed. Clinicians found themselves taking more time to listen to patients' stories, and more frequently considering the patients' perspective. Following the interventions, greater care and consideration was given to patient interactions, rather than the completion of tasks. A deeper recognition of a patient's journey through the healthcare system became apparent. Staff imagined what it was like to walk in their shoes and experience the service from the patient perspective.

'It's not like my practice has totally changed – like I'm not transformed – and yet, the experience of going to the Rounds is subtle, but profound…it just made me a little bit more conscious about what [information] I'm giving to my clients.' (Adamson et al., 2018; 1409; Participant "Clinician, two rounds")

Moreover, following the intervention, staff became empowered to be creative and imaginative in *how* they delivered patient care. Many returned to work and introduced new practices that went beyond what was necessary. Examples included providing special bags and boxes in which to return jewellery to relative after a loved one had died and implementing post-discharge telephone calls to patients to check that they had understood their medication (Masterson et al. 2014). Staff became empowered to voice their ideas and implement change in workplaces. Those who had previously feared difficult or distressing situations now found themselves better able to deal with them. This

included feeling less fearful and better able to care for patients who were at the end of life (Orellana-Rios et al., 2017).

Another change noted by both participants and researchers was improvements to staff wellbeing, particularly lower levels of work-related stress and burnout. Staff felt more at ease, calmer, relaxed, and able to leave work at work. These changes were immediate for some, and noticeable in both personal and professional lives. Professionally, participants were better able to do well in their roles. It was recognised that people who work in the caring professions automatically put others' needs above their own, and as a consequence neglect their own needs. The intervention changed this narrative, and supported staff to recognise their own needs and feelings. Some started to care for themselves in the same ways that they would care for patients.

"*'cause I'm a CNA and I'm trained all day to do for everybody else. I'm a caregiver, so this program helped me to just say, hey, just like I am actually standing outside of my body and doing the same thing I do for you…for me."* (Lathren et al., 2021; p1344; Participant).

The concept and practices of self-compassion were new for many, and for some participants the intervention was the first time they had thought about their own needs and the concept of self-compassion. In the work environment, patient care was always the focus of any additional training, therefore it came as a surprise for participants to have training that supported them. As a result, staff became less critical of themselves in relation to what they had been able to complete or achieve at work.

Another noticeable change in which the interventions humanised the healthcare environment was in the way colleagues interacted with each other. Following the intervention, participants noted the improved relationships they had developed with colleagues and the greater frequency of

interactions. The intervention provided space for staff to see colleagues in a different light, usually getting to know them on a more personal and deeper level. People became more willing to approach others at work, to say "hello" and to ask for help. Consequently, through attending interventions, participants naturally built upon existing support systems, creating connections across their workplaces and developing a larger resource pool from which to source help from when needed.

"It's really solidified that we're willing to talk about issues in the practice, like difficult topics that come up. Like, "I need help dealing with this, how would you do it? Am I doing this wrong?"

(Adamson et al., 2018; p1413; participant "Clinician, three rounds")

Structures of hierarchical leadership and siloes between different departments and professions are embedded in healthcare. Yet the intervention enabled equal conversations to be had between different professionals at different levels in the system.

'The development of a network both within the hospitals and across hospital group was a huge benefit. It was suggested that cross-group sessions contributed to a much wider network in relation to trying to develop people and deal with some of the challenges that they're experiencing.'

(Landers et al., 2020; pages 7 & 8; Participant "CDON/M1")

Deeper and closer working relationships meant that staff were no longer at odds with each other, but saw themselves as a team, with common values and goals.

Theme 3: Values are instilled.

This theme relates to how interventions instilled values at multiple levels. Individually, participants reconnected with their own personal and professional values. At the organisational level, interventions provided the opportunity to embed shared visions and values.

Connecting with personal values

Connections were made between participants and their personal values, including what brought them into the profession to start with. These reminders of why they do what they do - alongside reminders of the real differences they make to patient care – meant that staff returned to work after the intervention with greater momentum.

> *"…feeling reinvigorated and brough back in touch with their core values and why they had entered nursing: "Discussions with the tutors and the workshops sparked a small flame inside of me, waking me up from the robotic individual I had developed into"* (Masterson et al., 2014; p26; participant and author)

For staff, the interventions and workshops reinforced that they are doing a good job and working in line with their values. Staff could make connections between their values and the work they were doing. These were connections that staff had previously lost touch with, due to being caught up in the task-focused elements of their roles. Having clarity around values, identity and what they considered as important meant that participants were better able to navigate difficult situations and uncertainty. Many described feeling unburdened from the pressures of doing their work perfectly.

A way to demonstrate organisational values.

At an organisational level, interventions themselves were a way to demonstrate to staff that they are valued and important. Simply the implementation of the intervention, with organisations investing in staff and carving time out of busy schedules, was hugely appreciated. It created collective values of what was important for everyone in the organisation.

"An important outcome from the program reported by participants was the feeling of support and being able to take time out to share ideas. CDON/M 1 stated that: They [leaders] felt valued and they couldn't believe that the HSE [Health Service Executive; the organization that funded the program] . . . had invested in them for three days. That really, really hit home I suppose how valued, you know, they felt valued after it."

(Landers et al., 2020; p7; participant and author)

Furthermore, implementing the interventions were a way for the organisations to say to staff: 'we know that this job is difficult, and we recognise that everyone needs support to do the job'.

"I think it's a validation that what you see every day takes its impact. I think it's an unspoken validation of the immense suffering that you witness and the anticipatory suffering that you're going to see." (Nissim, 2019, p35, participant)

When the organisation made efforts to invest in staff training and wellbeing, healthcare staff saw the organisation in a different light. They saw the organisation they work for as one that values and respects people and are willing to listen to them. Working for an organisation that sees you as more than a role or profession is important, as is an organisation that values an environment where staff feel able to express emotions and difficulties.

Theme 4: It needs to be sustainable.

Although there was a great sense of appreciation for the intervention from healthcare staff, there was a recognition that it needed to continue for long-term change to be made. The intervention was seen as just the start of working towards embedding compassionate healthcare.

"It's like an oil tanker that you're trying to turn really. We've only just turned to port."

(McEwan et al, 2019; p724; Participant "Ben")

Some teams and organisations did ensure that they continued and adapted interventions to what was possible in their context. In some teams they were '*mentioned and utilised on a daily basis'* (McEwan et al., 2019). Sharing in conversations became one of the most notable ways of the intervention continuing, with discussions centring around what people had learnt and experienced, and what they could do differently in the workplace. Where continuity was not possible, there was a sense of sudden loss for staff. This was demoralising, given the time that staff had put into attending, making suggestions and stepping into vulnerability. Staff reflected on the time taken to open up and build connections, and the sudden endings made this difficult.

"The end of the training felt abrupt, especially considering the time it took to develop group trust and connection: "I heard a couple of people say, 'as soon as we got used to them, they're gone" (Lathren et al., 2021; p1344; participant and author).

The difficulties in sustaining the interventions were recognised, especially amidst current contexts. These included a lack of time, staff shortages, and unsuitable environments that were noisy, busy and chaotic. Questions arose regarding whose responsibility it is to facilitate interventions going forwards, and many looked towards management and leadership for this. Continuity was dependent upon involvement from seniority and leadership; where active roles were taken, the intervention continued to flourish. However, where there was nobody to take on this responsibility, the end of the training came abruptly. In some settings, junior staff made efforts to keep it going by reminding the team about cluster discussions.

Discussion

This review provides an understanding of how healthcare staff experience organisational interventions for compassionate care. Healthcare staff experience multiple barriers prior to participating in interventions, including organisational environments that do not feel safe or are not supportive, or personal factors such as finding it difficult to engage with the emotional aspects. However, when environments supported participation, benefits for staff went well beyond the intervention itself. Healthcare staff noticed improvements to patient care, their own wellbeing, and the relationships they had with those around them. The intervention became a space for staff to reflect on their work, process difficult emotions, and enabled greater perspective taking, facilitating compassionate healthcare. Healthcare staff felt valued by the organisation and felt that the intervention needed to be embedded on a long-term basis.

This review encapsulates the findings of eighteen studies that conducted fourteen different interventions across eight countries. Contexts varied in the healthcare setting and funding model they were set in but despite the heterogeneity of studies, findings were largely consistent. There were, however, some exceptions. For instance, systemic challenges were not recognised in two articles conducted in the USA and Canada, within privately funded healthcare systems. Some themes were not present in studies that utilised questionnaire designs, as participant responses were limited in depth and the studies did not include a follow-up. This meant that long-term impacts or how interventions led to actionable change in clinical practice were not recognised. However, there was general consistency across studies. This is despite the review incorporating a wide range of compassion-based interventions, ranging from self-compassion training and compassionate mind training to reflective rounds and leadership programmes. Interventions varied in the specific content that was shared, and in their format, however, what was consistent throughout them all was the space for reflection and connection with colleagues.

The primary finding from this review was the improvements to patient care reported by healthcare staff post-intervention. Greater listening, empathy and compassion towards patients were recognised, alongside the facilitation of clinical imagination, whereby staff became creative in the way they delivered personalised care. These findings are not novel. Increased empathy, compassion, and an improved ability to engage and communicate with patients have been reported in quantitative reviews (Blomberg et al., 2016; Sinclair et al., 2021), alongside evidence of clinical creativity (Sinclair et al., 2021). It is important to note that only the clinician perspective is presented here. Compassion is relational; therefore, it is important for the patient perspective to also be incorporated. According to a recent scoping review, the patient perspective was represented in only 30% of studies exploring compassion in healthcare (Malenfant et al., 2022a).

Alongside improving patient care, interventions improved staff wellbeing and the relationships between colleagues. These impacts were facilitated by having a reflective space where participants could reflect on their work and share experiences. The recognition that everyone was having similar experiences was important for healthcare staff. The understanding that struggles and difficulties are a natural part of the human experience is fundamental to Buddhist definitions of compassion and compassion focused therapy (Gilbert, 2009a; Rinpoche & Mullen, 2005; Strauss et al., 2016). The NHS workforce is its most important resource (Black, 2012) and improved staff wellbeing is an antecedent to patient care performance (Maben et al., 2012; Teoh et al., 2022). Another positive outcome identified in this review was improved relationships with colleagues. This is something not previously recognised in quantitative reviews of organisational interventions (Blomberg et al., 2016; Sinclair et al., 2021). This is an important outcome as good working relationships are a facilitator for compassionate healthcare (Christiansen et al., 2015).

Re-connecting to values was an important part of the intervention for healthcare staff. Values have been defined as what individuals consider good and worthy and are stable and enduring beliefs that

transcend situations (Moyo et al., 2016; Sagiv et al., 2017). In the present study, healthcare staff experienced feeling re-connected with their own personal values and some could see an alignment between their personal values and the values of the organisation. This is important in light of previous research; in a recent review healthcare professionals defined compassionate healthcare as something that is 'values-driven' (Marshman et al., 2024). Clinically, values are important in influencing and guiding decision making, especially when guidelines fall short (Marshman et al., 2024; Moyo et al., 2016). Furthermore, value-discrepant environments – where personal and organisational values do not match - have been shown to reduce clinician wellbeing, inhibit clinicians' ability to provide compassionate care (Pavlova et al., 2023a), and can contribute to moral injury. On a related note, it was important in this study for the intervention to be driven by organisational values, for example to show investment in staff wellbeing or to promote compassionate care. When interventions for compassionate nursing care have been implemented as a tick-box task in response to public criticism, and are not driven by organisational values, no benefits have been shown (Sims et al., 2020)

Healthcare staff experienced a variety of organisational barriers to participation. Practical barriers, such as high workloads, time constraints and staff shortages, are well-documented in the literature and limit both the possibility of interventions being implemented, and the ability of healthcare staff to attend them (Malenfant et al., 2022a). They reflect the daily challenges faced by staff working in healthcare. Cultural barriers were also experienced, whereby the environment of the intervention was not conducive to the culture of the wider organisation. Target and performance-driven cultures, where staff are not encouraged to speak out, share difficulties or express emotions meant that it was understandably difficult to take part in an intervention where this *was* strongly encouraged. These challenges are well-recognised across the literature (Jones et al., 2016; Malenfant et al., 2022a; Robinson et al., 2023) but do vary according to context. Settings with advanced technology, for

instance large acute hospitals, and ‘tick-box’ cultures have been recognised as the most challenging in which to provide compassionate care (Malenfant et al., 2022a).

Interventions that were sustainable and embedded in the healthcare system, rather than delivered as a one-off intervention were appreciated and requested from participants. When interventions did continue, it was important for staff to take active roles in facilitating this. Sustainability is a prevalent challenge recognised across the literature and is expected given pressures to healthcare delivery (Curtis et al., 2017). Commitment and ongoing support from leadership and senior members of staff are considered to be instrumental in sustaining interventions (Robinson et al., 2023; Sinclair et al., 2021).

Fears, blocks and resistances have been described as inhibitors to compassion (Gilbert & Mascaro, 2017), and were experienced by some healthcare staff in this review. Fears refer to the fear response we can have to compassion. Blocks refer to situational factors, such as a lack of time or resources. Resistances occur when people see no point in compassion. Staff experienced fears of how they would be seen by others, blocks of time, resource and availability constraints, and resistances to compassion by seeing it as something that was not for them. Fears, blocks and resistances are common experiences for people experiencing compassion-based interventions (Cole-King & Gilbert, 2014a), and new experiences of compassion can activate threat-based responses (Kirby et al., 2019a). Therefore, in implementing future compassionate interventions, organisations and facilitators need to be aware of this. Potential fears, blocks and resistances should be identified and addressed, ideally near the start of an intervention so that they can be normalised.

Limitations of the review

This review is limited by its lack of cultural diversity. This review predominantly represented the experiences of nurses who identified as female; therefore, the findings are limited in their

generalisability and transferability. In addition, the majority of participants in this review were white which is not representative of the NHS workforce. This may reflect the wider unequal opportunities for people of the global majority who work in healthcare. In the UK NHS, white staff are 15% more likely to access non-mandatory training than colleagues from the global majority (The Kings Fund, 2020). It is important to consider how accessible additional training, support and interventions are in healthcare for people of the global majority, who are working in professions other than nursing.

Furthermore, all studies took place within Western healthcare contexts. This limits the applicability of findings to Eastern countries. This is important as culture and religion influence meanings and understandings of compassion. The exclusion of non-English studies may have contributed to this and means that relevant and important studies may have been missed.

Moreover, thematic synthesis has been criticised for decontextualising the findings of individual studies (Britten et al., 2002; Thomas & Harden, 2008). Studies in this review are heterogeneous, incorporating global contexts which vary in healthcare funding models, and are implemented across settings, including acute hospitals, community and residential settings. The experiences of nursing assistants working in a nursing home in the USA (Lathren et al., 2021) are likely not applicable to a large acute NHS hospital in the UK. Furthermore, understandings and meanings of compassion differ across healthcare settings and cultures (Malenfant et al., 2022a; Marshman et al., 2024). The researcher attempted to mitigate issues of transferability through providing thorough descriptions of study contexts, however caution should be taken in applying the findings presented here to different contexts.

Conclusion and implications for practice

To conclude, organisational interventions for compassionate care are valued and appreciated by healthcare staff, and, from the perspectives of healthcare staff, have the potential to promote compassion across a whole healthcare system. The findings in this review suggest that organisational interventions may facilitate clinical creativity, improve staff wellbeing, and strengthen communication and relationships between colleagues and departments. Similar findings across the included studies suggest that it is the *way* interventions are delivered, rather than the specific content, that leads to benefits for staff and patients. A reflective space with opportunity to hear others' experiences, within a culture that supports openness is important. It is recommended that interventions are driven by organisational values, and are embedded with sustainability in mind, rather than a one-off intervention. Fears, blocks or resistances to compassion may be identified and addressed at the start of the intervention to support engagement. Future research should explore the impact of organisational interventions for compassionate healthcare from the patient perspective.

References

Adamson, K., Searl, N., Sengsavang, S., Yardley, J., George, M., Rumney, P., Hunter, J., & Myers-Halbig, S. (2018). Caring for the healthcare professional: A description of the Schwartz Rounds™ implementation. *Journal of Health Organization and Management, 32*(3), 402-415. https://doi.org/10.1108/JHOM-05-2017-0103

Adamson, K., Sengsavang, S., Myers-Halbig, S., & Searl, N. (2018). Developing a compassionate culture within pediatric rehabilitation: does the Schwartz rounds™ support both clinical and nonclinical hospital workers in managing their work experiences? *Qualitative Health Research, 28*(9), 1406-1420. hDttOpsI://1d0o.i.1o1rg7/71/01.10147977/13024391738273618273689239

Beaumont, E., & Martin, C. J. H. (2016). Heightening levels of compassion towards self and others through use of compassionate mind training. *British Journal of Midwifery, 24*(11), 777-786. https://doi.org/10.12968/bjom.2016.24.11.777

Black, C. (2012). Why healthcare organisations must look after their staff. *Nursing Management-UK, 19*(6), 27-30.

Blomberg, K., Griffiths, P., Wengström, Y., May, C., & Bridges, J. (2016). Interventions for compassionate nursing care: A systematic review. *International Journal of Nursing Studies, 62*, 137-155. https://doi.org/10.1016/j.ijnurstu.2016.07.009

Bridges, J., May, C., Fuller, A., Griffiths, P., Wigley, W., Gould, L., Barker, H., & Libberton, P. (2017). Optimising impact and sustainability: a qualitative process evaluation of a complex intervention targeted at compassionate care. *BMJ Quality & Safety, 26*(12), 970-977. http://dx.doi.org/10.1136/ bmjqs-2017-007356

Britten, N., Campbell, R., Pope, C., Donovan, J., Morgan, M., & Pill, R. (2002). Using meta ethnography to synthesise qualitative research: a worked example. *Journal of Health Services Research & Policy, 7*(4), 209-215. https://doi.org/10.1258/135581902320432732

Busetto, L., Wick, W., & Gumbinger, C. (2020). How to use and assess qualitative research methods. *Neurological Research and Practice, 2*(1), 14. https://doi.org/10.1186/s42466-020-00059-z

Chadwick, R. J., Muncer, S. J., Hannon, B. C., Goodrich, J., & Cornwell, J. (2016). Support for compassionate care: Quantitative and qualitative evaluation of Schwartz Center Rounds in an acute general hospital. *JRSM Open, 7*(7), 2054270416648043. 10.1177/2054270416648043

Christiansen, A., O'Brien, M. R., Kirton, J. A., Zubairu, K., & Bray, L. (2015). Delivering compassionate care: the enablers and barriers. *British Journal of Nursing, 24*(16), 833-837. https://doi.org/10.12968/bjon.2015.24.16.833

Cochrane, B. S., Ritchie, D., Lockhard, D., Picciano, G., King, J. A., & Nelson, B. (2019). A culture of compassion: How timeless principles of kindness and empathy become powerful tools for confronting today's most pressing healthcare challenges. Paper presented at the *Healthcare Management Forum, , 32*(3) 120-127. 10.1177/0840470419836240

Cole-King, A., & Gilbert, P. (2014). Compassionate care: the theory and the reality. *Providing compassionate healthcare* (1st ed., pp. 68-84). Routledge.

Curtis, K., Gallagher, A., Ramage, C., Montgomery, J., Martin, C., Leng, J., Theodosius, C., Glynn, A., Anderson, J., & Wrigley, M. (2017). Using appreciative inquiry to develop, implement and evaluate a multi-organisation 'cultivating compassion'programme for health professionals and support staff. *Journal of Research in Nursing, 22*(1-2), 150-165. 10.1177/1744987116681376

Department of Health & Social Care. (2015, May 8). *2010 to 2015 government policy: compassionate care in the NHS.* https://www.gov.uk/government/publications/2010-to-2015-government-policy-compassionate-care-in-the-nhs/2010-to-2015-government-policy-compassionate-care-in-the-nhs

de Zulueta, P. (2021). How do we sustain compassionate healthcare? Compassionate leadership in the time of the COVID-19 pandemic. *Clinics in Integrated Care, 8*, 100071. https://doi.org/10.1016/j.intcar.2021.100071

Dobrina, R., Bicego, L., Giangreco, M., Cassone, A., Schreiber, S., Buchini, S., Piazza, M., Muzzatti, B., & Rigoni, P. (2023). A multi-method quasi-experimental study to assess compassion satisfaction/fatigue in nurses, midwives and allied health professionals receiving a narrative medicine intervention. *Journal of Advanced Nursing, 79*(9), 3595-3608. 10.1111/jan.15686

Donald, G., Wilson, I., McCarthy, J., Hall, I., Crossley, B., Adshead, P., Shaw, V., Dunne, R., & Dwyer, T. (2019). Experiences of nurses and other health workers participating in a reflective course on compassion-based care.*British Journal of Nursing, 28*(15), 1020-1025. https://doi.org/10.12968/bjon.2019.28.15.1020

Flemming, K., & Noyes, J. (2021). Qualitative evidence synthesis: where are we at? *International Journal of Qualitative Methods, 20*, 1609406921993276. 10.1177/1609406921993276

Fotaki, M. (2015). Why and how is compassion necessary to provide good quality healthcare? *International Journal of Health Policy and Management, 4*(4), 199. 10.15171/ijhpm.2015.66

Gilbert, P. (2009). Introducing compassion-focused therapy. *Advances in Psychiatric Treatment, 15*(3), 199-208. 10.1192/apt.bp.107.005264

Gilbert, P., & Mascaro, J. (2017). *Compassion: Fears, blocks, and resistances: An evolutionary investigation* (Illustrated ed.). Oxford University Press Oxford, UK.

Gilbert, P., Catarino, F., Duarte, C., Matos, M., Kolts, R., Stubbs, J., Ceresatto, L., Duarte, J., Pinto-Gouveia, J., & Basran, J. (2017). The development of compassionate engagement and action scales for self and others.*Journal of Compassionate Health Care, 4*(4), 1-24. 10.1186/s40639-017-0033-3

Goodrich, J. (2012). Supporting hospital staff to provide compassionate care: do Schwartz Center Rounds work in English hospitals? *Journal of the Royal Society of Medicine, 105*(3), 117-122. 10.1258/jrsm.2011.110183

Jeffrey, D. (2016). Empathy, sympathy and compassion in healthcare: Is there a problem? Is there a difference? Does it matter? *Journal of the Royal Society of Medicine, 109*(12), 446-452. 10.1177/0141076816680120

Jones, J., Winch, S., Strube, P., Mitchell, M., & Henderson, A. (2016). Delivering compassionate care in intensive care units: nurses' perceptions of enablers and barriers. *Journal of Advanced Nursing, 72*(12), 3137-3146. https://doi.org/10.1111/jan.13064

Kirby, J. N., Day, J., & Sagar, V. (2019). The 'Flow'of compassion: A meta-analysis of the fears of compassion scales and psychological functioning. *Clinical Psychology Review, 70*, 26-39. https://doi.org/10.1016/j.cpr.2019.03.001

Landers, M., Hegarty, J., Saab, M. M., Savage, E., Cornally, N., Drennan, J., Bassett, G., Lunn, C., & Coffey, A. (2020). Nurses' and midwives' views of the "Leaders for Compassionate Care Program": A qualitative analysis. *Collegian, 27*(1), 2-10. https://doi.org/10.1016/j.colegn.2019.03.005

Lathren, C., Sheffield-Abdullah, K., Sloane, P. D., Bluth, K., Hickey, J. V., Wretman, C. J., Phillips, L. P., & Zimmerman, S. (2021). Certified nursing assistants' experiences with self-

compassion training in the nursing home setting. *Geriatric Nursing, 42*(6), 1341-1348. https://doi.org/10.1016/j.gerinurse.2021.08.013

Levine, S. A., Brett, B., Robinson, B. E., Stratos, G. A., Lascher, S. M., Granville, L., Goodwin, C., Dunn, K., & Barry, P. P. (2007). Practicing physician education in geriatrics: Lessons learned from a train-the-trainer model.*Journal of the American Geriatrics Society, 55*(8), 1281-1286. https://doi.org/10.1111/j.1532-5415.2007.01205.x

Lown, B. A. (2016). A social neuroscience-informed model for teaching and practising compassion in health care. *Medical Education, 50*(3), 332-342. 10.1111/medu.12926

Maben, J., Adams, M., Peccei, R., Murrells, T., & Robert, G. (2012). 'Poppets and parcels': the links between staff experience of work and acutely ill older peoples' experience of hospital care. *International Journal of Older People Nursing, 7*(2), 83-94.

Malenfant, S., Jaggi, P., Hayden, K. A., & Sinclair, S. (2022). Compassion in healthcare: an updated scoping review of the literature. *BMC Palliative Care, 21*(1), 80. https://doi.org/10.1186/s12904-022-00942-3

Marshman, C., Allen, J., Ling, D., & Brand, G. (2024). 'It's very values driven': A qualitative systematic review of the meaning of compassion according to healthcare professionals. *Journal of Clinical Nursing, 33,* 1647-1665. 10.1111/jocn.16998

Marx, R., Strauss, C., & Williamson, C. (2014). The eye of the storm: a feasibility study of an adapted Mindfulness-based Cognitive Therapy (MBCT) group intervention to manage NHS staff stress. *The Cognitive Behaviour Therapist, 7*(18), e18. https://doi.org/10.1017/S1754470X14000300

Masterson, A., Robb, E., Gough, P., & Machell, S. (2014). Inspiring senior nurses to lead the delivery of compassionate care. *Nursing Older People, 26*(8), 26-30. 10.7748/nop.26.8.26.e622

Matney, B. (2018). Understanding literature reviews: Implications for music therapy. *Nordic Journal of Music Therapy, 27*(2), 97-125. https://doi.org/10.1080/08098131.2017.1366543

McEwan, K., Minou, L., Moore, H., & Gilbert, P. (2020). Engaging with distress: Training in the compassionate approach. *Journal of Psychiatric and Mental Health Nursing, 27*(6), 718-727. 10.1111/jpm.12630

Medici, A. C. (2021). Health sector challenges and policies in the context of ageing populations. *United Nations, Department of Economics and Social Affairs, Population Division,*

Mercado, M., Wachter, K., Schuster, R. C., Mathis, C. M., Johnson, E., Davis, O. I., & Johnson-Agbakwu, C. E. (2022). A cross-sectional analysis of factors associated with stress, burnout and turnover intention among healthcare workers during the COVID-19 pandemic in the United States. *Health & Social Care in the Community, 30*(5), e2690-e2701. https://doi.org/10.1111/hsc.13712

Meyer, R., Lu, W., Post, S. G., & Chandran, L. (2022). Pediatric Schwartz Rounds: Influencing Provider Insights and Emotional Connectedness. *Hospital Pediatrics, 12*(8), 703-710. https://doi.org/10.1542/hpeds.2021-006366

Moyo, M., Goodyear-Smith, F. A., Weller, J., Robb, G., & Shulruf, B. (2016). Healthcare practitioners' personal and professional values. Advances in Health Sciences Education, 21, 257-286. 10.1007/s10459-015-9626-9

National Institute for Health and Care Excellence. (2012, September 26). *Appendix H Quality appraisal* checklist – qualitative studies | Methods for the development of NICE public health guidance (third *edition) Guidance*. *NICE.* NICE https://www.nice.org.uk/process/pmg4/chapter/appendix-h-quality-appraisal-checklist-qualitative-studies

Nilsen, P., Seing, I., Ericsson, C., Birken, S. A., & Schildmeijer, K. (2020). Characteristics of successful changes in health care organizations: an interview study with physicians, registered nurses and assistant nurses. *BMC Health Services Research, 20*(147), 1-8. https://doi.org/10.1186/s12913-020-4999-8

Nissim, R., Malfitano, C., Coleman, M., Rodin, G., & Elliott, M. (2019). A qualitative study of a compassion, presence, and resilience training for oncology interprofessional teams. *Journal of Holistic Nursing, 37*(1), 30-44. 10.1177/0898010118765016

Orellana-Rios, C. L., Radbruch, L., Kern, M., Regel, Y. U., Anton, A., Sinclair, S., & Schmidt, S. (2018). Mindfulness and compassion-oriented practices at work reduce distress and enhance self-care of palliative care teams: a mixed-method evaluation of an "on the job "program. *BMC Palliative Care, 17*(3), 1-15. 10.1186/s12904-017-0219-7

Organisation for Economic Co-operation and Development. (2023, February 23). *Boosting investment in health systems will be essential to deal with future shocks, says OECD.* OECD. https://www.oecd.org/newsroom/boosting-investment-in-health-systems-will-be-essential-to-deal-with-future-shocks.htm

Ortega-Galán, Á M., Pérez-García, E., Brito-Pons, G., Ramos-Pichardo, J. D., Carmona-Rega, M. I., & Ruiz-Fernández, M. D. (2021). Understanding the concept of compassion from the perspectives of nurses. *Nursing Ethics, 28*(6), 996-1009. 10.1177/0969733020983401

Paez, A. (2017). Gray literature: An important resource in systematic reviews. *Journal of Evidence-Based medicine, 10*(3), 233-240. https://doi.org/10.1111/jebm.12266

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., & Brennan, S. E. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *Bmj, 372*, 1-9. http://dx.doi.org/10.1136/bmj.n71

Pavlova, A., Paine, S., Sinclair, S., O'Callaghan, A., & Consedine, N. S. (2023). Working in value-discrepant environments inhibits clinicians' ability to provide compassion and reduces well-being: A cross-sectional study.*Journal of Internal Medicine, 293*(6), 704-723. 10.1111/joim.13615

Pehlivan, T., & Güner, P. (2022). Oncology-hematology nurses' perspectives on the compassion fatigue resiliency program: A qualitative study. *The Journal of Continuing Education in Nursing, 53*(7), 329-336. 10.3928/00220124-20220603-09

Perez-Bret, E., Altisent, R., & Rocafort, J. (2016). Definition of compassion in healthcare: a systematic literature review. *International Journal of Palliative Nursing, 22*(12), 599-606. https://doi.org/10.12968/ijpn.2016.22.12.599

Pfaff, K. A., Freeman-Gibb, L., Patrick, L. J., DiBiase, R., & Moretti, O. (2017). Reducing the "cost of caring" in cancer care: Evaluation of a pilot interprofessional compassion fatigue resiliency programme. *Journal of Interprofessional Care, 31*(4), 512-519. http://dx.doi.org/10.1080/13561820.2017.1309364

Rinpoche, R. T., & Mullen, K. (2005). The Buddhist use of compassionate imagery in mind healing. *Compassion*(1st ed., pp. 218-238). Routledge.

Roberts, B. W., Roberts, M. B., Yao, J., Bosire, J., Mazzarelli, A., & Trzeciak, S. (2019). Development and validation of a tool to measure patient assessment of clinical compassion. *JAMA Network Open, 2*(5), e193976. 10.1001/jamanetworkopen.2019.3976

Robinson, J., Raphael, D., Moeke-Maxwell, T., Parr, J., Gott, M., & Slark, J. (2023). Implementing interventions to improve compassionate nursing care: A literature review. *International Nursing Review, ,* 1-11. https://doi.org/10.1111/inr.12910

Romano, D., Weiser, N., Santiago, C., Sinclair, C., Beswick, S., Espiritu, R., & Bellicoso, D. (2022). An organizational approach to improve staff resiliency and wellness during the COVID-19 pandemic. *Journal of Medical Imaging and Radiation Sciences, 53*(4), S93-S99. https://doi.org/10.1016/j.jmir.2022.06.011

Sagiv, L., Roccas, S., Cieciuch, J., & Schwartz, S. H. (2017). Personal values in human life. *Nature Human Behaviour, 1*(9), 630-639. https://doi.org/10.1038/s41562-017-0185-3

Sims, S., Leamy, M., Levenson, R., Brearley, S., Ross, F., & Harris, R. (2020). The delivery of compassionate nursing care in a tick-box culture: qualitative perspectives from a realist

evaluation of intentional rounding. *International Journal of Nursing Studies, 107*, 103580. https://doi.org/10.1016/j.ijnurstu.2020.103580

Sinclair, S., Hack, T. F., Raffin-Bouchal, S., McClement, S., Stajduhar, K., Singh, P., Hagen, N. A., Sinnarajah, A., & Chochinov, H. M. (2018). What are healthcare providers' understandings and experiences of compassion? The healthcare compassion model: a grounded theory study of healthcare providers in Canada. *BMJ Open, 8*(3), e019701. 10.1136/bmjopen-2017-019701

Sinclair, S., Kondejewski, J., Jaggi, P., Roze des Ordons, A. L., Kassam, A., Hayden, K. A., Harris, D., & Hack, T. F. (2021). What works for whom in compassion training programs offered to practicing healthcare providers: a realist review. *BMC Medical Education, 21*(1), 455. https://doi.org/10.1186/s12909-021-02863-w

Sinclair, S., Kondejewski, J., Raffin-Bouchal, S., King-Shier, K. M., & Singh, P. (2017). Can self-compassion promote healthcare provider well-being and compassionate care to others? Results of a systematic review. *Applied Psychology: Health and Well-Being, 9*(2), 168-206. 10.1111/aphw.12086

Sinclair, S., Norris, J. M., McConnell, S. J., Chochinov, H. M., Hack, T. F., Hagen, N. A., McClement, S., & Bouchal, S. R. (2016). Compassion: a scoping review of the healthcare literature. *BMC Palliative Care, 15*(6), 1-16. 10.1186/s12904-016-0080-0

Slatyer, S., Craigie, M., Rees, C., Davis, S., Dolan, T., & Hegney, D. (2018). Nurse experience of participation in a mindfulness-based self-care and resiliency intervention. *Mindfulness, 9*, 610-617. 10.1007/s12671-017-0802-2

Soper, K. (2022). Reducing burnout and promoting professional development in the palliative care service.*Journal of Hospice & Palliative Nursing, 24*(3), 181-185. 10.1097/NJH.0000000000000847

Strauss, C., Taylor, B. L., Gu, J., Kuyken, W., Baer, R., Jones, F., & Cavanagh, K. (2016). What is compassion and how can we measure it? A review of definitions and measures. *Clinical Psychology Review, 47*, 15-27. https://doi.org/10.1016/j.cpr.2016.05.004

Taylor, A., Hodgson, D., Gee, M., & Collins, K. (2017). Compassion in healthcare: a concept analysis. *Journal of Radiotherapy in Practice, 16*(4), 350-360. http://shura.shu.ac.uk/16040/

Teoh, K. R., Hassard, J., & Cox, T. (2022). Individual and organizational predictors of patient care: A multilevel analysis of the English National Health Service Staff Survey. *International Journal of Stress Management, 29*(1), 97.

The King's Fund. (2020, July 7). A long way to go: ethnic minority NHS staff share their stories. https://features.kingsfund.org.uk/2020/07/ethnic-minority-nhs-staff-racism-discrimination/#:~:text=According%20to%20the%20latest%20WRES,from%20an%20ethnic%20minority%20background.

Thomas, J., & Harden, A. (2008). Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Medical Research Methodology, 8*(45), 1-10. 10.1186/1471-2288-8-45

Tod, D., Booth, A., & Smith, B. (2022). Critical appraisal. *International Review of Sport and Exercise Psychology, 15*(1), 52-72. https://doi.org/10.1080/1750984X.2021.1952471

Van der Cingel, M. (2011). Compassion in care: A qualitative study of older people with a chronic disease and nurses. *Nursing Ethics, 18*(5), 672-685. 10.1177/0969733011403556

van Wietmarschen, H., Tjaden, B., van Vliet, M., Battjes-Fries, M., & Jong, M. (2018). Effects of mindfulness training on perceived stress, self-compassion, and self-reflection of primary care physicians: a mixed-methods study. *BJGP Open, 2*(4), 1-11. https://doi.org/10.3399/bjgpopen18X101621

West, M. A. (2021). Compassionate leadership: sustaining wisdom, humanity and presence in health and social care. Swirling Leaf Press.

West, T. H., Daher, P., Dawson, J. F., Lyubovnikova, J., Buttigieg, S. C., & West, M. A. (2022). The relationship between leader support, staff influence over decision making, work pressure and patient satisfaction: a cross-sectional analysis of NHS datasets in England. *BMJ Open, 12*(2), e052778. 10.1136/ bmjopen-2021-052778

Part Two – Predictors and moderators of submissive compassion in healthcare: Implications for the NHS

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This paper is written in the format ready for submission to the Journal of Clinical Nursing. Please see Appendix H for the Guideline for Authors.

Word count = 7910

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Abstract

Background. The National Health Service (NHS) is currently facing unrelenting pressure during uncertain and turbulent times. Consequently, the compassionate care that the NHS strives towards is becoming increasingly challenging to deliver, and recently, much attention has been focused on the lack of compassion in UK healthcare settings. Recent research has suggested that compassionate behaviour is not always associated with compassionate intentions such as wanting to alleviate suffering. Instead, compassionate behaviour can arise from a desire for acceptance or fear of rejection. Coined as 'submissive compassion', this concept has been found to be associated with submissive behaviour, depression, anxiety and stress. Submissive compassion has been explored in student populations but has not yet been investigated within a healthcare context. This study aims to investigate whether submissive compassion is present within a healthcare context, and whether systemic factors, including moral injury and the emotional climate of healthcare settings, contribute towards submissive compassion.

Methods. Quantitative data were collected via online, self-report questionnaires from NHS staff (n=409). The survey was distributed across five NHS Trusts in the North of England, and through social media. Emotional climate, moral injury, submissive compassion, and the flows of compassion were measured. Data were analysed through regression analyses, t-tests, one-way ANOVAs and moderation analyses.

Results. Healthcare staff had higher levels of both compassion to others, and submissive compassion compared to generic student samples. Younger participants who had worked in the NHS for less time, who were working in threat based emotional climates, and experienced greater moral injury and greater fear of compassion from others are more susceptible to submissive compassion.

No moderation effects of self-compassion or fear of compassion from others were found.

Conclusion. The way healthcare organisations respond to challenges have a knock-on effect on compassionate healthcare. Soothing responses, and actions that reduce moral injury such as

ensuring decision making is shared, are recommended to have positive impacts on compassionate care. Interventions that help staff to overcome their fears of compassion may help in normalising the difficulties of working in healthcare. Specific efforts may need to be made to support younger healthcare staff.

Keywords Healthcare; compassion; emotional climate; submissive compassion; moral injury

Introduction

Compassion is commonly defined as ‘a sensitivity to suffering in self and others, with a commitment to try to alleviate and prevent it’ (Gilbert, 2014; Lama, 1995) and is a fundamental cornerstone to providing high-quality healthcare. As such, it is one of the key values in the NHS constitution and is central to policy and training (NHS Constitution for England, 2023). However, healthcare staff face multiple barriers to delivering compassionate healthcare due to changing political, economic and cultural climates. This research aims to investigate whether submissive compassion plays a role when compassionate healthcare is not feasible. Submissive compassion is a relatively new concept defined as “caring that functions for self-advancing or protective needs, such as wanting to please others, to be liked or thought well of, and to avoid rejection.” It has not yet been explored in healthcare staff but has been recognised in a sample of student nurses (Malkin et al., 2018). If a healthcare professional were to be experiencing submissive compassion, we may expect their attention to become focused on themselves rather than patients, their thinking to become narrowed to focus only on the functional aspects of care, they may minimise witnessing examples of poor care, and they may feel fear, low morale or be disengaged from sympathy and empathy. Submissive compassion could be a survival strategy that may arise to protect oneself. The clinical healthcare provided to patients may remain the same, but the way it is delivered may alter. If present in a healthcare context, submissive compassion could affect the relationships between patients and staff, and on patient care, and may contribute to reduced whistleblowing and escalations of concern. This study aims to explore submissive compassion in a healthcare context, and the systemic factors that may predict and moderate it.

Current context for compassionate healthcare

Compassionate healthcare has widespread benefits. Most importantly for patients, compassion leads to improved outcomes, aiding recovery, whilst also giving patients greater responsibility and control

over their health (Cochrane et al., 2019b). In the presence of compassionate care, patients are more likely to trust clinicians and disclose concerns, creating a virtuous cycle as patients are then more likely to receive the care they need (Sinclair et al., 2016b). Furthermore, it is not only advantageous for those in receipt of care but has widespread benefits across a healthcare system. In healthcare professionals, compassion is linked with lower levels of burnout, improved wellbeing, and greater job satisfaction (de Zulueta, 2021; Roberts et al., 2019), and for the wider organisation it is related to lower staff turnover and a decrease in spending and resource utilisation (Trzeciak et al., 2017; West, M. A. & Chowla, 2017). It can result in lower absenteeism and fewer medical errors (Trzeciak et al., 2017) and, in sum, can contribute towards sustainable and effective healthcare systems (Baguley et al., 2020).

An increased focus on compassionate healthcare has been evident in the UK, most notably since the publications of the Francis Report (Francis, 2013) and the Ockenden review of maternity services at Shrewsbury and Telford Hospital NHS Trust (Ockenden, 2022). Both reports highlighted the '*lack of kindness and compassion'* that contributed towards repeated patterns of poor care, and the Francis Report identified *'a culture not conducive to providing good care, and an atmosphere of fear of adverse repercussions'.* Both reports called for '*high quality, compassionate care'* (Francis, 2013), alongside the establishment of '*a compassionate culture where staff learn together…and feel able to speak out'* (Ockenden, 2022). In response to the Francis Report, new policy and strategy has been proposed, most notably the *Compassion in Practice* strategy (NHS England, 2016), which aimed to highlight the importance of compassionate healthcare. It contained a focus on recruiting staff according to individual values, reviewing organisational culture and monitoring staff levels. However, the strategy was criticised for its '*top-down'* approach that failed to recognise the organisational and structural constraints that limited healthcare workers' ability to provide compassionate care (O'Driscoll et al., 2018) and it has fuelled the debate as to whether compassion can actually be measurable or mandated through policy (Chadwick, Raymond, 2015).

Theoretical Background

Compassion is the desire and motivation to be caring and helpful towards others. Gilbert conceptualises compassion as an evolved strategy and prosocial mentality that supports survival and reproduction (Gilbert, 2005; Gilbert, 2010). According to Gilbert, compassion requires two psychologies (Gilbert, 2009b; Gilbert, 2010). The first is *awareness* and *engagement*, meaning that we have the ability to be sensitive to and engage with suffering, rather than turning away from it. The second psychology centres around *action* or having the wisdom and skills to take action to alleviate and prevent suffering. The competencies of both psychologies are necessary for compassionate care in a healthcare context. Also relevant is the flow of compassion (Gilbert, 2014): the compassion we feel for others, compassion we allow ourselves to feel from others, and the compassion we show towards ourselves. Research suggests that these are mutually supportive (Gilbert, 2017), however can also exist independently. For example, it is often the case that healthcare professionals consistently display a flow of compassion towards others, yet this can be in the absence of allowing compassion from others or showing compassion towards themselves. This imbalance has been found to be associated with stress (Gilbert, 2013) and vulnerabilities to mental health difficulties (Hermanto & Zuroff, 2016; Kirby et al., 2019).

Another theoretical model relevant to this research is Gilbert's three systems model (Gilbert, 2015). This hypothesises three affective systems that each consist of a cluster of emotions that relate to evolutionary survival: threat (related to feelings of anger, shame and anxiety), drive (related to feelings of vitality, excitement and motivation), and soothe (related to contentment and affection). All three systems are necessary in a healthcare context. The soothe system engages compassionate motivation to be gentle and caring towards patients. The drive system focuses on accomplishment, motivating healthcare professionals to complete tasks to alleviate suffering in patients, or to take

courageous action when needed. Our threat system becomes active in emergencies, allowing us to respond effectively in times of crisis. The aim is for the three systems to be appropriately responsive to the situation, and compassion is the motivation at the centre of the three systems which allows for this responsiveness (See Figure 1). For example, if there was an emergency in a hospital, compassionate motivation would activate the threat system for the nurse or doctor to respond to the emergency. However, prolonged overactivation of the threat and drive-based systems, and suppression of our soothe systems, can contribute towards emotional distress and mental health problems (Gilbert, 2009c; McEwan et al., 2020b).

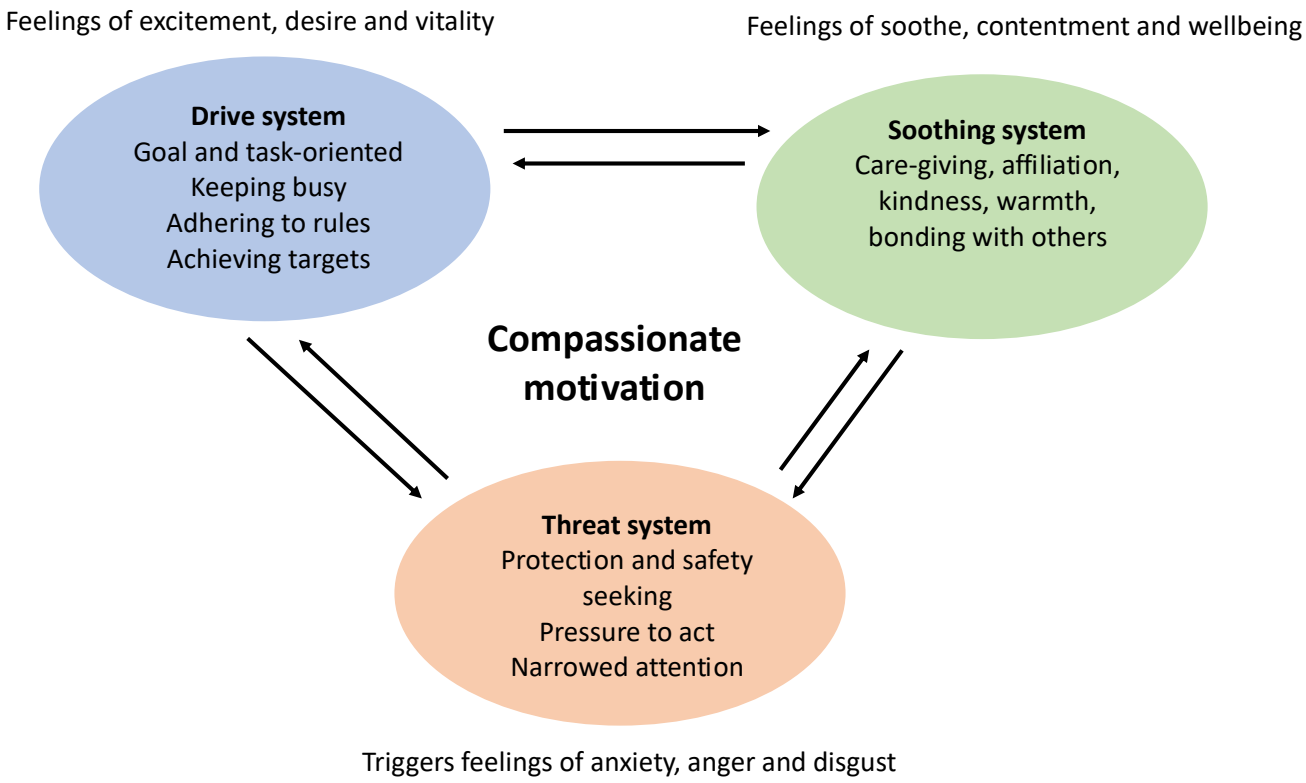

Figure 1. Three systems affective model (Gilbert, 2015).

Submissive compassion

Whilst we are motivated to be compassionate for caring and altruistic reasons, evolutionary models of compassion suggest that compassionate behaviours can be driven by other motives, including to

avoid rejection, or to appear likeable and helpful in the minds of others (Buss, 2019; Catarino et al., 2014). These motives can contribute towards submissiveness or submissive behaviours, where we may lack assertiveness, inhibit our own needs and feelings to please others, or appease others to avoid threat or conflict (Gilbert & Allan, 1994). Submissive behaviours are associated with depression (Horowitz et al., 1993), social anxiety, and interpersonal problems (Allan & Gilbert, 1997). Submissive compassion has been coined as, '*caring that functions for self-advancing or protective needs, such as wanting to please others, to be liked, or thought well of, and to avoid rejection'* (Catarino et al., 2014). Submissive compassion has been explored within the general population, where genuine compassion was not found to be predictive of submissive compassion, suggesting that the two concepts are distinct from each other (Catarino et al., 2014; Gilbert, 2017).

The behaviours that are indicative of submissive compassion, such as inhibiting one's own feelings and needs, not being assertive, avoiding eye contact, not defending oneself and not expressing one's feelings (Catarino et al., 2014), overlap with the findings of the Francis Report (Francis, 2013). It was recognised that there was '*a culture of fear and blame'* and *'atmosphere of intimidation and bullying'* where healthcare staff did not feel able to raise concerns (Francis, 2013). It could be argued that submissive compassion may be even more relevant within healthcare contexts, in that healthcare professionals fear being rejected by the employers, colleagues, patients and the profession in general for not being compassionate enough and may behave compassionately for submissive reasons. In a sample of student nurses, levels of submissive compassion were found to be higher than a generic student sample (Malkin et al., 2018*).* This is unsurprising given that being caring and compassionate is central to their role, but perhaps more so due to the evaluative aspect of pre-qualification roles.

Systemic factors in compassionate healthcare

An individual-level understanding of compassionate healthcare is reflected in research and policy. Innate virtues, life experiences, self-motivation and personal choice have been identified as individual factors that contribute towards compassionate healthcare (Sinclair et al., 2017; Smith-MacDonald et al., 2019), and values-based recruitment of healthcare staff was adopted in 2014 following the Francis Report (Health Education England, 2016). However, from a theoretical perspective, compassionate care is context dependent (Gilbert, 2009a) and research has evidenced this; an increase in perceived organisational threat reduces compassion for others in healthcare professionals (Henshall et al., 2018). Furthermore, target-driven cultures, staff shortages, and a lack of resources have been identified as systemic factors that impact on compassionate care (Gilbert, 2014; O'Driscoll et al., 2018; Robinson et al., 2023). Therefore, it is important to recognise the systemic predictors that impact upon submissive compassion.

Emotional climate

The three affective regulatory systems can be activated or inhibited by the social and environmental context (Gilbert, 2009d). The organisational climate of the NHS, where services are under immense pressure to meet performance and financial targets in a post-pandemic era, can result in the repeated overactivation of the threat and drive systems across the system (Cole-King & Gilbert, 2014b; Gallagher, 2015; Paley, 2014). Consequently, it could be hypothesised that the emotional climate of an organisation, when threat and drive systems are persistently overactive and soothe systems are underactive, contributes towards submissive compassion in staff. In this context, the need for self-protection and a fear of rejection competes with the motivation to provide compassion for others.

Moral injury

Originally coined within a military veteran context, moral injury is defined as “a deep sense of transgression including feelings of shame, guilt, meaningless and remorse from having violated core moral beliefs” (Brock & Lettini, 2012, p. xiv). Moral injury was brought into the healthcare context

in the midst of the Covid-19 pandemic, when healthcare staff were frequently making difficult decisions about the allocation of limited resources and had to take actions that were inconsistent with their core values. These challenges have continued beyond the pandemic and are commonly faced by healthcare staff in settings with limited resources. Moreover, moral injury is recognised as a priority for intervention in published policy and strategy (British Medical Association, 2021; Welsh Government, 2021). Moral injury has been distinguished from the concept of burnout, which places the problem in the individual, whereas in moral injury the root of the problem is within the system (Dean et al., 2019). Clinically significant levels of moral injury have been identified in a sample of healthcare professionals in China (Wang et al., 2022). What's more, in this sample moral injury was associated with significant distress and found to be more prevalent in younger healthcare professionals (Wang et al., 2022). In a qualitative study of NHS staff, systemic issues including a lack of funding, resource shortages, and poor channels of communication between frontline staff and management contributed towards moral injury (Hegarty et al., 2022). Moreover, research has identified correlations between morally injurious experiences and compassion satisfaction (Ahmadi et al., 2024), impacting how staff care for patients. It may be that an accumulation of moral injury over time contributes to submissive compassion. Taking actions that conflict with your values as a healthcare professional may make you more susceptible to wanting to protect yourself and adopt survival strategies to manage in a threatening environment.

Rationale

Healthcare systems are facing greater pressures than ever. It is important to explore how the changing environments impacts upon compassionate care provided in the NHS. Submissive compassion may be one of the consequences, though it has not yet been explored in a sample of healthcare staff. It should be recognised that submissive compassion is a relatively new concept and the underpinning psychological mechanisms have not yet been fully developed. This research will explore these relationships and given the changing organisational climate; this study further aims to

investigate the impact of systemic factors on submissive compassion. Moreover, research has demonstrated that the flow of compassion may have protective or buffering effects against the activation of the threat system and stress response (Henshall et al., 2018; Leary et al., 2007). Therefore, this study further aims to investigate the moderating impact of self-compassion and being open to receiving compassion from others on levels of submissive compassion.

Research Questions

The purpose of this study was to address the following research questions:

1) Do NHS staff have a higher level of submissive compassion than a generic student sample?
2) Does emotional climate predict submissive compassion in NHS workplaces?
3) Does moral injury predict submissive compassion in NHS workplaces?
4) Does self-compassion and compassion from others moderate the relationship between emotional climate, moral injury and submissive compassion?

Hypotheses

The following hypotheses are inferred in light of previous research and theoretical perspectives (Gilbert, 2009b; Gilbert, 2014).

1) Malkin et al (2018) found a higher level of submissive compassion in student nurses compared to the general population. Therefore, it is hypothesised that NHS staff will have a significantly higher level of submissive compassion than a generic student sample, due to the importance of being seen to be compassionate in the caring profession. It is further hypothesised that NHS staff will have lower levels of submissive compassion than a sample of student nurses (Malkin et al., 2018), due to the additional evaluation incorporated into training programmes.
2) The emotional climate of an organisation will be predictive of submissive compassion. Emotional climates which over activate threat and drive systems, and under activate soothe

systems – for example where organisations respond with targets and negative consequences for staff in the face of difficulties - will be associated with higher levels of submissive compassion.

3) Moral injury will be predictive of submissive compassion; when healthcare staff are taking actions that violate moral beliefs, one would expect some of the submissive compassion behaviours in response such as avoiding eye contact, not expressing one's feelings, or not defending oneself.
4) Self-compassion and compassion from others will have moderating relationships on emotional climate, moral injury and submissive compassion. To put it another way, people with greater levels of self-compassion and those who have greater openness to compassion from others, will be 'protected' from the impact of moral injury and the emotional climate. The relationship between threat-based emotional climate or moral injury and submissive compassion will be strongest when self-compassion is low. The relationship between threat-based emotional climate or moral injury and submissive compassion will be strongest when FOCOS is high.

Method

Design and participants

An observational, cross-sectional design was adopted, collecting quantitative data via online questionnaires. The JISC Online Surveys (Version 2) platform was used to design and distribute the survey. All NHS staff whose roles involved patient contact were eligible to participate. This included non-clinical patient contact and so administration and reception staff were also eligible to participate. All specialties and professions were included. Participants had to be over the age of 18 and able to read and understand English.

People enrolled on training or apprenticeship programmes were not eligible to take part. This included medical students, student nurses, trainee physiotherapists and trainee psychologists. Training or apprenticeship programmes focus heavily on assessment, with students and trainees being assessed or observed continuously throughout training, which can impact on compassionate behaviours (Malkin et al., 2018*).*

Power Analysis

For the regression analyses, an a priori power analysis using GPower* using a multiple regression with 13 predictors at an alpha level of 0.05 ($p<0.05$) and a power of 0.80 was predicted to require a sample size of N=131 to identify a medium effect size.

For moderation analyses, standards for effect sizes in such analyses are considered to be 0.005, 0.01 and 0.025 for small, medium and large, respectively (Kenny & Judd, 2019) and sample sizes more than 200 are considered to be required for detecting moderating effects that are medium in size (Whisman & McClelland, 2005). An a priori power analysis using GPower*, testing a linear multiple regression R2 increase with 10 predictors at an alpha level of 0.05 ($p<0.05$) and a power of 0.80, predicted a sample size of N=441 would be required to identify a large effect size of ($f2=0.025$). Following the sample size calculation, it was estimated that 441 participants would be required for the study.

Ethical considerations

The study was reviewed and approved by the Faculty of Health Sciences Research Ethics Committee on 12/07/2023 (FHS 22-23.87) and received HRA and Health and Care Research Wales (HCRW) Approval on 23 October 2023 (23/HRA/3932). Participation was voluntary and anonymous; no identifiable information was collected. Participants were able to withdraw from the study as any point up until they clicked on the submit option as after this a participant's individual

data could not be identified. Debrief information was provided at the end of the survey, in light of possible participant distress.

Procedure

Recruitment ran from November 2023 until April 2024. A short summary of the study and advertisement were distributed via the staff newsletters and intranet pages of five NHS trusts (three acute, one ambulance and one mental health) in the North of England. The advertisement (See Appendix I) and a short summary of the study was disseminated via social media through the primary researcher's accounts and shared within appropriate healthcare groups and pages.

Participants accessed the survey online via the QR code or direct link within the advertisement. Upon accessing the survey, participants were presented with the information sheet (See Appendix N), followed by the consent form and eligibility criteria (See Appendix O and P). Participants confirmed their consent and eligibility via a tick-box, after which they could access the measures. Upon completion, participants were provided with debrief information (See Appendix S). A separate debrief information sheet was provided for individuals who were not eligible to participate (See Appendix R). Completion of the survey took approximately 20 minutes.

Measures

Demographics

Five demographic questions were used to collect the following information: age, gender identity, ethnicity, profession, and length of time working in the NHS. Age, gender and ethnicity were recorded to contextualise the data, and in light of previous research. Moral injury, barriers to compassion and self-compassion have been associated with age (Fernando III & Consedine, 2014; Neff, Kristin, 2003; Neff, Kristin D. & McGehee, 2010; Wang et al., 2022) and gender differences in the flow of compassion have been identified (Gilbert et al., 2011a). An optional question asked

participants how many people they managed if they were a line manager. We did not ask participants which NHS Trust they worked in, or their specific role to ensure that participants were not identifiable.

Predictor variables

Emotional Climate of Organisations Scale (ECOS; Albuquerque et al., 2023)

The ECOS was developed based on the affect regulation systems model (Gilbert, 2015). The ECOS is a 15-item measure assessing the frequency in which people feel each different emotion regulation system in the place that they work. Participants are asked to choose a number which best describes how they feel at work (Never 0 – 4 Always). The ECOS is made up of three scales: 1) emotional climate, 2) satisfaction of needs and 3) motives underlying one's actions. In the present study, only the emotional climate scale was used. Higher scores indicate that threat, drive and soothe emotions are more present in the organisation. The psychometric properties of the ECOS show it to be valid and reliable (threat = .75, drive .86, soothe = .83; Albuquerque et al., submitted manuscript). The ECOS scale has previously been used in educational research (Matos et al., 2022) and with caregivers of adolescents (Santos et al., 2022). See Appendix T for the full measure.

Moral Injury Symptom Scale – Healthcare Professionals (MISS-HP; Mantri et al., 2020)

The MISS-HP is a 10-item measure for identifying moral injury symptoms in healthcare professionals. Participants rate their agreement on a scale of 1 (strongly disagree) to 10 (strongly agree). On a possible score range of 10-100, scores higher than the cut-off score of 36 indicates impact on functioning due to moral injury symptoms. The scale has good internal reliability of 0.75 (Mantri et al., 2020). The MISS-HP scale has been utilised previously to identify moral injury in healthcare professionals in China during the covid-19 pandemic (Wang et al., 2022). See Appendix V for the full measure.

Moderator variables

Compassionate Engagement and Action Scales (CEAS; Gilbert et al., 2017b)

The self-compassion and compassion to others sub-scales from the CEAS were used in the survey. In the first section of each scale, six items are formulated to reflect the six compassion attributes in the compassion-focused therapy model: sensitivity to suffering, sympathy, non-judgemental, empathy, distress tolerance and care for wellbeing. These sections also include two reversed filler items. The second section of the scale has four more items which reflect specific compassionate actions to deal with distress and an extra reversed filler item. Participants are asked to rate each statement according to how frequently it occurs on a scale of 1 to 10 (1 = Never; 10= Always). Higher scores indicate higher levels of self-compassion and compassion to others. The CEAS is psychometrically robust. It has good internal reliability (Self-compassion = .88, compassion to others = .90; Lindsey et al., 2022). See Appendix W and X for the full measures.

Fear of Compassion from Others Sub-scale (FOCOS; Gilbert et al., 2011b)

The responding to compassion from others sub-scale was utilised in the present study. The 13-item sub-scale measures the compassion that we experience from others and flowing into the self. Each item is rated on a 5-point Likert scale, ranging from 0 ("Don't agree at all") to 4 ("Completely agree). Higher scores indicate higher fears of compassion from others. The Cronbach's alpha for this sub-scale was 0.87 (Gilbert et al., 2011a). The compassion from others subscale from the FOCS was utilised rather than the equivalent subscale in the CEAS. This is because the CEAS is thought is measure an individual's perception of other's compassion towards themselves, rather than their receptiveness and openness to allowing compassion in (Gilbert et al., 2017b). See Appendix Y for the full measure.

Outcome variable

Submissive Compassion Scale (SCS; Catarino et al., 2014)

The 10-item scale measures the extent to which one's kind and compassionate actions are related to submissive behaviour. Items are rated on a 5-point Likert scale, ranging from 0 ("Not at all like me") to 4 ("Extremely like me"). The scale has good internal consistency with a Cronbach's alpha of .89 (Catarino et al., 2014). Total scores range from 0 to 40 and are calculated by adding all individual item scores, with higher scores more indicative of submissive compassion. See Appendix U for the full measure.

Data analysis procedures

Data were analysed using IBM SPSS Statistics version 27.0 (IBM Corp., 2020) for windows. Descriptive statistics were used to analyse demographic data. In all data analyses procedures, a significance level of 5% was used. Professions with small participant numbers that were less than or equal to 5 were grouped together as 'Other', making up 6.6% of the sample. Due to a computer error, question ten of the MISS-HP was missed from the online survey, and therefore was not completed by any participants. In the case of missing data, the manual of the MISS-HP scale recommends pro-rating the mean to make up for missing data. This was completed prior to data analysis. Due to the small samples within the *Prefer to self-describe* (n=1) and *prefer not to say* (n=2) for the gender identity question, these data were removed from the regression model. Cronbach's alpha scores were calculated for each outcome measure to test for internal validity.

Collinearity diagnostics for all regression analyses showed that the variables do not show multicollinearity (VIF<5; Tolerance >.20) for all variables. VIF values did not exceed 2.302 and the smallest tolerance value was .434 (See Appendix Z). Independent variables were checked for multicollinearity, using Pearson's correlation coefficient. Age and time spent working in the NHS were highly correlated (.809). Two regression analyses were run, entering these two variables separately. Age explained a greater proportion of the variance in the model, therefore time spent in the NHS was excluded from the regression model.

All skewness and kurtosis values fell within the ranges of normality (less than 2 and 4, respectively; Tabachnick et al., 2007). Scatterplot and normal probability Plot for SCS indicated that the assumptions of homoscedasticity and independence of residuals were met (See Appendix Z). Casewise diagnostics revealed one significant outlier (SCS score of 4). Data for the outlier was not removed. Tests of normality showed that the data were non-normal, therefore the regression was bootstrapped.

Pearson's correlations were conducted to establish relationships between variables. T-tests and ANOVAs were conducted to investigate differences in SC scores between variables. In answering the study's research questions, a multiple regression model was used. Demographic variables of age and gender were entered into the first block, followed by emotional climate (threat, drive and soothe emotions), moral injury, self-compassion, compassion to others and FOCOS in the second block.

A multiple hierarchical regression was carried out to explore predictors of submissive compassion. Profession and line manager status were excluded from the regression due to previous analyses indicating no predictive value. Age and time spent in the NHS were highly correlated (.809). Therefore, time spent in the NHS was excluded from the regression to avoid multicollinearity. Moderation analyses using the Hayes PROCESS model was conducted. Four models were tested. Moral injury and threat-based emotional climate were the predictor variables. Self-compassion and FOCOS were moderating variables. Submissive compassion was the outcome variable.

The possibility of type 1 errors due to multiple testing were considered, however the Bonferroni correction was not applied for the following reasons: tests were pre-planned and driven by pre-planned hypotheses and exact p-values for individual tests were reported.

Results

Sample Characteristics

Participant characteristics are shown in Table 1. The sample consisted of 409 NHS staff aged between 20-72 (mean=39.04; SD=12.726). Three people did not record their age. Participants were predominantly white British (n=364, 89%), this is higher than NHS workforce statistics where 74.3% are white (NHS Workforce Statistics, 2022). The majority of participants identified as female (n=363, 88.8%), this is higher than NHS statistics where 74% identify as female (NHS Digital, 2023). However, the majority of participants worked within the psychological professions (*n*=126, 30.8%) or in nursing (*n*=122, 29.8%), which are both female-dominated professions (NHS Digital, 2018). Seventy-five participants were line managers (18.34%), who managed between 1 and 200 staff (mean=16; SD=29.31). Participants had worked in the NHS between 2 months and 48 years (mean=12.64; SD=11.601). In the final analysis, the data of 403 participants were included.

Table 1.
Participant characteristics.

	Frequency (%) Total (*n*=409)
Age	
20-29	130 (31.78)
30-39	96 (23.47)
40-49	76 (18.58)
50-59	75 (18.34)
60-69	26 (6.36)
70-79	3 (0.73)
Gender	
Female	363 (88.8%)
Male	43 (10.5%)
Prefer not to say	2 (0.5%)
Non-binary	1 (0.2%)
Ethnicity	
Asian: British	1 (0.2%)
Asian: Chinese	1 (0.2%)
Asian: Indian	3 (0.7%)
Asian: Pakistani	3 (0.7%)
Asian: other Asian background	2 (0.5%)
Black: African	2 (0.5%)
Black: British	1 (0.2%)
Black: Caribbean	1 (0.2%)
White: English, Welsh, Scottish, Northern Irish or British	364 (89%)
White: Irish	7 (1.7)
White: Gypsy or Irish Traveller	3 (0.7%)
White: other White background	14 (3.4%)
Mixed ethnic background: White and Black Caribbean	2 (0.5%)
Mixed ethnic background: White and Black African	1 (0.2%)
Other mixed ethnic background	1 (0.2%)
Prefer not to say	3 (0.7%)
Profession	
Allied Health Professional	52 (12.7%)
Ambulance Service Team	10 (2.4%)
Doctor	19 (4.6%)
Healthcare Support Worker	21 (5.1%)
Management	6 (1.5%)

Nursing	122 (29.8%)
Psychological Professions	126 (30.8%)
Wider Healthcare Team	26 (6.4%)
Other	27 (6.6%)
Time spent working in the NHS	
Less than 5 years	150 (36.7%)
5-10 years	75 (18.3%)
11-20 years	78 (19.1%)
21-30 years	67 (16.4%)
30+ years	39 (9.5%)

The mean, standard deviation, range and Cronbach's alpha for each measure can be found in Table 2. The mean [SD] submissive compassion score was 20.79 [8.906] out of a possible 40. This mean score is slightly higher than the scores reported in two university student samples (mean [SD]=16.04[9.42]; Gilbert et al., 2017), (mean [SD]=18.76[8.52]; Catarino et al., 2014). However, the mean score in this study is lower in comparison to a sample of student nurses (mean [SD] = 25.13[9.20]; Malkin et al., 2018).

On the emotional climate in organisations scale, the mean [SD] score for threat emotions was 10.88 [3.221], for drive emotions 11.31 [3.562] and for soothe emotions 10.88 [3.311]. Participants most often felt drive emotions in NHS workplaces, and similar levels of both soothe and threat emotions. In a sample of caregivers, mean [SD] scores were 8.05 [2.85], 12.45 [2.37], and 12.12 [2.51] for threat, drive and soothe emotions, respectively (Santos et al., 2022).

The mean [SD] moral injury symptom score was 36.53 [14.291]. This is just above the identified cut-off score of 36 for indicating moderate to extreme moral injury in healthcare professionals (Mantri et al., 2020). The percentage of participants whose moral injury symptom scores was above the clinical cut-off score of 36 was 48.71%.

The mean self-compassion score was 63.88, out of a possible 100. This is slightly higher than the mean scores reported in a sample of UK university students (Gilbert et al., 2017b), where the mean [SD] scores were 58.18 [16.15] and 58.19 [15.05] for males and females respectively. The mean [SD] compassion to others scores as measured by the CEAS scales was 80.25 [12.995], out of a possible 100. This mean score is higher than reported in a sample of UK university students, that showed a mean [SD] score for males of 60.93 [19.75] and an average score of 72.51 [15.67] for females (Gilbert et al., 2017b). This finding is expected due to the nature of healthcare roles, and the values people hold that draws them into healthcare.

On the FOCOS, the mean [SD] score was 15.21 [11.187]. This mean score is higher than reported in a sample of training healthcare visitors (mean=11.6[7.7]; McVicar et al., 2021), meaning that the present sample were more cautious of receiving compassion from others.

Table 2.

Mean, standard deviation, range and Cronbach's Alpha for all measures.

Measure	**Mean (*M*)**	**Standard Deviation (*SD*)**	**Range**	**Cronbach's Alpha**
Submissive Compassion Scale	20.79	8.906	39	.899
Threat emotions	10.88	3.221	18	.801
Drive emotions	11.31	3.562	20	.841
Soothe emotions	10.88	3.311	19	.809
MISSHP	36.53	14.291	80	.731/.809[1]
CEAS: Self Compassion	63.88	14.696	90	.854
CEAS: Compassion to others	80.25	12.995	90	.902
Fear of Compassion (FOCOS)	15.21	11.187	52	.923

Correlation Analyses

A correlation matrix for all measures can be shown in Table 3. SC scores were significantly positively correlated with threat-based emotional climate (r =.240, p <0.01), moral injury (r = .220, p <0.01), and FOCOS (r = .302, p <0.01). This suggests that the greater the threat from the organisation, the more likely a person will be to feel the need to avoid rejection, or to appear likeable and helpful in the minds of others, or to appease others. SC scores were negatively correlated with soothe emotions (r = -.049), however this correlation was not significant.

[1] .731 is with 9 items completed by participants. .809 is with additional prorated mean for 10th item.

Age (r=-.236, p <0.01) and NHS time (r = -.173, p <0.01) were significantly negatively correlated with SC scores. Younger participants who had been working in the NHS for fewer years showed higher levels of submissive compassion, suggesting that younger healthcare staff who are newer to the role have a stronger desire to appear likeable and feel appreciated, therefore reducing the fear of rejection.

Moral injury was significantly positively correlated with threat emotions (r = .516, p <0.01), suggesting that the greater environmental threat the more likely a person may not act in line with their values but act instead to avoid punishment. Moral injury was also significantly negatively correlated with drive emotions (r = -.433, p <0.01) and soothe emotions (r=-.535, p<0.01). The correlation with drive emotions indicates that organisational targets for better healthcare are consistent with NHS staff values, and the correlation with soothe emotions indicates that environments that foster connection and belonging are consistent with staff values.

Self-compassion scores were significantly negatively correlated with threat emotions (r=-.260, p<0.01), and positively correlated with drive (r.357, p<.0.01) and soothe (r=.383, p<0.01) emotions. This is a logical finding; it is harder to be self-compassionate in a threat soaked environment, and connection and affiliation-based environments encourage self-compassion. Alternatively, self-compassionate individuals may be drawn towards working in more soothing environments.

FOCOS scores were significantly positively correlated with threat emotions (r=.328, p<.001), and significantly negatively correlated with drive (r=-.212, p<.001) and soothe emotions (r-.310, p<.001), meaning that those with greater fear of receiving compassion perceived the environment as more threat-based but less drive and soothe focused. Participants with greater self-compassion were more compassionate to others (r=.380, p<0.01). Those who were more fearful of compassion from

others were less self-compassionate (r=-.454, p<0.01) and showed less compassion to others (r=-.116, p<0.01).

T-tests and one-way ANOVAs

Independent t-tests and one-way ANOVAs were used to explore relationships between demographic variables and SC scores. An independent samples t-test revealed a significant effect of gender on submissive compassion scores, with females (M=21.08, SD=8.838) having higher scores than males (M=17.67, SD=8.893; t(404) = 2.387, p=.017).

An ANOVA revealed that that were no significant differences in submissive compassion scores between different professions (F (8, 405) = 1.705, p=.095). There were no significant differences between the submissive compassion scores of participants who were line managers (M=19.93, SD=8.540), and those who were not (M=20.90, SD=8.988; t(404) = .849, p=.396).

Table 3.

Pearson's correlation matrix for all measures

	Age	NHS Time	ECOS Threat	ECOS Drive	ECOS Soothe	SCS	MISSHP	Self-Compassion	Compassion to others	Fear of Compassion from others (FOCOS)
Age	-	.808**	-.091	.055	.097	-.236**	-.050	.079	.046	-.111
NHS Time		-	-.032	-.030	-.009	-.173**	-.013	.003	.005	-.082
ECOS Threat			-	-.422**	-.640**	.240**	.516**	-.260**	-.027	.328**
ECOS Drive				-	.592**	.005	-.433**	.357**	.203**	-.212**
ECOS Soothe					-	-.049	-.535**	.383**	.180**	-.310**
SCS						-	.220**	.005	.095	.302**
MISSHP							-	-.368**	-.127**	.459**
CEAS: Self Compassion								-	.380**	-.454**
CEAS: Compassion to others									-	-.116*
Fear of Compassion from others (FOCSO)										-

Internal Consistency

To determine internal consistency, Cronbach's Alpha values were calculated for each measure. Two scales showed excellent internal consistency (>0.9): CEAS Compassion to others (α = .902) and FOCOS (α = .923). All other scales showed good internal consistency: submissive compassion scale (α = .899); ECOS threat (α = .801); ECOS drive (α = .841); ECOS soothe (α = .809); MISSHP (α = .809) and CEAS self-compassion (α = .854). (Field, 2018).

Research Question 1 – Do NHS staff have a higher level of submissive compassion than a sample of the general population?

Summary independent-samples t-tests were conducted to compare the submissive compassion scores between the present sample, and a generic student sample. Findings showed that the average levels of submissive compassion scores in this sample of healthcare staff (M=20.78, SD=8.91, N=409) were significantly higher than levels in a sample of the general population in Catarino et al's study (M=18.76, SD=8.52, N=192, $t(599) = 2.628$, $p = .009$, 95% confidence internals (.510, 3.530)) (Catarino et al., 2014).

Scores in this study were also significantly higher than a generic student sample (M=16.04, SD=9.42, N=1352, $t(1759) = 9.047$, $p<.001$, 95% confidence intervals (3.720, 5.780)) (Gilbert et al., 2017b). A summary independent t-test showed that the submissive scores in this study were significantly lower than those in a sample of student nurses (M=25.13, SD=9.20, N=641, $t(1048) = -7.546$, $p<.001$, 95% confidence intervals (-5.561, -3.219)) in Malkin et al's (2018) sample. These findings suggest that healthcare staff are more susceptible to submissive compassion than the general population. However, those in training programmes for healthcare professionals are even more susceptible to submissive compassion than those not enrolled in training programmes or in qualified roles.

Multiple regression

A multiple hierarchical regression was carried out to explore predictors of submissive compassion. Unlike stepwise regression, the order of variables into a hierarchical regression are theoretically based. As it was hypothesised that independent variables would have greater predictability than demographic variables, age and gender, as the demographic variables were entered first. Emotional climate (threat, drive, soothe), moral injury, self-compassion, compassion for others and FOCOS were entered second. Age and gender explained 6% of the variance in submissive compassion. After the independent variables were entered, the total variance explained by the model as a whole was 21.9%, F (9, 393) = 12.229, $p < .001$. The control measures explained an additional 15% of the variance in submissive compassion after controlling for age and gender, (R squared change = .152, F change (7, 393) = 10.907, $p < .001$). In the final model, seven control measures were statistically significant. Age recorded the highest semi partial correlation value (sr = -.230, p<.001), followed by FOCOS (sr = .178, p<.001), ECOS threat (sr = .167, p<.001), ECOS Soothe (sr = .141, p=.002), gender (sr = -.107, p=.028), compassion to others (sr = .104, p=.020), and moral injury (sr = .104, p=.035).

Research Questions 2 – To what extent does emotional climate predict submissive compassion in NHS workplaces?

As shown in Table 4, threat and soothe emotions were significantly predictive of submissive compassion. Threat emotions ($s\ r$=.167, $p < .001$) recorded a higher semi partial correlation than soothe emotions (sr = .141, p = .002). These findings are in line with the hypotheses that threat-based environments would facilitate submissive compassion and soothe-based environments would inhibit submissive compassion. Contrary to the hypotheses, drive emotions were not found to be significantly predictive of submissive compassion. This is an unusual finding. It could be suggested that drive emotions do not predict submissive compassion when that drive from the organisation is motivated by values that are consistent between both the organisation, and the individual.

Research Questions 3 – To what extent does moral injury predict submissive compassion in NHS workplaces?

As shown in Table 4, greater moral injury was significantly predictive of submissive compassion, however this variable had one of the smallest semi partial correlation values (*sr* = .095, *p* = .035). This does, however, support the hypothesis that moral injury would be predictive of submissive compassion.

Table 4.

Hierarchical multiple regression analyses examining the association between age, gender, emotional climate, moral injury and the flow of compassion on submissive compassion.

Variables	**Beta**	**SE**	**t**	**p-value**	**95% CI**		***sr***
					Lower	**Upper**	
Block 1							
Age	-.230	.034	-4.757	<.001	-.227	-.094	-.230
Gender	-.107	1.390	-2.207	.028	-5.802	-.335	-.107
Block 2							
ECOS Threat	.228	.169	3.751	<.001	.302	.966	.167
ECOS Drive	.102	.142	1.779	.076	-.027	.533	.079
ECOS Soothe	.214	.182	3.160	.002	.217	.930	.141
MISSHP	.125	.037	2.121	.035	.006	.150	.095
Self-Compassion	-.080	.034	-1.423	.155	-.116	.019	-.063
Compassion to others	.115	.034	2.330	.020	.012	.146	.104
FOCOS	.217	.043	4.001	<.001	.088	.257	.178

Note. sr = semi partial correlation coefficient; FOCOS = Fear of Compassion from Others Scale

Research Question 4 – Does self-compassion and compassion from others moderate the relationship between emotional climate, moral injury and submissive compassion?

Moderation analyses were carried out using the Hayes PROCESS tool (Version 4.2). Age and gender were entered as covariates. The statistical analysis demonstrated no significant moderating effect of self-compassion on the relationship between threat-based emotional climate and submissive compassion (p=0.77). Moreover, no significant moderating effect of self-compassion was found on the relationship between moral injury and submissive compassion (p=0.70).

The statistical analysis demonstrated no significant moderating effect of FOCOS on the relationship between threat-based emotional climate and submissive compassion (p=0.99) or on the relationship between moral injury and submissive compassion (p=0.63). All of these outcomes contradict the hypothesis that self-compassion and FOCOS would moderate the relationship between submissive compassion, and moral injury or threat emotions.

Discussion

This study aimed to investigate submissive compassion within a healthcare context, and to explore predictors and moderators of submissive compassion. Firstly, submissive compassion scores in this sample were significantly higher than student samples, indicating a susceptibility amongst healthcare workers. Younger staff who identify as female, are fearful of compassion from others, and work in threat-based environments, with high levels of moral injury could be more susceptible to submissive compassion. Soothe-based environments mitigate submissive compassion.

Firstly, it is important to note that the previous studies of submissive compassion in student samples took place pre-pandemic, therefore it is difficult to decipher whether the increased prevalence of submissive compassion in the present study is a result of working in healthcare, or due to additional

stressors and challenges as a consequence of the pandemic. Rates of burnout, emotional exhaustion and compassion fatigue have increased since the COVID-19 pandemic (Lluch et al., 2022). Moreover, the two studies that were used as comparisons of submissive compassion in this study were both student samples as submissive compassion has not been investigated within a sample of the general population. Findings from this study must be considered in light of this and future research should incorporate samples across a range of demographics. Nonetheless, this has important implications for the mental health of healthcare staff given the associations between submissive compassion and depression, anxiety and stress (Catarino et al., 2014).

Secondly, regarding the emotional climate, participants mostly felt drive emotions at work, followed by similar levels of threat and soothing emotions. This is a logical outcome, as in a healthcare environment, the activation of the drive system is most needed in providing compassion to others in completing healthcare tasks. When looking at the predictors of submissive compassion, threat and soothe emotions were significantly predictive, however drive emotions were not. These outcomes are partially in line with the original hypotheses.

For threat emotions, when people feel irritated, nervous, frustrated, inadequate and anxious at work, their motives move from wanting to provide compassionate healthcare, to a different position of wanting to protect oneself and avoid rejection. This finding has important implications for healthcare and the way that healthcare organisations respond to challenges. The findings here imply that when healthcare organisations respond with threat-based responses, either through issuing negative consequences or repercussions, this contributes towards submissive compassion. Soothe-based environments, however, mitigate submissive compassion. Responses from healthcare organisations that facilitate connection and affiliation, such as reflective practice or compassion-focused interventions, will aid the provision of compassionate healthcare. Both of these findings align with Gilbert's theoretical conceptualisation of compassion and the three affective systems

model; emotions provide guidance for motives (Gilbert, 2009b; McEwan et al., 2020b). However, drive emotions neither predicted, nor mitigated, submissive compassion. Participants who felt mostly drive emotions at work also had higher levels of self-compassion and compassion to others, and lower levels of moral injury and FOCOS. This contradicts our original hypothesis; it was hypothesised that drive-based emotional climates would be contradictory to compassionate healthcare, instead leading to submissive compassion. This may be because both the organisation and the staff that work in it have consistent motives of wishing to provide compassionate healthcare. Value discrepant environments have been found to inhibit clinician's ability to provide compassionate care (Pavlova et al., 2023b). Therefore, if the organisation was driven by the need to meet targets and reduce waiting times, whereas staff were driven by wishing to provide compassionate healthcare, this is more likely to impact upon the compassion shown to patients (Pavlova et al., 2023b), and therefore may result in submissive compassion.

Almost half of participants met the clinical cut-off for moral injury. This is concerning considering the sequential effect on stress, moral burden and inner conflicts (Čartolovni et al., 2021). The involvement of senior staff in complex cases, shared moral responsibility, reflective space to process events, and agreement that important decisions should not be made alone are all recommendations identified to reduce moral injury in healthcare professionals (Roycroft et al., 2020). Moreover, moral injury was predictive of SC, although it did not account for as much variance in the model as age or emotional climate. This supports our original hypothesis. Moral injury can cause inner conflicts and moral problems which are the result of restrictions and boundaries set by leadership in the organisation. When faced with these moral problems, staff may find themselves making a choice between being submissive and appeasing others or standing up for their values but facing negative consequences as a result.

Interestingly, a fear of compassion from others was significantly predictive of submissive compassion. Therefore, those who were reluctant to experience compassion from others were also more likely to be motivated by the need to avoid rejection in their work. To the author's knowledge, this is a novel finding. Both factors have previously been found to be highly correlated with negative mental health outcomes, however the interrelationship between them has not been explored (Catarino et al., 2014; Kirby et al., 2019b). Interventions that ameliorate fears of compassion from others may have a secondary effect on mitigating submissive compassion. Compassionate mind training has been found to reduce fears of compassion in a sample of health visitors (McVicar et al., 2021).

Age was the strongest predictor for submissive compassion, indicating that younger participants who had worked in the NHS for a shorter amount of time showed higher levels of submissive compassion in comparison to older colleagues, who had worked in the NHS for longer. This would suggest that younger staff are more conscious of appearing likeable and wanting to avoid rejection. Previous research reflects similar findings; older age is associated with lower levels of burnout (Erickson & Grove, 2008; Rich & Rich, 1987); fewer barriers to compassion (Fernando III & Consedine, 2014) and greater self-compassion (Neff, Kristin D. & Vonk, 2009). Older healthcare workers are also more likely to reach out to others when in need of help (Alkema et al., 2008). This may be because those who are more able to seek support systems are less likely to leave the profession early.

In response to research question four, there were no moderating effects of self-compassion or FOCOS. This was an unexpected finding as it was assumed that the flow of compassion would have a buffering effect, protecting healthcare staff from the impact of systemic challenges on the care they provide (Henshall et al., 2018; Leary et al., 2007). However, this was not the case. This may be due to the flows of compassion being independent from each other. Previous research has suggested

that they may not necessarily be associated, in that an individual could display high levels of compassion to others, but very little self-compassion (Kirby et al., 2019; López et al., 2018). Submissive compassion relates to the compassion we show towards others. Therefore, if we assume that the flows of compassion are not associated, this may explain why self-compassion and FOCOS would not impact upon the compassion we show towards others. Furthermore, from an evolutionary perspective, submissive compassion is seen as a protective strategy for survival (Gilbert, 2014). As humans, we adapt to environments, are influenced by prosocial and group behaviours, and do what we can to survive. A person high in self-compassion may recognise that they are doing what they can in the face of adversities and challenges. On a clinical practice level, being self-compassionate or letting compassion in may not change how you provide compassion to others. However, it may be the case that individuals with higher self-compassion or openness to compassion from others are more likely to show better personal wellbeing or are more likely to leave the environments, to work somewhere else to meet their needs.

Strengths and limitations

This study collates the experiences of a large sample of NHS staff, working across acute, mental health and ambulance trusts. This cross-sectional study may be susceptible to non-response bias, with potential participants who are currently working in a 'threat' environment or facing greater difficulties less likely, or less able, to participate. Furthermore, the study is limited by its lack of diversity and sampling bias; participants were majority white British, female, and in the nursing or psychological professions. This limits the generalisability and transferability of findings. Compassion is synonymous with the nursing profession and historically has been at the centre of nursing training. Therefore, the findings from this research may differ if conducted in a diverse sample of professions. Additionally, data in the present study were compared to two student samples. Student samples are more homogenous than the general population, and findings from student samples are not generalisable to the wider population. Research on submissive compassion

has not yet been conducted, therefore we do not know how levels of submissive compassion in healthcare staff compare to the general population.

It is important to acknowledge that data collection took place during a difficult period for the NHS, over the winter period and during periods of strike action. There are many systemic factors not recognised by the use of self-report measures, for example staff turnover, staffing levels, funding, pressure on services and variation in how different NHS trusts are run. Furthermore, the present sample included participants in all areas of the NHS, yet there have been found to be greater challenges to compassionate healthcare in acute hospitals (Malenfant et al., 2022b). Future research could explore differences in submissive compassion across NHS settings. On a final note, the ECOS has not yet been validated in a healthcare population.

Conclusion and clinical implications

To conclude, this study provides initial evidence to suggest that healthcare professionals may experience a higher level of submissive compassion to adult student samples. This has serious implications for staff mental health and patient care. Submissive compassion derives from threatening environments and moral injury, and it mitigated by soothing environments. These findings would suggest that the way healthcare organisations respond to challenges has significant knock-on effects on the provision of compassionate care. Punitive measures and negative consequences for not being compassionate enough contribute to submissive compassion. This finding mirrors the events of the Mid Staffs scandal as staff were fearful of adverse repercussions. This is the same at an organisational level, where sanctions imposed on NHS trusts, financial or otherwise, come as a consequence of not meeting targets. On the other hand, supports that promote connection and affiliation are likely to mitigate submissive compassion. Supervision, reflective

practice, and compassion focused interventions are recommended in helping staff to experience the working environment as more soothing and less threat soaked. This may be challenging during a period of increased remote working and hot desking, where it is difficult to connect with colleagues or feel a sense of safeness as a team (O'Hare et al., 2024). Interventions that reduce fears of compassion and moral injury are also recommended to mitigate submissive compassion, namely compassion cultivation training, ensuring decision making is shared and involving multiple senior staff in complex cases. Moreover, the younger healthcare professionals who have worked in the NHS for fewer years are more susceptible to experiencing submissive compassion. Future research should explore how supervision and training can be shaped to support younger healthcare staff.

References

Ahmadi, M. H., Heidarzadeh, M., Fathiazar, A., & Ajri-Khameslou, M. (2024). Investigating the relationship between compassion fatigue and moral injury in nurses. *Nursing ethics*, 09697330241247323. https://doi.org/10.1177/09697330241247323

Albuquerue, I., Matos, M., Galhardo, A., Cunha, M., Palmeira, L., Gilbert, P., & Irons, C. (2018). *Emotional Climate in Organisations Scale.* [Manuscript in preparation].

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

Allan, S., & Gilbert, P. (1997). Submissive behaviour and psychopathology. *British Journal of Clinical Psychology, 36*(4), 467-488. https://doi.org/10.1111/j.2044-8260.1997.tb01255.x

Baguley, S. I., Dev, V., Fernando, A. T., & Consedine, N. S. (2020). How do health professionals maintain compassion over time? Insights from a study of compassion in health. *Frontiers in Psychology, 11*, 564554. https://doi.org/10.3389/fpsyg.2020.564554

British Medical Association. (2021). *Moral distress and moral injury. Recognising and tackling it for UK doctors.* https://www.bma.org.uk/media/4209/bma-moral-distress-injury-survey-report-june-2021.pdf

Brock, R. N., & Lettini, G. (2012). *Soul repair: Recovering from moral injury after war*. Beacon Press.

Buss, D. (2019). *Evolutionary psychology: The new science of the mind*. Routledge.

Čartolovni, A., Stolt, M., Scott, P. A., & Suhonen, R. (2021). Moral injury in healthcare professionals: A scoping review and discussion. *Nursing Ethics*, *28*(5), 590-602. 10.1177/0969733020966776

Catarino, F., Gilbert, P., MCewaN, K., & Baião, R. (2014). Compassion motivations: Distinguishing submissive compassion from genuine compassion and its association with shame, submissive behavior, depression, anxiety and stress. *Journal of Social and Clinical Psychology*, *33*(5), 399-412. https://doi.org/10.1521/jscp.2014.33.5.399

Chadwick, R. (2015). Compassion: hard to define, impossible to mandate. *Bmj*,

Cochrane, B. S., Ritchie, D., Lockhard, D., Picciano, G., King, J. A., & Nelson, B. (2019). A culture of compassion: How timeless principles of kindness and empathy become powerful tools for confronting today's most pressing healthcare challenges. Paper presented at the *Healthcare Management Forum*, , *32*(3) 120-127. 10.1177/0840470419836240

Cole-King, A., & Gilbert, P. (2014). Compassionate care: the theory and the reality. *Providing compassionate healthcare* (pp. 68-84). Routledge.

de Zulueta, P. (2021). How do we sustain compassionate healthcare? Compassionate leadership in the time of the COVID-19 pandemic. *Clinics in Integrated Care, 8*, 100071. https://doi.org/10.1016/j.intcar.2021.100071

Dean, W., Talbot, S., & Dean, A. (2019). Reframing clinician distress: moral injury not burnout. *Federal Practitioner, 36*(9), 400.

Erickson, R. J., & Grove, W. J. (2008). Why emotions matter: age, agitation, and burnout among registered nurses. *Online Journal of Issues in Nursing, 13*(1), 1-13.

Fernando III, A. T., & Consedine, N. S. (2014). Beyond compassion fatigue: the transactional model of physician compassion. *Journal of Pain and Symptom Management, 48*(2), 289-298. https://doi.org/10.1016/j.jpainsymman.2013.09.014

Francis, R. (2013). *Report of the Mid Staffordshire NHS Foundation Trust public inquiry: executive summary*. The Stationery Office.

Gallagher, A. (2015). Reflections on compassion in care. *Nursing Ethics, 22*(8), 843-844. 10.1177/0969733015619371

Gilbert, P. (2005). *Compassion: Conceptualisations, research and use in psychotherapy*. Routledge.

Gilbert, P. (2013). *Mindful compassion*. Hachette UK.

Gilbert, P. (2009c). Introducing compassion-focused therapy. *Advances in Psychiatric Treatment, 15*(3), 199-208. 10.1192/apt.bp.107.005264

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

Gilbert, P. (2014). The origins and nature of compassion focused therapy. *British Journal of Clinical Psychology, 53*(1), 6-41. 10.1111/bjc.12043

Gilbert, P. (2015). The evolution and social dynamics of compassion. *Social and Personality Psychology Compass, 9*(6), 239-254. 10.1111/spc3.12176

Gilbert, P. (2017). A brief outline of the evolutionary approach for compassion focused therapy. *EC Psychology and Psychiatry,*

Gilbert, P., & Allan, S. (1994). Assertiveness, submissive behaviour and social comparison. *British Journal of Clinical Psychology, 33*(3), 295-306. https://doi.org/10.1111/j.2044-8260.1994.tb01125.x

Gilbert, P., Catarino, F., Duarte, C., Matos, M., Kolts, R., Stubbs, J., Ceresatto, L., Duarte, J., Pinto-Gouveia, J., & Basran, J. (2017). The development of compassionate engagement and action scales for self and others. Journal of Compassionate Health Care, 4(4), 1-24. 10.1186/s40639-017-0033-3

Gilbert, P., McEwan, K., Matos, M., & Rivis, A. (2011a). Fears of compassion: Development of three self-report measures. Psychology and Psychotherapy: Theory, Research and Practice, 84(3), 239-255. 10.1348/147608310X526511

Gilbert, P., McEwan, K., Matos, M., & Rivis, A. (2011b). Fears of compassion: Development of three self-report measures. Psychology and Psychotherapy: Theory, Research and Practice, 84(3), 239-255. 10.1348/147608310X526511

GOV.UK. (2023, April 13). NHS Workforce. https://www.ethnicity-facts-figures.service.gov.uk/workforce-and-business/workforce-diversity/nhs-workforce/latest/

Hegarty, S., Lamb, D., Stevelink, S. A., Bhundia, R., Raine, R., Doherty, M. J., Scott, H. R., Marie Rafferty, A., Williamson, V., & Dorrington, S. (2022). 'It hurts your heart': frontline healthcare worker experiences of moral injury during the COVID-19 pandemic. European Journal of Psychotraumatology, 13(2), 2128028.

Henshall, L. E., Alexander, T., Molyneux, P., Gardiner, E., & McLellan, A. (2018). The relationship between perceived organisational threat and compassion for others: Implications for the NHS. *Clinical Psychology & Psychotherapy*, *25*(2), 231-249. 10.1002/cpp.2157

Hermanto, N., & Zuroff, D. C. (2016). The social mentality theory of self-compassion and self-reassurance: The interactive effect of care-seeking and caregiving. *The Journal of Social Psychology*, *156*(5), 523-535. https://doi.org/10.1080/00224545.2015.1135779

Horowitz, L. M., Rosenberg, S. E., & Bartholomew, K. (1993). Interpersonal problems, attachment styles, and outcome in brief dynamic psychotherapy. *Journal of Consulting and Clinical Psychology*, *61*(4), 549. https://psycnet.apa.org/doi/10.1037/0022-006X.61.4.549

Kenny, D. A., & Judd, C. M. (2019). The unappreciated heterogeneity of effect sizes: Implications for power, precision, planning of research, and replication. *Psychological Methods, 24*(5), 578. 10.1037/met0000209

Kirby, J. N., Day, J., & Sagar, V. (2019). The 'Flow'of compassion: A meta-analysis of the fears of compassion scales and psychological functioning. *Clinical Psychology Review, 70*, 26-39. https://doi.org/10.1016/j.cpr.2019.03.001

Lama, H. D. (1995). *Awakening the mind, lightening the heart*. Harper Collins.

Leary, M. R., Tate, E. B., Adams, C. E., Batts Allen, A., & Hancock, J. (2007). Self-compassion and reactions to unpleasant self-relevant events: the implications of treating oneself kindly. *Journal of Personality and Social Psychology, 92*(5), 887. https://psycnet.apa.org/doi/10.1037/0022-3514.92.5.887

Lindsey, S., Hiskey, S., Irons, C., & Andrews, L. (2022). Examining the Psychometric Properties of the Compassionate Engagement and Action Scales (CEAS) in the UK General Population. *OBM Integrative and Complementary Medicine, 7*(3), 1-29. 10.21926/obm.icm.2203039

Lluch, C., Galiana, L., Doménech, P., & Sansó, N. (2022). The impact of the COVID-19 pandemic on burnout, compassion fatigue, and compassion satisfaction in healthcare personnel: a systematic review of the literature published during the first year of the pandemic. Paper presented at the *Healthcare, , 10*(2) 364. https://doi.org/10.3390/healthcare10020364

López, A., Sanderman, R., Ranchor, A. V., & Schroevers, M. J. (2018). Compassion for others and self-compassion: Levels, correlates, and relationship with psychological well-being. *Mindfulness, 9*, 325-331. 10.1007/s12671-017-0777-z

Malenfant, S., Jaggi, P., Hayden, K. A., & Sinclair, S. (2022). Compassion in healthcare: an updated scoping review of the literature. *BMC Palliative Care, 21*(1), 80. https://doi.org/10.1186/s12904-022-00942-3

Malkin, S. (2018). *Exploring Shame and Compassion in Student Nurses.* .[Unpublished doctoral thesis]. University of Hull.

Mantri, S., Lawson, J. M., Wang, Z., & Koenig, H. G. (2020). Identifying moral injury in healthcare professionals: The moral injury symptom scale-HP. *Journal of Religion and Health, 59*(5), 2323-2340. https://doi.org/10.1007/s10943-020-01065-w

Matos, M., Albuquerque, I., Galhardo, A., Cunha, M., Pedroso Lima, M., Palmeira, L., Petrocchi, N., McEwan, K., Maratos, F. A., & Gilbert, P. (2022). Nurturing compassion in schools: A randomized controlled trial of the effectiveness of a Compassionate Mind Training program for teachers. *PLoS One*, *17*(3), e0263480. https://doi.org/10.1371/journal.pone.0263480

McEwan, K., Minou, L., Moore, H., & Gilbert, P. (2020). Engaging with distress: Training in the compassionate approach. *Journal of Psychiatric and Mental Health Nursing, 27*(6), 718-727. 10.1111/jpm.12630

McVicar, A., Pettit, A., Knight-Davidson, P., & Shaw-Flach, A. (2021). Promotion of professional quality of life through reducing fears of compassion and compassion fatigue: Application of

the Compassionate Mind Model to Specialist Community Public Health Nurses (Health Visiting) training. *Journal of Clinical Nursing, 30*(1-2), 101-112. 10.1111/jocn.15517

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

Neff, K. D., & McGehee, P. (2010). Self-compassion and psychological resilience among adolescents and young adults. *Self and Identity, 9*(3), 225-240. 10.1080/15298860902979307

Neff, K. D., & Vonk, R. (2009). Self-compassion versus global self-esteem: Two different ways of relating to oneself.*Journal of Personality, 77*(1), 23-50. 10.1111/j.1467-6494.2008.00537.x

NHS England. (2016, May). *Compassion in Practice. Evidencing the Impact.* https://www.england.nhs.uk/wp-content/uploads/2016/05/cip-yr-3.pdf

Health Education England. (2016, March). *Values Based Recruitment Framework.* https://www.hee.nhs.uk/sites/default/files/documents/VBR_Framework%20March%202016.pdf

O'Driscoll, M., Allan, H., Liu, L., Corbett, K., & Serrant, L. (2018). Compassion in practice—Evaluating the awareness, involvement and perceived impact of a national nursing and midwifery strategy amongst healthcare professionals in NHS Trusts in England. *Journal of Clinical Nursing, 27*(5-6), e1097-e1109. 10.1111/jocn.14176

O'Hare, D., Gaughran, F., Stewart, R., & da Costa, M. P. (2024). A cross-sectional investigation on remote working, loneliness, workplace isolation, well-being and perceived social support in healthcare workers. *BJPsych Open, 10*(2), e50. 10.1192/bjo.2024.7

Ockenden, D. (2022, March 30). *Independent review of maternity services at Shrewsbury and Telford Hospital NHS Trust.* https://www.ockendenmaternityreview.org.uk/wp-content/uploads/2022/03/FINAL_INDEPENDENT_MATERNITY_REVIEW_OF_MATERNITY_SERVICES_REPORT.pdf

Paley, J. (2014). Cognition and the compassion deficit: the social psychology of helping behaviour in nursing. *Nursing Philosophy, 15*(4), 274-287. 10.1111/nup.12047

Pavlova, A., Paine, S., Sinclair, S., O'Callaghan, A., & Consedine, N. S. (2023). Working in value-discrepant environments inhibits clinicians' ability to provide compassion and reduces well-being: A cross-sectional study. *Journal of Internal Medicine, 293*(6), 704-723. https://doi.org/10.1111/joim.13626

Rich, V. L., & Rich, A. R. (1987). Personality hardiness and burnout in female staff nurses. *Image: The Journal of Nursing Scholarship, 19*(2), 63-66. https://doi.org/10.1111/j.1547-5069.1987.tb00592.x

Roberts, B. W., Roberts, M. B., Yao, J., Bosire, J., Mazzarelli, A., & Trzeciak, S. (2019). Development and validation of a tool to measure patient assessment of clinical compassion. *JAMA Network Open, 2*(5), e193976. 10.1001/jamanetworkopen.2019.3976

Robinson, J., Raphael, D., Moeke-Maxwell, T., Parr, J., Gott, M., & Slark, J. (2023). Implementing interventions to improve compassionate nursing care: A literature review. *International Nursing Review,* , 1-11. https://doi.org/10.1111/inr.12910

Roycroft, M., Wilkes, D., Pattani, S., Fleming, S., & Olsson-Brown, A. (2020). Limiting moral injury in healthcare professionals during the COVID-19 pandemic. *Occupational Medicine, 70*(5), 312-314. 10.1093/occmed/kqaa087

Santos, L., do Rosário Pinheiro, M., & Rijo, D. (2022). Compassionate mind training for caregivers of residential youth care: Early findings of a cluster randomized trial. *Child Abuse & Neglect, 123*, 105429. https://doi.org/10.1016/j.chiabu.2021.105429

Sinclair, S., Kondejewski, J., Raffin-Bouchal, S., King-Shier, K. M., & Singh, P. (2017). Can self-compassion promote healthcare provider well-being and compassionate care to others? Results of a systematic review. *Applied Psychology: Health and Well-Being, 9*(2), 168-206. 10.1111/aphw.12086

Sinclair, S., Norris, J. M., McConnell, S. J., Chochinov, H. M., Hack, T. F., Hagen, N. A., McClement, S., & Bouchal, S. R. (2016). Compassion: a scoping review of the healthcare literature. *BMC Palliative Care, 15*(6), 1-16. 10.1186/s12904-016-0080-0

Smith-MacDonald, L., Venturato, L., Hunter, P., Kaasalainen, S., Sussman, T., McCleary, L., Thompson, G., Wickson-Griffiths, A., & Sinclair, S. (2019). Perspectives and experiences of compassion in long-term care facilities within Canada: a qualitative study of patients, family members and health care providers. *BMC Geriatrics, 19*(128), 1-12. https://doi.org/10.1186/s12877-019-1135-x

Tabachnick, B. G., Fidell, L. S., & Ullman, J. B. (2007). *Using multivariate statistics (Vol. 5)*. Boston, MA: pearson.

The NHS Constitution for England (2023, August 17) GOV.UK. https://www.gov.uk/government/publications/the-nhs-constitution-for-england/the-nhs-constitution-for-england

Trzeciak, S., Roberts, B. W., & Mazzarelli, A. J. (2017). Compassionomics: hypothesis and experimental approach.*Medical Hypotheses, 107,* 92-97. https://doi.org/10.1016/j.mehy.2017.08.015

Wang, Z., Koenig, H. G., Tong, Y., Wen, J., Sui, M., Liu, H., Zaben, F. A., & Liu, G. (2022). Moral injury in Chinese health professionals during the COVID-19 pandemic. *Psychological Trauma: Theory, Research, Practice, and Policy, 14*(2), 250.

Welsh Government. (2021, August 3). *Technical Advisory Group: moral injury in health care workers during the COVID-19 pandemic.* https://www.gov.wales/sites/default/files/pdf-versions/2021/8/2/1628000224/technical-advisory-group-moral-injury-health-care-workers-during-covid-19-pandemic.pdf

West, M. A., & Chowla, R. (2017). Compassionate leadership for compassionate health care. *Compassion* (pp. 237-257). Routledge.

Whisman, M. A., & McClelland, G. H. (2005). Designing, testing, and interpreting interactions and moderator effects in family research. *Journal of Family Psychology, 19*(1), 111. 10.1037/0893-3200.19.1.111

Part Three: Appendices

Reflective statement

This reflective statement is an amalgamation of notes and reflections jotted down throughout the research process.

To start, I wanted to share a metaphor that came to mind many times throughout the process of conducting this research. In their book, *Staff support in the helping professions*, Hartley and Kennard use the metaphor of a lifeboat at sea to understand staff support. The lifeboat is the staff support intervention, and the sea is the organisation. If the organisational sea is choppy, the lifeboat is less likely to survive. If the boat is well-built and able to withstand squally conditions, it is more likely to be helpful to more people. The unpredictability of the 'organisational sea' came to mind many times, alongside the importance of recognising context in research. It is difficult to summarise the events that have happened within the NHS, even over just the last three years that I have been working on this research: recovery from the pandemic, industrial action, the Lucy Letby enquiry, greater demands and longer waiting lists than ever, the introduction of integrated care systems, and greater complexity of medical cases…I was even reminded by someone that I was doing data collection over the winter period. All of these factors impact the research, affecting who was able to complete the survey, what I originally expected to find, and how the data were interpreted.

The concept of 'submissive compassion'

The concept of submissive compassion became something I frequently thought about during this research process. 'Submissive' and 'compassion' feel like the antithesis of each other, and the idea that compassion can perhaps 'erode' or change often felt difficult to think about. It felt so obscure from the concept of compassion that I had come to understand through Paul Gilbert's work. However, I knew this concept was important to explore, and the research important to do. One of the things I did early on in the process was to complete the measures myself. This was an important

process, as I noticed which questions were especially difficult, what they brought up for me, and how I felt about the questions as a healthcare professional. Completing the emotional climate scale was an enjoyable process, as I could reflect on the times that I felt connected and energetic at work. The submissive compassion scale and moral injury scales were more difficult, as I noticed some feelings of guilt and shame.

I found myself concerned and worried about how the research would be perceived by others, and overall, I would say the feedback was very mixed, which was how I felt about the concept myself. We don't always get much participant feedback in quantitative surveys, but I receive some comments – both positive and negative! Some included: '*Interesting', 'thought-provoking'* and '*made me think about my role as a professional',* as well as an online comment which strongly disagreed with the aims of the study and questions asked. During recruitment for the study, I briefly talked about the research at a trust research event. I remembered feeling very reluctant to do this. I was fearful of conflict and anxious about how people would respond. I hope to inspire people with exciting research and felt like this was not the case. Surprisingly, people were actually interested and many decided to take part. This was different to other experiences, for example, after much deliberation one trust decided not to support with distribution of the study. They had recently received a CQC report and the reviewers were concerned about how the survey would be perceived by staff. One on hand, I understood why this might be as the idea of submissive compassion can feel demoralising and disheartening. On the other hand, I found myself thinking 'perhaps if we spoke about it, we could create a space to share anxieties, concerns, hopes etc. in a common space?' However, I could understand their decision, and appreciate that so much time and thought was put into that decision. If I were to go through this process again, getting as much feedback from as many trusts and NHS staff as possible would be a priority right at the start.

Ethics and recruitment

Despite it always being known as a dreaded part of the research process, ethics and recruitment was not as difficult as I had anticipated, there were however a number of hurdles. Navigating NHS ethics was probably the biggest. The forms and paperwork required is extensive, and I found myself constantly rewriting and filling in new forms on what felt like a weekly basis. What did counteract this, however, was the support from research and development teams in the five NHS trusts who were keen to support, meet with me, and were very prompt in responding to emails. There were, however, a couple of trusts that I lost in the process, either from not keeping in touch, not having a single contact, or from trusts being so bombarded with research requests that they did not have capacity to support. If I was to do a similar piece of research again, I would definitely go through NHS ethics – as I definitely could not have reached as large a sample without support from NHS trusts – however, I would give more time and energy to keeping in regular contact with key collaborators.

Regarding recruitment, this felt like a long drawn out process, especially with a required sample size of 440 looming over me. It seemed to ebb and flow, with lots of responses during quieter times in the NHS – the gap between Christmas and new year being one. I was surprised by how many people completed the survey. Once the participant numbers reached 409, I found that I had exhausted all avenues, and the deadline for the write up was fast approaching. Therefore, we decided to close the study.

Data analysis

Out of all the challenges associated with this research, data analysis may have been the greatest. I was reluctant to blow the dust off the statistics textbooks and felt uncertain and unsure where to start. It became a back and forth process, whereby I would get so far, realise I had missed something, and had to go back and start again. Receiving support from Zoe McAndrews was

invaluable in helping me to 'zoom out' from the statistics, bring some meaning to them and to think 'what's the story here?' It can be easy to lose the context when working with statistics, so frequently zooming out from the numbers to think about what processes might be happening here was crucial and imaging the reality of it in clinical practice.

Systematic Literature Review (SLR)

When I was working on the empirical project, I found myself thinking about how we measure compassion, and whether it is measurable at all. It's difficult to define in healthcare. We might say that someone listened, cared, or took the time to get to know us, but it is more akin to a feeling. I was drawn to a qualitative approach for the systematic literature review for these reasons. I decided to explore how healthcare staff experience organisational interventions for compassionate care. This stemmed from my experiences of seeing the value of compassion-focused interventions and reflective practice in NHS services, whilst also recognising that they tended to be introduced during times of crisis.

Reflexivity

I remember in a teaching session discussing reflexive qualitative research, and wondering where, and if, quantitative research fell into this. I saw reflexivity being equally as important in quantitative research than in qualitative research, although it is often not seen this way. I came across a paper called *Reflexivity in Quantitative Research* (Jamieson et al., 2023) that helped me to think about how I had shaped the research. I could see how I had shaped it in terms of recruitment and the social circles I was drawn to recruiting from – the majority of participants were similar to myself, typically white British, younger in age, and working in psychological professions. Furthermore, in quantitative research, we are further away from participants and see just scores and numbers, so we need to think harder about who they are and what they represent. Being an 'insider' of the research group helped to some extent, as I found myself drawing on my experiences of working on a busy

inpatient ward, and in various NHS teams facing multiple challenges. I reflected on how I felt as I went into work, and how this was impacted by the wider organisation. Needless to say, my professional experiences, as well as my personal experiences, in the NHS impacted on how I analysed this data, and the questions I was drawn to answering. If someone else did this research, they may find something else. I had similar experiences in relation to the SLR. As someone who has attended reflective practice sessions and facilitated compassion-focused interventions, I found it reassuring to notice similar experiences to mine in the data, and interesting when new ideas or challenges came up too.

Overall, I have learnt so much from this research journey. Importantly, that research in the NHS is needed, and possible, even in a stormy organisational sea.

References

Hartley, P., & Kennard, D. (2009). In Hartley P., Kennard D.(Eds.), *Staff support groups in the helping professions: Principles, practice and pitfalls* (Illustrated ed.). Routledge.

Jamieson, M. K., Govaart, G. H., & Pownall, M. (2023). Reflexivity in quantitative research: A rationale and beginner's guide. *Social and Personality Psychology Compass, 17*(4), e12735. 10.1111/spc3.12735

Epistemological statement

Ontological and epistemological reflexivity is important for researchers in understanding the assumptions that underpin research, and in identifying the impact of historical, cultural and philosophical contexts on knowledge claims (Bracken, 2010). This statement aims to explain what is meant by ontology and epistemology, and to shed light on the researcher's stance taken within this thesis.

Ontology is defined as the assumption of what entities and processes exist. Two ontological positions are realism and relativism (Willig, 2012). Realism posits that there is a single objective reality that exists independently of our own minds. It holds the view that things exist independently from our beliefs or perceptions about them. Relativism, on the other hand, posits that there is no objective truth, but that reality is relative to the observer or observer's position. Epistemology is defined as how we can generate dependable knowledge. Objectivist, constructivist and subjectivist are three predominant epistemological positions. Objectivism posits that knowledge is objective. Subjectivism posits that knowledge is subjective and is created by people's perceptions and understandings of reality. Constructivism lies in the middle, and posits that knowledge is socially constructed from an engagement between the subject and object. Epistemology and ontology influence research throughout, including the methodologies chosen and used. Quantitative and qualitative methodologies have different epistemological and ontological perspectives, in what has otherwise been known as the paradigm wars. A quantitative stance takes a realist and objectivist approach which aims to seek and understand the truth (Slevitch, 2011). A qualitative stance, on the other hand, takes a relativist and constructionist approach that focuses on meaning making (Clarke & Braun, 2021).

However, there is a growing recognition that quantitative and qualitative approaches can complement and accommodate each other (Bryman, 2006). Critical realism seeks to transcend both approaches (Bhaskar, 1975). Critical realism *'assumes a reality that exists independent of the*

observer, but which can only be apprehended imperfectly because of the complexity of social phenomena' (Rehman & Alharthi, 2016). Critical realism recognises that the researcher's own beliefs and values will affect what is being observed.

In reflecting on my personal ontological and epistemological beliefs, I discovered that I align with the critical realist stance, seeing quantitative and qualitative approaches as complementary and both needed. In study of compassion some have taken a realist, positivist stance to conduct research, seeking to measure the concept via scales, whereas others take a relativist constructionist stance. Through a critical realist lens, we can recognise that compassion in healthcare as something that is affected by interactions between individuals and their context. In the present study, quantitative methods were adopted to answer the research questions that considered whether submissive compassion is present in healthcare professionals, and whether the emotional climate and moral injury predicts this. This is more in line with a positivist approach, as only quantitative data was collected. However, findings from the measures were not taken as absolute conclusions and reflexivity was incorporated throughout this paper that is consistent with a critical realist perspective. Regarding the systematic literature review, qualitative methods were used to synthesise the experiences of healthcare staff who had attended an organisational intervention for compassionate healthcare.

To conclude, a critical realist approach was adopted for this thesis. This involved utilising quantitative and qualitative methodologies to explore predictors and organisational interventions for compassionate healthcare.

References

Bhaskar, R. (1975). Forms of realism. Philosophica, 15(1), 99-127.

Bracken, S. (2010). Discussing the importance of ontology and epistemology awareness in practitioner research. Worcester Journal of Learning and Teaching, (4)

Bryman, A. (2006). Paradigm peace and the implications for quality. International Journal of Social Research Methodology, 9(2), 111-126. https://doi.org/10.1080/13645570600595280

Clarke, V., & Braun, V. (2021). Thematic analysis: a practical guide (1st ed.). SAGE Publications Ltd.

Rehman, A. A., & Alharthi, K. (2016). An introduction to research paradigms. International Journal of Educational Investigations, 3(8), 51-59.

Slevitch, L. (2011). Qualitative and quantitative methodologies compared: Ontological and epistemological perspectives. Journal of Quality Assurance in Hospitality & Tourism, 12(1), 73-81. https://doi.org/10.1080/1528008X.2011.541810

Willig, C. (2012). In H. Cooper (Ed.), Perspectives on the epistemological bases for qualitative research. American Psychological Association. 10.1037/13619-002

Appendix A: **Submission guidelines for Journal of Clinical Nursing (Systematic Literature Review)**

GENERAL SUBMISSION INFORMATION

We are delighted you are choosing to submit to *Journal of Clinical Nursing.* While we cannot provide any assurance of acceptance, we can say that following all of the following guidelines very carefully and asking any questions you might have along the way to this email address: jcn@wiley.com might go a long way towards facilitating a favourable outcome for your submission.

Please do not submit your paper to the Journal if it is not relevant to nurses, nursing, and the topics that nurses are involved with and care about.

- Once all of your submission materials have been prepared in accordance with these Author Guidelines, manuscripts should be submitted online at https://mc.manuscriptcentral.com/JCN
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-
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  Find the Wiley preprint policy **here.** *The Journal of Clinical Nursing* accepts articles previously published on preprint servers. You may also post the submitted version of a manuscript to a preprint server at any time. You are requested to update any pre-publication versions with a link to the final published article.
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- **Data Sharing and Data Availability**
  The Journal encourages data sharing. Review **Wiley's Data Sharing policy** where you will be able to see and select the data availability statement that is right for your submission.
- **Data Citation**
  Review **Wiley's Data Citation policy**.
- **Data Protection**
  By submitting a manuscript to or reviewing for this publication, your name, email address, and affiliation, and other contact details the publication might require, will be used for the regular operations of the publication. review **Wiley's Data Protection Policy** to learn more.

- **Authorship**
  All listed authors are to have contributed to the manuscript substantially, agreed to the order in which the author names appear, and agreed to the final submitted version. Review Wiley's **editorial standards** and see the ICJME description of **authorship criteria.**
- **ORCID**
  This journal requires ORCID. refer to **Wiley's resources on ORCID**.
- **Reference Style**
  This journal uses American Psychological Association (APA) Reference Style; as the journal offers Free Format submission, however, this is for information only and you do not need to format the references in your article. This will instead be taken care of by the typesetter. All references must be in publications available in English.

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- **ARTICLE TYPES**
- Carefully review the types of articles the Journal considers for publication in the chart below and all of the guidelines included throughout. You will be asked to select an article type when you enter your submission into Research Exchange (our submission management system). Contact the editorial office (**jcn@wiley.com**) if you have any questions.

PARTS OF THE SUBMISSION

PREPARE IN ORDER AS DESCRIBED HERE

TITLE PAGE
The title page is to be submitted separately from all other files and must include the following as applicable:

1. A brief informative **title** (maximum 20 words) containing as many of the *keywords* for your submission as possible.

a. Do not use country names or abbreviations in the title.

b. Craft your title with great thought and care for readability and maximum search discoverability (see *Wiley's best practice SEO tips)*.

c. All submissions describing randomised clinical controlled trials are to include 'randomised controlled trial' in the title. Also make non-randomized and other types of studies that evaluate interventions clear in the title:

“Intervention effect of virtual reality technology for people with kinesiophobia: Meta-Analysis of Randomised Controlled Trials”

“**Audiovisual and printed technology to prevent childhood diarrhea: Clinical Trial**”

2. A **short running title** of fewer than 40 characters.
3. The full names of the **authors** (last name in CAPITALS) including institutional affiliations where the work was conducted (maximum of three per author) and a footnote for the author’s present address if different from where the work was conducted.
4. For all articles, the journal mandates the (CRediT (Contribution Roles Taxonomy)—more information is also available on our Services Detail the **contributions each author** has made to the manuscript in accordance with the taxonomy here. See also the ICMJE authorship guidelines mentioned here.
5. Insert all the declarations regarding ***conflicts of interest*** from all authors here. Include what they are if any, or if there are none for each author.
6. **Corresponding author’s** contact email address and telephone number.
7. **Twitter handles** for all authors and their affiliated school/university/organization if available; note these may not be included if a handle is not appropriate in a professional setting.
8. The number of **References** for Clinical Trials, Empirical Research Mixed Methods, Empirical Research Qualitative, Empirical Research Qualitative, or Feasibility submissions permitted are shown in the A*rticle Type* chart as 25 or less. If more than 25 references are included address why in the cover letter.
9. **Conflict of Interest Statement**
10. **Acknowledgments:** Acknowledgments, including all funding sources. The corresponding author is responsible for obtaining in writing permission for individual acknowledgements for those persons and their names to be included, for including the funding sources for all authors, and for the accuracy of funder designations. If in doubt, check the Open Funder Registry for the correct nomenclature. Include information from all authors specifying any sources of funding (institutional, private and corporate financial support) for the work reported in their paper. Include the name of the funding organization(s) and the grant number. If there was no funding, use this wording: “This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.” (NB: this does not apply to protocols). Name any suppliers of materials and their location (town, state/county, country) included if appropriate. This

information will be included in the published article.

Confirm that any data utilised in the submitted manuscript have been lawfully acquired in accordance with The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from Their Utilization to the Convention on Biological Diversity. State that the relevant fieldwork permission was obtained and list the permit numbers.

MAIN TEXT FILE
The Journal uses a double-blind peer review process. ensure that all identifying information such as author names and affiliations, acknowledgements or explicit mentions of author institution in the text are on the title page and not in the main text file. **It is not possible to anonymize trial registration entries. Reviewers will be able to view who conducted the trial when making essential checks of the registration entry.**

For all article types except Brief Reports, Commentary, Letter to the Editor, and Editorial the main text file to include the following information and/or headers:

Repeat the *brief informative* ***title*** (maximum 20 words) you included on the title page here.

Abstract: The abstract format for all article types is structured, except these article types do not include abstracts: Brief Report, Commentary, Letter to the Editor, and Editorial.

Structured Abstract Format:

a. 300 words maximum.
b. No abbreviations.
c. Do not report p values, confidence intervals and other statistical parameters.

INCLUDE THE FOLLOWING HEADERS IN ABSTRACTS:

Aim(s) (of the paper, simply state **'To...'**)

Design

Keywords (You will be able to choose keywords when you begin the submission process and you can select up to ten).

Methods

Data Sources (Include search dates) ***for reviews only***

Results

Conclusion

Implications for the profession and/or patient care

Impact (Addressing:)

- What problem did the study address?
- What were the main findings?
- Where and on whom will the research have an impact?

Reporting Method: State here that you have adhered to relevant EQUATOR guidelines and name the reporting method.

Patient or Public Contribution: Include a paragraph that details how patients, service users, caregivers or members of the public were involved in your study. This may be the design or conduct of the study, analysis or interpretation of the data, or in the preparation of the manuscript.

OR

Include a statement at the end of the abstract titled "No Patient or Public Contribution". Your paper will be unsubmitted and returned to you if this section is not included.

What does this paper contribute to the wider global clinical community?: Include one to three bullet points.

Trial and Protocol Registration: Include the following here for papers that require **trial and protocol registration**:

- Include the name of the name of the trial register, the clinical trial registration number, and a link to the trial at the registration website.
- If there is a protocol that does not require registration, it must still be made accessible at: Open Science Framework (https://osf.io/) " or "Figshare (https://figshare.com/). Include the name of the website, the protocol number, and a link to the registration site.
- If the trial is not registered, or was registered retrospectively, explain the reasons why.

MAIN TEXT HEADINGS

REVIEW article types:

1. Introduction
2. The Review
3. Aim(s)
4. Methods/Methodology

- Design
- Search Methods
- Inclusion and/or Exclusion Criteria
- Search Outcome
- Quality Appraisal
- Data Abstraction
- Synthesis

1. Results/Findings
2. Discussion
3. Conclusion

SPECIAL GUIDELINES FOR SYSTEMATIC REVIEWS WITH OR WITHOUT META-ANALYSIS

Systematic reviews are valued submissions to the Journal. Follow these guidelines to ensure that the topic is appropriate, the methods are well described and applied, reporting guidelines are adhered to, and the findings are credible. Evaluate your submission as follows:

- The search is contemporary for the question.
- Cross check reporting against the relevant reporting guideline and provide substantial methodological information.
- All meta-analyses to be reviewed by a statistician prior to submission, or a statistician is a member of the author team.

Systematic reviews and meta-analyses of interventions

- Registered in *PROSPERO* or other recognized registry such as *JBI* if reporting a health outcome.
- Systematic reviews and meta-analyses of interventions must conform to PRISMA reporting guidelines.

- Ensure that Item 20 of PRISMA (reporting outcomes and estimates of precision such as confidence intervals for all outcomes of interest) is not omitted.
- Consider that PRISMA is a reporting guideline and not a methods manual. Authors must cite a review design and an appropriate methods manual or citation (and not just cite the PRISMA reporting guideline). Where?

- Unless conducting a systematic review of systematic reviews, do not include systematic reviews in reviews. Unpick systematic reviews, and screen primary studies screened for inclusion in the review.
- Quantitative reviews must critically appraise included studies; it is an essential requirement.
- The Journal will carefully consider how a specific methodological limitation may impact the findings. The *Cochrane risk of bias tool* is the recommended tool for trials of interventions. The EPOC group provides guidance on its application and reporting.
- If applicable, report the assessment of each domain of quality for each tool and each study in *supporting information.*
- If conducting a review without a meta-analysis do not use the terms 'qualitative synthesis' or 'narrative synthesis' to avoid confusion with qualitative synthesis methods of the same name. The preferred term is: 'Synthesis without meta-analysis'. Also check that the PRISMA flow diagram does not mention 'qualitative synthesis'.
- Use the new Synthesis without meta-analysis (SWiM) reporting guidelines and not the standard PRISMA checklist.
- If following Cochrane methods apply GRADE and produce a summary of findings table.
- Reviews must include a PRISMA flow diagram.

Appendix B: Methodological Quality Appraisal Checklist for Qualitative Studies (NICE 2012)

Appendix H Quality appraisal checklist – qualitative studies

There is considerable debate over what quality criteria should be used to assess qualitative studies. Quality in qualitative research can be assessed using the same broad concepts of validity (or trustworthiness) used for quantitative research, but these need to be put in a different contextual framework to take into account the aims of qualitative research.

This qualitative checklist[17] is designed for people with a basic understanding of qualitative research methodology, and is based on the broadly accepted principles that characterise qualitative research and which may affect its validity. The following notes provide suggestions for completing the checklist. A list of publications on qualitative research is provided at the end of these notes for further reading on this topic.

The studies covered by this checklist are studies which collect and analyse qualitative data, usually (but not exclusively) textual (written), spoken or observational data. Qualitative data are occasionally collected by structured questionnaires (for example, as thematically organised free text comments), but such data needs to be carefully scrutinised as it may not meet acceptable quality criteria for consideration as a qualitative study.

The checklist's questions are framed in such a way so that it can encompass the variety of ways qualitative research is conducted. Care must be taken to apply the checklist in a way that matches the research methodology.

Please note that the sub questions given as examples under each question are intended to highlight some of the key issues to be considered for that question. They are not intended to be exhaustive. Please add any additional considerations in the comments box.

Notes on the completion of the separate sections of the checklist are appended to it.

In some circumstances it may be necessary to analyse qualitative material using a different approach, where the goal will be to seek to extract underlying theories, propositions and principles from the data, rather than focusing on the quality of the study per se. This may be appropriate where the aim is to gain particular insights into social processes. Where

developments of the processes of appraisal are required these will be discussed with the CPHE team.

Checklist

Study identification: Include author, title, reference, year of publication		
Guidance topic:	**Key research question/aim:**	
Checklist completed by:		
Theoretical approach		
1. Is a qualitative approach appropriate? For example: • Does the research question seek to understand processes or structures, or illuminate subjective experiences or meanings? • Could a quantitative approach better have addressed the research question?	Appropriate Inappropriate Not sure	Comments:
2. Is the study clear in what it seeks to do? For example: • Is the purpose of the study discussed – aims/ objectives/research question/s? • Is there adequate/appropriate reference to the literature? • Are underpinning values/assumptions/theory discussed?	Clear Unclear Mixed	Comments:
Study design		

3. How defensible/rigorous is the research design/ methodology? For example: • Is the design appropriate to the research question? • Is a rationale given for using a qualitative approach? • Are there clear accounts of the rationale/justification for the sampling, data collection and data analysis techniques used? • Is the selection of cases/sampling strategy theoretically justified?	Defensible Indefensible Not sure	Comments:
Data collection		
4. How well was the data collection carried out? For example: • Are the data collection methods clearly described? • Were the appropriate data collected to address the research question? • Was the data collection and record keeping systematic?	Appropriately Inappropriately Not sure/ inadequately reported	Comments:
Trustworthiness		
5. Is the role of the researcher clearly described? For example: • Has the relationship between the researcher and the participants been adequately considered? • Does the paper describe how the research was explained and presented to the participants?	Clearly described Unclear Not described	Comments:

6. Is the context clearly described? For example: • Are the characteristics of the participants and settings clearly defined? • Were observations made in a sufficient variety of circumstances • Was context bias considered	Clear Unclear Not sure	Comments:
7. Were the methods reliable? For example: • Was data collected by more than 1 method? • Is there justification for triangulation, or for not triangulating? • Do the methods investigate what they claim to?	Reliable Unreliable Not sure	Comments:
Analysis		
8. Is the data analysis sufficiently rigorous? For example: • Is the procedure explicit – i.e. is it clear how the data was analysed to arrive at the results? • How systematic is the analysis, is the procedure reliable/dependable? • Is it clear how the themes and concepts were derived from the data?	Rigorous Not rigorous Not sure/not reported	Comments:

9. Is the data 'rich'? For example: • How well are the contexts of the data described? • Has the diversity of perspective and content been explored? • How well has the detail and depth been demonstrated? • Are responses compared and contrasted across groups/sites?	Rich Poor Not sure/not reported	Comments:
10. Is the analysis reliable? For example: • Did more than 1 researcher theme and code transcripts/data? • If so, how were differences resolved? • Did participants feed back on the transcripts/data if possible and relevant? • Were negative/discrepant results addressed or ignored?	Reliable Unreliable Not sure/not reported	Comments:
11. Are the findings convincing? For example: • Are the findings clearly presented? • Are the findings internally coherent? • Are extracts from the original data included? • Are the data appropriately referenced? • Is the reporting clear and coherent?	Convincing Not convincing Not sure	Comments:

12. Are the findings relevant to the aims of the study?	Relevant Irrelevant Partially relevant	Comments:
13. Conclusions For example: • How clear are the links between data, interpretation and conclusions? • Are the conclusions plausible and coherent? • Have alternative explanations been explored and discounted? • Does this enhance understanding of the research topic? • Are the implications of the research clearly defined? **Is there adequate discussion of any limitations encountered?**	Adequate Inadequate Not sure	Comments:
Ethics		
14. How clear and coherent is the reporting of ethics? For example: • Have ethical issues been taken into consideration? • Are they adequately discussed e.g. do they address consent and anonymity? • Have the consequences of the research been considered i.e. raising expectations, changing behaviour? • Was the study approved by an ethics committee?	Appropriate Inappropriate Not sure/not reported	Comments:
Overall assessment		

As far as can be ascertained from the paper, how well was the study conducted? (see guidance notes)	++ + –	Comments:

Notes on the use of the qualitative studies checklist

Section 1: theoretical approach

This section deals with the underlying theory and principles applied to the research.

1. Is a qualitative approach appropriate?

A qualitative approach can be judged to be appropriate when the research sets out to investigate phenomena which are not easy to accurately quantify or measure, or where such measurement would be arbitrary and inexact. If clear numerical measures could reasonably have been put in place then consider whether a quantitative approach may have been more appropriate. This is because most qualitative research seeks to explain the meanings which social actors use in their everyday lives rather than the meanings which the researchers bring to the situation.

Qualitative research in public health commonly measures:

- personal/lives experiences (for example, of a condition, treatment, situation)
- processes (for example, action research, practitioner/patient views on the acceptability of using new technology)
- personal meanings (for example, about death, birth, disability)
- interactions/relationships (for example, the quality of the GP/patient relationship, the openness of a psychotherapeutic relationship)
- service evaluations (for example, what was good/bad about patients experiences of a smoking cessation group).

2. Is the study clear in what it seeks to do?

Qualitative research designs tend to be theory generative rather than theory testing;

Appendix C: **Data Extraction form**

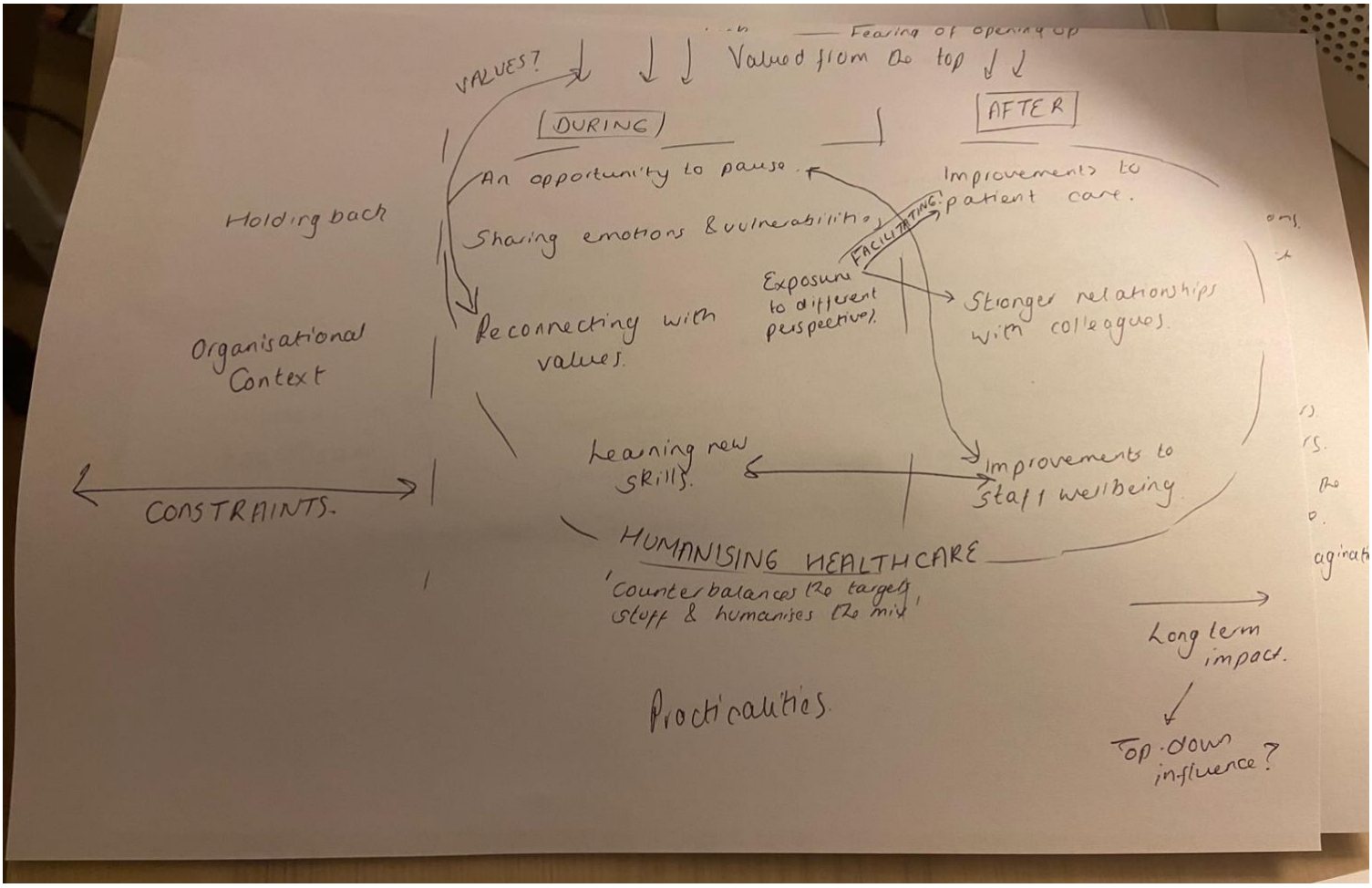
Author(s), Date of publication	**Description of intervnetion**	**Length of intervention**	**Participant characteristics**	**Setting; Country**	**Methodology**	**Identified themes relating to participants' experience of intervention**

Appendix D: Quality assessment summary table for reviewed studies

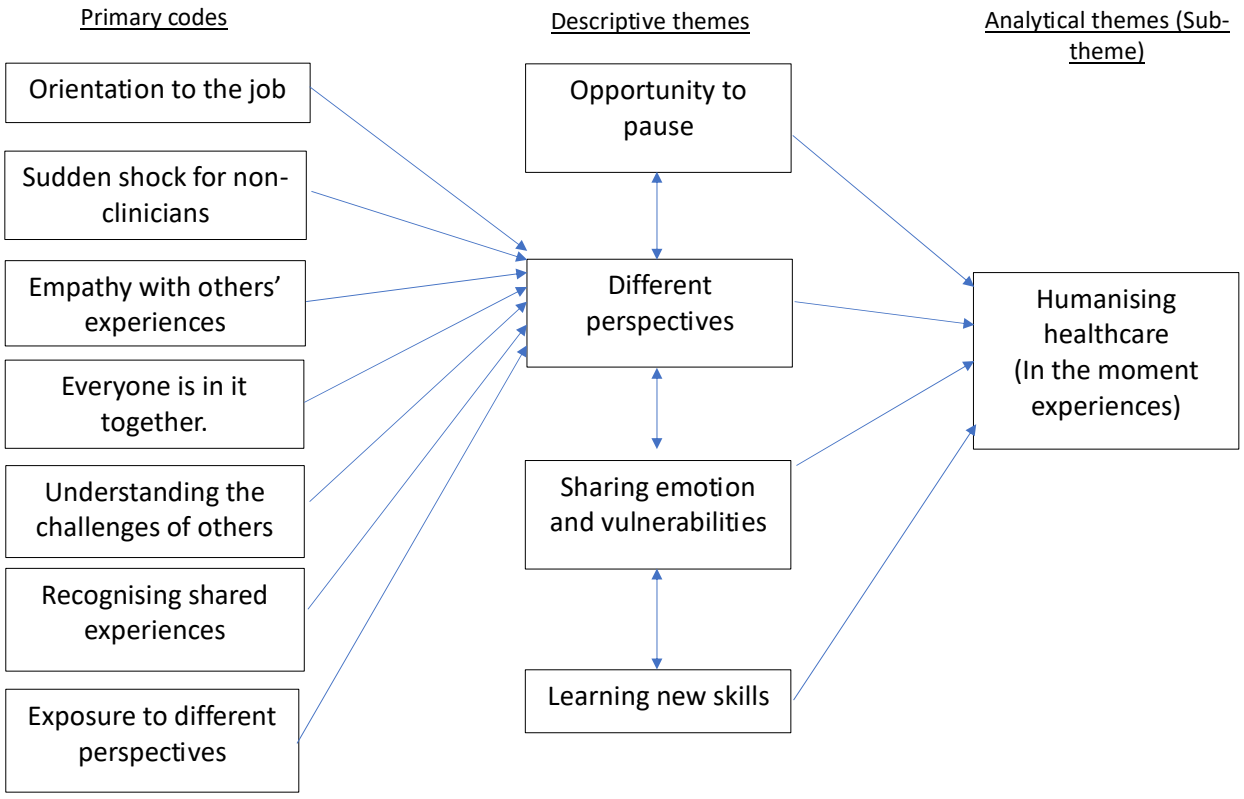
Article	1. Is a qualitative approach appropriate?	2. Is the study clear in what it seeks to do?	3. How defensible/ rigorous is the research design/ methodology?	4. How well was the data collection carried out?	5. Is the role of the researcher clearly described?	6. Is the context clearly described?	7. Were the methods reliable?	8. Is the data analysis sufficiently rigorous?	9. Is the data 'rich'?	10. Is the analysis reliable	11. Are the findings convincing?	12.Are the findings relevant to the aims of the study?	13.Is there adequate discussion of any limitations encountered?	14.How clear and coherent is the reporting of ethics?	Overall Assessment
Adamson et al., 2018	Appropriate	Clear	Defensible	Appropriately	Not described	Not sure	Not sure	Rigorous	Rich	Reliable	Convincing	Relevant	Adequate	Appropriate	+
Bridges et al., 2017	Appropriate	Clear	Defensible	Inappropriately	Not described	Clear	Reliable	Rigorous	Rich	Reliable	Convincing	Relevant	Adequate	Appropriate	+
Chadwick et al., 2016	Not sure	Clear	Not sure	Appropriately	Clearly described	Clear	Reliable	Not sure	Rich	Reliable	Convincing	Relevant	Adequate	Inappropriate	+
Dobrina et al., 2023	Appropriate	Clear	Defensible	Inappropriately	Unclear	Clear	Reliable	Rigorous	Rich	Reliable	Convincing	Relevant	Adequate	Appropriate	+
Donald et al., 2019	Appropriate	Clear	Defensible	Not sure	Not described	Clear	Not sure	Rigorous	Rich	Reliable	Convincing	Relevant	Adequate	Appropriate	+
Goodrich et al., 2012	Appropriate	Clear	Not sure	Inappropriately	Not described	Clear	Reliable	Not rigorous	Rich	Unreliable	Convincing	Relevant	Inadequate	Inappropriate	-
Landers et al., 2020	Appropriate	Clear	Defensible	Appropriately	Clearly described	Clear	Reliable	Not sure	Rich	Reliable	Convincing	Relevant	Adequate	Appropriate	++
Lathren et al., 2021	Not sure	Clear	Not sure	Appropriately	Clearly described	Clear	Not sure	Rigorous	Rich	Reliable	Convincing	Relevant	Adequate	Inappropriate	+

Marx et al., 2014	Appropriate	Clear	Not sure	Not sure	Clearly described	Clear	Reliable	Rigorous	Poor	Reliable	Not sure	Partially relevant	Adequate	Not sure	+
Masterson et al., 2014	Inappropriate	Unclear	Indefensible	Inappropriately	Not described	Not sure	Unreliable	Not rigorous	Not sure	Unreliable	Not sure	Relevant	Adequate	Inappropriate	-
McEwan et al., 2019	Appropriate	Clear	Defensible	Appropriately	Clearly described	Clear	Reliable	Rigorous	Rich	Reliable	Convincing	Relevant	Adequate	Appropriate	++
Meyer et al., 2022	Not sure	Mixed	Not sure	Not sure	Not described	Clear	Not sure	Not sure	Not sure	Unreliable	Convincing	Relevant	Adequate	Not sure	+
Nissim et al., 2019	Appropriate	Clear	Indefensible	Not sure	Not described	Clear	Not sure	Not sure	Rich	Not sure	Convincing	Relevant	Adequate	Appropriate	+
Orellana-Rios et al., 2018	Not sure	Clear	Defensible	Appropriately	Unclear	Clear	Reliable	Rigorous	Not sure	Reliable	Convincing	Relevant	Adequate	Not sure	++
Pehlivan & Güner, 2022	Appropriate	Clear	Defensible	Not sure	Unclear	Clear	Reliable	Not sure	Rich	Reliable	Convincing	Relevant	Adequate	Appropriate	++
Pfaff et al., 2017	Appropriate	Clear	Defensible	Not sure	Not described	Clear	Reliable	Rigorous	Not sure	Reliable	Convincing	Relevant	Adequate	Appropriate	+
Romano et al., 2022	Not sure	Mixed	Indefensible	Not sure	Clearly described	Clear	Not sure	Not sure	Not sure	Reliable	Not sure	Relevant	Adequate	Not sure	+
Slatyer et al., 2018	Appropriate	Clear	Defensible	Not sure	Unclear	Clear	Reliable	Rigorous	Rich	Reliable	Convincing	Relevant	Adequate	Appropriate	++

Appendix E: **Notes of how themes for the thematic synthesis were generated**



Appendix F: Example of theme development



Appendix G: Contribution of studies to the thematic synthesis

		Adamson et al., 2018	Bridges et al., 2017	Chadwick et al., 2016	Dobrina et al., 2023	Donald et al., 2019	Goodrich et al., 2012	Landers et al., 2020	Lathren et al., 2021	Marx et al., 2014	Masterson et al., 2014	McEwan et al., 2019	Meyer et al., 2022	Nissim et al., 2019	Orellana-Rios et al., 2017	Pehlivan & Güner, 2022	Pfaff et al., 2017	Romano et al., 2022	Slatyer et al., 2017
Holding back	Systemic barriers	/	/	/	/	/		/	/	/	/	/							/
	Personal barriers	/			/	/	/	/	/	/		/		/	/		/		/
Humanising healthcare	In the moment experiences	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	Impacts outside the intervention	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
Values are instilled	Connecting with personal values	/	/		/	/	/	/	/		/				/	/			/

	A way to demonstrate organisational values	/					/	/	/		/	/		/		/		/	
It needs to be sustainable		/	/	/	/		/	/	/			/		/		/	/	/	/

Appendix H: **Submission guidelines for Journal of Clinical Nursing (Empirical Project)**

GENERAL SUBMISSION INFORMATION

We are delighted you are choosing to submit to *Journal of Clinical Nursing.* While we cannot provide any assurance of acceptance, we can say that following all of the following guidelines very carefully and asking any questions you might have along the way to this email address: jcn@wiley.com might go a long way towards facilitating a favourable outcome for your submission.

Please do not submit your paper to the Journal if it is not relevant to nurses, nursing, and the topics that nurses are involved with and care about.

- Once all of your submission materials have been prepared in accordance with these Author Guidelines, manuscripts should be submitted online at https://mc.manuscriptcentral.com/JCN
- You will be asked to complete a submission form as part of the process and these author guidelines may be helpful to refer to as you do so.
- For help with submissions, contact: jcn@wiley.com
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Statistical Guidelines

General Instructions

- Authors should have statistics checked prior to submission and are encouraged to find and consult with an expert statistician prior to submission or to have a statistician on the author team.

- As part of the terms/conditions for submitting a paper, the author(s) agrees to take responsibility for ensuring that the choice of statistical approach is appropriate and is conducted and interpreted correctly.
- The author(s) are to make sure that the methods they employ in their data analyses are suitably applied to their data within their study design and context and they implement and interpret the statistical findings correctly.
- Authors must ensure that submitted papers conform as applicable to the Journal's statistical guidelines as detailed below:

Study Aim and Objective(s)

- State the study aim and objectives clearly and concisely.
- Explain any technical terminology used to describe the study aim.
- Indicate which study objectives are primary, secondary or other objectives (if applicable).

Study design

The study design should be stated clearly, for example, randomised controlled trial, intervention study (randomised or non-randomised), quasi-experimental study, systematic review, cross-sectional study, case-control study, ecological study, descriptive study, etc.

The design for the study being reported should be described in detail and you should state clearly which parts of the study are exploratory or confirmatory. Recognize that hypothesis generating and hypothesis testing are different and be clear on which you are doing:

Exploratory Analysis: The study objectives may not always lead to pre-determined hypotheses and tests. The choice of hypotheses may depend on the data. The data analysis may include data exploration and require a more flexible approach that allows for changes in response to accumulating results.

Confirmatory Analysis: The key hypothesis is pre-defined and its choice is independent of the data, follows from the primary study objective, and is subsequently tested, upon completion of the study. The results should be robust (in contrast to being sensitive to outliers, missing values) and reliable.

Population and Sample

- Describe the target population of the study and also the eligible, evaluable, per protocol, and intention to treat populations (if applicable). The subjects in the study should mirror the target population as closely as possible.
- Present an adequate description on the sampling approach and the selection mechanism of the sample e.g. if a probability (random) sampling method is used, you should describe which type of random sampling approach was used e.g. simple random sampling, a weighted sampling approach, stratified sampling, cluster sampling (include details and justification of any weights, strata or clusters used).
- If a non-probability sampling approach is used, explain what type of sampling e.g. convenience sampling, quota sampling, snowball sampling. Justify these choices and explain for which population the sample is representative and to which extent the results are valid, applicable, and generalizable.
- Explain the pool from which the sample was drawn, and the pre-specified inclusion and exclusion criteria
- If an intervention study, explain the assignment mechanism (randomized, partially randomized, non-randomized) to different treatments or arms, and any blinding techniques used.

Sample Size and Ph4>

Describe the outcome variables, distributional assumptions, parameters, the effect size, the choice of significance levels and power (if appropriate), upon which the sample size calculation was based. Studies should be powered on the main objective and its appropriate analysis.

State the method of sample size calculation clearly, what type of statistical test the calculation is based upon, the outcome variable, distributional assumptions and estimated variability, if appropriate, and justify the assumptions made.

Data collection:

Details on how data were collected should be included, for example, by using a survey, interviews, observation or an alternative approach. If the study uses secondary data e.g.

medical records or previously published data, then details of the source of the data, data collection, sampling methods used to collect the data etc. should be described.

Where appropriate, information about validity and reliability of questionnaire instruments should also be included:

- Provide a justification of the selected tool or instrument, state as to whether the tool/ instrument has been shown to be valid and reliable in the study population, and list references that document evidence in support of their psychometric properties.
- If it is a newly developed or "modified" tool, provide reasons and address the validity and reliability issues of the tool.

The dates of when data collection took place should be provided, as well as details of how the data collection procedure was administered e.g. via online survey, face-to face interviews etc.

Details of how participants were invited to take part, informed consent procedures and ethical considerations should also be addressed.

Data Analysis:

- All statistical methods of analysis should be very clearly described.
- This will include details of which descriptive statistics are used to describe the study sample and also any statistical tests or methods which are used to answer the objectives/ research questions in the study. You should ensure that all statistical methods including statistical tests relate to the study objectives or research questions.
- All statistical methods should only be used where appropriate and a reference for further reading should be included for any advanced or non-elementary statistical methods.
- Describe in detail the procedures that were applied to handle missing values and data, any outliers (spell out the definition used for an outlier), multiplicities in hypothesis testing, for example, adjustments for multiplicity to quantify the type I error rate (e.g. Bonferroni, Holm, Hochberg, etc. adjusted p-values), or any other irregularities to which the statistical analysis could be sensitive. Adjustments for multiple testing are required in a confirmatory analysis.
- Pay close attention to such issues as multicollinearity in multiple regression and multiple comparisons in ANOVA. Use multivariable techniques if appropriate for answering the research question (for example, instead of reporting many correlations with no attempt to draw out "genuine" relationships).
- Any deviations or adjustments to the analysis methods should be specified prior to the statistical analysis.

- Make sure that the decision to use parametric/ non-parametric statistics is appropriate; use data transformations if needed, provide justifications, and describe any data transformations.
- Describe the model assumptions checks that were performed (e.g. distributional assumptions under the null hypothesis of any hypothesis test carried out, for example, goodness-of-fit tests, tests for normality or homoscedasticity of residuals, graphical plots or representations).
- If any sensitivity analysis was performed, these should be reported.
- Specify the software and the version of software used in the analysis.

As a general guide, the statistical methodology should be described in enough detail in order that the study design and analysis could, hypothetically, be repeated and would verify the study findings.

Results

Make sure that the style and presentation of the analysis, results and tables in particular are of sufficiently high quality, and the overall grammar and quality of English are readable and accessible and not a barrier to the reviewer or reader of the manuscript.

This section should include the response rate(s) if applicable, or give details of the number included in the study sample, giving reasons for any exclusions, problems with missing data etc.

Descriptive (summary) statistics of the study sample should first be presented. Then the results should be presented in turn explicitly for each study aim/objective/research question/hypothesis.

Some pointers are noted for additional guidance in presenting the results/ findings:

- Standard deviations and standard errors should not be presented along with means using the symbol ±; instead, represent these as 'mean (SD)' and 'mean (SE)', respectively, taking care to define all statistics presented throughout the paper.
- Provide confidence intervals for effect sizes wherever possible; this enables evaluation of the ‘clinical significance’ of the result as well as the statistical significance.
- Usually, two-sided tests and confidence intervals are appropriate; the use of a one-sided test must be justified in the paper.
- Include sufficient details about the variable measurements to enable the reader to determine the type of data e.g. continuous or categorical, and therefore verify whether the analysis used is appropriate.
- Use appropriate measures of central tendency and spread (e.g. no means of highly skewed data) as summary statistics. Instead the median and the 25^{th} and 75^{th} percentiles or the range or interquartile range or would be more appropriate.

- Report effects of variables in measures that are clinically relevant, for example, report the effect of age in 10 year increments rather than 1 year increments, effect of weight in 10 pound increments rather than 1 pound.
- Distinguish between statistical and clinical significance. Do not conclude that a non-significant result proves the null hypothesis.
- State the actual p-values for results, and avoid presentation as 'NS' for 'non-significant', or '$p>0.05$' or '$p<0.05$'. Provide the p-values in all cases, even if the result is not favourable.
- Truncate the p-value to a maximum of three decimal places and be consistent in presenting to the same number of decimal places throughout the paper.
- For highly significant results present the p-value, for example, as $p<0.001$. Do not write a p-value as $p=0.000$.
- Tables and figures should be clear, easy to follow and self-explanatory. For the presentation of tables, figures, graphical plots, diagrams, and displays and representations, see the guidelines for authors. Make sure that the format of the cell entries and data results are consistent throughout a particular table and manuscript.
- Illustrate the main characteristics of the key variables in suitable tables and/or graphical presentations and make sure that the latter are useful and not just duplications of information given elsewhere.
- Refer to all tables and figures in the text; describe the main points or trends for each table or figure in the text.
- Report summary statistics, result summaries, or the quantities associated with a p-value when reporting test results in tables and in the text.
- When using regression modelling methods, list all predictors considered for inclusion in the modelling and list all predictors included in the final model. Report effect estimates along with either standard errors or confidence intervals for these estimates and give the p-values for the predictors. Discuss checks carried out to assess model assumptions and diagnostics.
- When carrying out multiple testing, the authors must address the problem of increased rates of false positive findings. This can be addressed by either using an adjustment to the p-value e.g. Bonferroni correction (or one of the other adjustment methods), or to critically discuss the problems of multiple testing when discussing the results.

Discussion

You must ensure that the results are derived from the data and analysis described within the paper and that the conclusions are based on the study results.

- Provide an interpretation of the results of the study.
- Highlight new findings and contributions.

Study Limitations

- Describe possible limitations to the study findings.
- Understand the limits of generalizability of the study and describe how the sample does or does not adequately represent the study population.
- Identify any potential sampling bias (such as comparability to control group, representativeness of sample population), violations of inclusion/exclusion criteria, irregularities, or deviation from the planned study conduct that may have occurred. These may include limitations that impair the statistical analysis and/or affect the interpretation of the results.
- Indicate the observed values for the variables and/or statistics whose values were estimated prior to the study in order to estimate the sample size and state any discrepancies between these estimated and observed values. Explain how these discrepancies may impact the power of a hypothesis test.
- State how the power of a test may be affected by multiplicity issues.
- Address (if appropriate) the sensitivity of the analyses and results, including p-values, missing values, missing data imputation used, multiplicity issues, and violations of model assumptions that may have occurred.
- Discuss appropriately how outliers were treated and whether the outliers or their treatment is likely to over-influence the findings.

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The title page is to be submitted separately from all other files and must include the following as applicable:

1. A brief informative **title** (maximum 20 words) containing as many of the *keywords* for your submission as possible.

a. Do not use country names or abbreviations in the title.

b. Craft your title with great thought and care for readability and maximum search discoverability (see *Wiley's best practice SEO tips)*.

c. All submissions describing randomised clinical controlled trials are to include 'randomised controlled trial' in the title. Also make non-randomized and other types of studies that evaluate interventions clear in the title:

"Intervention effect of virtual reality technology for people with kinesiophobia: Meta-Analysis of Randomised Controlled Trials"

"**Audiovisual and printed technology to prevent childhood diarrhea: Clinical Trial**"

2. A **short running title** of fewer than 40 characters.
3. The full names of the **authors** (last name in CAPITALS) including institutional affiliations where the work was conducted (maximum of three per author) and a footnote for the author's present address if different from where the work was conducted.
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8. The number of **References** for Clinical Trials, Empirical Research Mixed Methods, Empirical Research Qualitative, Empirical Research Qualitative, or Feasibility submissions permitted are shown in the A*rticle Type* chart as 25 or less. If more than 25 references are included address why in the cover letter.
9. **Conflict of Interest Statement**
10. **Acknowledgments:** Acknowledgments, including all funding sources. The corresponding author is responsible for obtaining in writing permission for individual acknowledgements for those persons and their names to be included, for including the funding sources for all authors, and for the accuracy of funder designations. If in doubt, check the Open Funder Registry for the correct nomenclature. Include information from all authors specifying any sources of funding (institutional, private and corporate financial support) for the work reported in their paper. Include the name of the funding organization(s) and the grant number. If there was no funding, use this wording: "This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors." (NB: this does not apply to protocols). Name any suppliers of materials and their location (town, state/county, country) included if appropriate. This information will be included in the published article.

Confirm that any data utilised in the submitted manuscript have been lawfully acquired in accordance with The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from Their Utilization to the Convention on Biological Diversity. State that the relevant fieldwork permission was obtained and list the permit numbers.

For all submissions with statistics, include the following in the title page:

INCLUDE "b" **OR** "c":

a. The authors have checked to make sure that our submission conforms as applicable to the Journal's statistical guidelines *described here.*

b. The statistics were checked prior to submission by an expert statistician, and state their name and email address

OR

c. There is a statistician on the author team and state which author.

If you cannot state either "b" or "c" above have this done and submit your paper at a later time.

d. The author(s) affirm that the methods used in the data analyses are suitably applied to their data within their study design and context, and the statistical findings have been implemented and interpreted correctly.

e. The author(s) agrees to take responsibility for ensuring that the choice of statistical approach is appropriate and is conducted and interpreted correctly as a condition to submit to the Journal.

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The Journal uses a double-blind peer review process. ensure that all identifying information such as author names and affiliations, acknowledgements or explicit mentions of author institution in the text are on the title page and not in the main text file. **It is not possible to anonymize trial registration entries. Reviewers will be able to view who conducted the trial when making essential checks of the registration entry.**

For all article types except Brief Reports, Commentary, Letter to the Editor, and Editorial the main text file to include the following information and/or headers:

Repeat the *brief informative* ***title*** (maximum 20 words) you included on the title page here.

Abstract: The abstract format for all article types is structured, except these article types do not include abstracts: Brief Report, Commentary, Letter to the Editor, and Editorial.

Structured Abstract Format:

a. 300 words maximum.
b. No abbreviations.
c. Do not report p values, confidence intervals and other statistical parameters.

INCLUDE THE FOLLOWING HEADERS IN ABSTRACTS:

Aim(s) (of the paper, simply state **'To...'**)

Design

Keywords (You will be able to choose keywords when you begin the submission process and you can select up to ten).

Methods

Data Sources (Include search dates) ****for reviews only***

Results

Conclusion

Implications for the profession and/or patient care

Impact (Addressing:)

- What problem did the study address?
- What were the main findings?
- Where and on whom will the research have an impact?

Reporting Method: State here that you have adhered to relevant EQUATOR guidelines and name the reporting method.

Patient or Public Contribution: Include a paragraph that details how patients, service users, caregivers or members of the public were involved in your study. This may be the design or conduct of the study, analysis or interpretation of the data, or in the preparation of the manuscript.

OR

Include a statement at the end of the abstract titled "No Patient or Public Contribution". Your paper will be unsubmitted and returned to you if this section is not included.

What does this paper contribute to the wider global clinical community?: Include one to three bullet points.

Trial and Protocol Registration: Include the following here for papers that require **trial and protocol registration**:

- Include the name of the name of the trial register, the clinical trial registration number, and a link to the trial at the registration website.
- If there is a protocol that does not require registration, it must still be made accessible at: Open Science Framework (https://osf.io/) " or "Figshare (https://figshare.com/). Include the name of the website, the protocol number, and a link to the registration site.
- If the trial is not registered, or was registered retrospectively, explain the reasons why.

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Find your **ARTICLE TYPE** below and use the relevant headings below in your main text file:

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1. Introduction
2. Background
3. The Study

- Aim(s), Objective, Research Question/Hypotheses
- Technical Terminology Used to Describe the Aim(s) (if any)
- Primary, Secondary, or Other Objectives (if applicable)

4. Methods/Methodology

- Design
- Study Setting and Sampling (including if appropriate justification of sample size and power)
- Inclusion and/or Exclusion Criteria
- Study interventions (if any)
- Fidelity of intervention (if any)

- Instrument with Validity and Reliability/ Data source
- Data collection Data Analysis
- Ethical Considerations

5. Results

- Characteristics of the sample

6. Discussion

- Strength and Limitations of the Work
- Recommendations for Further Research
- Implications for policy and practice

7. Conclusion

Appendix I: **Research Advertisement**

Appendix J: Documentation of Research Ethics Committee Approval

UNIVERSITY OF HULL

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w: www.hull.ac.uk

PRIVATE AND CONFIDENTIAL
Lydia Tunstall
Faculty of Health Sciences
University of Hull
Via email

Wednesday 12th July 2023

Dear Lydia,

FHS 22-23.87 – Predictors and moderators of submissive compassion in healthcare: Implications for the NHS

Thank you for your responses to the points raised by the Faculty of Health Sciences Research Ethics Committee.

Given the information you have provided I confirm approval by Chair's action.

Please refer to the Research Ethics Committee web page for reporting requirements in the event of any amendments to your study.

Should an Adverse Event need to be reported, please complete the Adverse Event Form and send it to the Research Ethics Committee FHS-ethicssubmissions@hull.ac.uk within 15 days of the Chief Investigator becoming aware of the event.

I wish you every success with your study.

Yours sincerely

Maureen Twiddy

Dr Maureen Twiddy
Chair, FHS Research Ethics Committee

UNIVERSITY OF HULL

Maureen Twiddy | Senior Lecturer in Applied Health Research Methods | Faculty of Health Sciences
University of Hull
Hull, HU6 7RX, UK
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Maureen.Twiddy@hyms.ac.uk | 01482 463336
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Appendix K: Documentation of sponsorship approval

UNIVERSITY OF HULL

Professor Simon Green
Interim Pro-Vice-Chancellor (Research & Enterprise)
University of Hull
Hull, HU6 7RX
United Kingdom
T: +44 (0)1482 466732 | **E:** s.t.green@hull.ac.uk
w: www.hull.ac.uk

Date: 30th August 2023

Lydia Tunstall
University of Hull

Dear Lydia,

Project Title: Predictors and moderators of submissive compassion in healthcare: Implications for the NHS
RS202

I am writing to confirm that the University of Hull has agreed to act as sponsor, subject to approval being granted in accordance with the Department of Health Research Governance Framework for the project: Predictors and moderators of submissive compassion in healthcare: Implications for the NHS.

Yours sincerely,

Professor Simon Green
Interim Pro-Vice-Chancellor (Research & Enterprise)
(Chair of University Research Committee)

cc Dean
Research Governance

Appendix L: Documentation of Health Research Authority Approval

Ymchwil Iechyd a Gofal Cymru
Health and Care Research Wales

NHS
Health Research Authority

Miss Lydia Tunstall
Aire Building, University of Hull
Cottingham Road, Hull
HU6 7RX

Email: approvals@hra.nhs.uk
HCRW.approvals@wales.nhs.uk

23 October 2023

Dear Miss Tunstall

HRA and Health and Care Research Wales (HCRW) Approval Letter

Study title:	**Predictors and moderators of submissive compassion in healthcare: Implications for the NHS**
IRAS project ID:	**325666**
Protocol number:	**RS202**
HRA reference:	**23/HRA/3932**
Sponsor	**University of Hull**

I am pleased to confirm that **HRA and Health and Care Research Wales (HCRW) Approval** has been given for the above referenced study, on the basis described in the application form, protocol, supporting documentation and any clarifications received. You should not expect to receive anything further relating to this application.

Please now work with participating NHS organisations to confirm capacity and capability, in line with the instructions provided in the "Information to support study set up" section towards the end of this letter.

How should I work with participating NHS/HSC organisations in Northern Ireland and Scotland?
HRA and HCRW Approval does not apply to NHS/HSC organisations within Northern Ireland and Scotland.

If you indicated in your IRAS form that you do have participating organisations in either of these devolved administrations, the final document set and the study wide governance report (including this letter) have been sent to the coordinating centre of each participating nation. The relevant national coordinating function/s will contact you as appropriate.

Please see IRAS Help for information on working with NHS/HSC organisations in Northern Ireland and Scotland.

Appendix M: Documentation of ethics amendment approval

UNIVERSITY OF HULL

University of Hull
Hull, HU6 7RX
United Kingdom
T: +44 (0)1482 463336 | **E:** Maureen.Twiddy@hyms.ac.uk
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Lydia Tunstall
Faculty of Health Sciences
University of Hull
Via email

Friday 9th February 2024

Dear Lydia,

REF FHS 22-23.87 - Predictors and moderators of submissive compassion in healthcare: Implications for the NHS

Thank you for your notice of amendment. Given the information you have provided I confirm approval by Chair's action.

Please note that this approval only provides confirmation that the Research Ethics Committee considers your project ethical. You will still need to obtain the Dean of Faculty's approval before the study is rolled out to FHS staff.

The approval is valid until 24th September 2024. If you require an extension to this end date or in the event that any amendments are required to your study, please email FHS-ethicssubmissions@hull.ac.uk and the relevant paperwork will be provided.

Should an Adverse Event need to be reported, please complete the Adverse Event Form and send it to the Research Ethics Committee FHS-ethicssubmissions@hull.ac.uk within 15 days of the Chief Investigator becoming aware of the event.

I wish you every success with your study.

Yours sincerely

Maureen Twiddy

Dr Maureen Twiddy
Chair, FHS Research Ethics Committee

UNIVERSITY OF HULL

Maureen Twiddy | Senior Lecturer in Applied Health Research Methods | Faculty of Health Sciences
University of Hull
Hull, HU6 7RX, UK

Appendix N: **Participant Information Sheet**

Version 1.1 14/09/2023

Thank you for considering taking part in this research.

I would like to invite you to participate in a research project which forms part of my Clinical Psychology Doctorate research. Before you decide whether you want to take part, it is important for you to understand why the research is being done and what your participation will involve. Please take time to read the following information carefully and discuss it with others if you wish.

What is the purpose of the study?

The purpose of the study is to explore what may influence submissive compassion in the NHS. Submissive compassion has been defined as "caring that functions for self-advancing or protective needs, such as wanting to please others or be liked". Research suggests that submissive compassion may relate to the emotions we experience at work, otherwise known as the emotional climate. It may also relate to a concept called moral injury, where the actions we have to take conflict with our own values.

The study aims to investigate the extent to which emotional climate and moral injury contribute towards submissive compassion. It further aims to investigate the impact of self-compassion and compassion to and from others on this relationship. The NHS is a challenging place to work and it is hoped that this research can contribute towards a better understanding of ways to support NHS staff and cultivate a more compassionate system to work in.

Why have I been invited to take part?

You are being invited to participate in this study because the researcher is looking to recruit people who:

Currently work in the NHS in a role that involves patient contact Age 18+
Can read and understand English.

What will happen if I take part?

If you choose to take part in the study you will be asked to complete a single online survey that takes roughly 15 minutes to complete.

You are able to choose whether or not you would like to take part. Once you have read through this information and agree to take part in the study, you will be asked a series of questions on the following topics: demographic information (age, gender, ethnicity, profession, time spent working in the NHS and whether you hold a managerial role), emotional climate at work, moral injury, self-compassion, compassion from others, compassion to others and submissive compassion. An example question from the self-compassion topic is '*When something painful happens I try to take a balanced view of the situation.'*

All information will remain anonymous. Therefore, **once you have clicked the submit button at the end of the survey, you will not be able to withdraw this information from the study**. However, you will be able to do so up until you click the submit button.

Do I have to take part?

Participation is completely voluntary. You should only take part if you want to and choosing not to take part will not disadvantage you in any way. Once you have read the information sheet, please contact us if you have any questions that will help you to decide whether to participate.

Once you have read through this information and confirmed that you have understood it, you will be asked to read through a consent statement before completing the survey. This statement will ask you to provide your consent and for your anonymised data to be used as part of this research project. You will be unable to complete the survey until you have consented. You are free to leave the survey at any point.

What are the possible risks of taking part?

It is possible that some of the questions in the study may be upsetting for some people as they are related to the emotional climate that you work in, self-compassion, compassion from and to others, submissive compassion and moral injury. Sources of support can be found at the end of this information sheet if needed.

What are the possible benefits of taking part?

We hope that by taking part in this research you, as an NHS professional, will be able to contribute to knowledge that may influence the way in which the NHS supports its staff and creates a compassionate system to work in.

How will we use the information you provide?

We will not collect or ask for any personally identifying information. All participants and their data will remain anonymous throughout the entirety of the research.
All information gathered during the research will be stored and retained for 10 years as consistent with university policy. Anonymous and collated data will be shared with the primary researcher's supervisors and will be written up as part of my Doctorate Degree in Clinical Psychology.

Data may be used in journal articles and conference presentations.

What are your choices about how your information is used?

All questionnaire responses are anonymous and no personal data will be collected. Therefore, once you have submitted the survey it will not be possible to withdraw or change your responses. You can stop being part of the study at any time, without giving a reason, up until you submit the survey.

Should you have any concerns, you can contact the Data Protection Officer at the University of Hull (dataprotection@hull.ac.uk).

Who has reviewed this study?

Research studies are reviewed by an independent group of people, called a Research Ethics Committee, to protect your interests. This study has been reviewed and been given a favourable opinion by the Faculty of Health Sciences Ethics Committee, University of Hull.

The study is sponsored by the University of Hull.

Who should I contact for further information?

If you have any questions or require more information about this study, please contact me using the following contact details:

l.tunstall-2021@hull.ac.uk

What if I have further questions, or if something goes wrong?

If you wish to make a complaint about the conduct of the study, you can contact the University of Hull using the details below for further advice and information:

Dr Philip Molyneux University of Hull Cottingham Road Hull

HU6 7RX

p.molyneux@hull.ac.uk

01482 464094

Alternatively, you can contact Dr Christopher Ince, University Secretary at c.ince@hull.ac.uk

Sources of support

Contact your General Practitioner for further support or signposting of appropriate services in your area. NHS people helpline: text FRONTLINE to 85258 for 24/7 support.

Contact your manager, HR team or occupational health colleagues within your trust.

Samaritans UK Helpline and Webchat (24/7): Contact us 116 123

The NHS has partnered with Headspace, UnMind and Big Health to offer apps free of charge to support NHS staff (https://www.england.nhs.uk/supporting-our-nhs-people/support-now/)

Thank you for reading this information sheet and for considering taking part in this research.

Appendix O: **Consent form**

Version 1.1 14/09/2023

Do you consent to take part?

We are asking if you would like to take part in a research project that explores the factors impacting upon submissive compassion in NHS workplaces. Before you consent to participating in the study, please read the information provided.

If you have any questions or queries before taking part, please contact the researcher, Lydia Tunstall, by email at l.tunstall- 2021@hull.ac.uk.

Please read the following statements and click on the option below to indicate that you are happy to take part in the study.

1. I confirm that I have read the participant information sheet and fully understand what is expected of me.
2. I understand that the questionnaire will include questions on potentially emotional topics, and that although every care has been taken for these questions to be asked in a sensitive manner, they may be upsetting at times.
3. I understand that I do not have to complete the questionnaire and that I am free to stop at any time, for any reason.
4. I understand that once I have submitted my anonymous responses it will not be possible to remove them.
5. I understand that my anonymised responses will be added to other participants' responses and may be published as part of an anonymous data set and written up as a research report, which may be published.

Please click on an option below to indicate whether you wish to take part in the study

**Required*

- ○ I consent to all five statements above and wish to take part in the current study.
- ○ I do not consent to all five statements above and do not wish to take part in the current study (selecting this option will end the survey now)

Appendix P: **Eligibility criteria**

Version 1.1 14/09/2023

Are you eligible to take part?

Before you continue, please read and confirm the following statements:

1. I am 18 years or older

2. I am able to read and understand English

3. I currently work in the NHS in a role that involves patient contact

4. I am **not** currently in a pre-qualification role in the NHS or enrolled on a training programme*

**(This includes medical students, student nurses, student paramedics, trainee clinical psychologists, trainee physiotherapists and other pre-qualification positions, or those enrolled in degree apprenticeships, accelerated programmes, traineeships, cadet schemes or other NHS training programmes)*

Please indicate your eligibility

- Yes, I confirm to the above statements and am eligible to take part
- No, I do not confirm to the statements above

Appendix Q: Demographic Questions

Version 1.1 14/09/2023

Tell us about yourself...

What is your age in years?

What gender do you identify as?

- Female
- Male
- Prefer not to say
- Prefer to self-describe

If you selected *Prefer to self-describe*, please specify:

Please indicate your ethnicity

- Asian: Bangladeshi
- Asian: British
- Asian: Chinese
- Asian: Indian
- Asian: Pakistani
- Asian: other Asian background
- Black: African
- Black: British
- Black: Carribbean
- Black: other Black background
- White: English, Welsh, Scottish, Northern Irish or British
- White: Irish
- White: Gypsy or Irish Traveller
- White: Roma
- White: other White background
- Mixed ethnic background: White and Black Caribbean
- Mixed ethnic background: White and Black African
- Mixed ethnic background: White and Asian
- Other mixed ethnic background
- Prefer not to say
- Other

If you selected Other, please specify:

Please indicate your profession

- Allied Health Professional
- Ambulance Service Team
- Dental Team
- Doctor
- Estates and facilities
- Health Informatics
- Healthcare Science
- Healthcare Support Worker
- Management
- Medical Associate Professions
- Midwifery
- Nursing
- Pharmacy
- Psychological Professions
- Public Health
- Wider Healthcare Team*
- Prefer not to say
- Other

**Wider healthcare team includes administration staff, clinical support staff and corporate services, for example, optometrists, phlebotomists, social prescribers, and social workers, among others.*

If you selected Other, please specify:

How long have you been working in the NHS? (in years)

If you are a line manager, how many people do you manage?

Appendix R: Supporting information for participants who were not eligible to participate

Version 1.1 14/09/2023

Thank you for considering to take part in this study.

Unfortunately, you are not eligible to take part.

We are looking for participants who meet the following criteria:

- Age 18+
- Are able to read and understand English
- Currently work in the NHS in a role that involves patient contact

Unfortunately, individuals who are in pre-qualification roles or enrolled on a training course are not able to participate.

If you have any questions, please contact the research, Lydia Tunstall, by email at l.tunstall-2021@hull.ac.uk

Should you be affected by the topics raised in this questionnaire, please contact your GP, HR team or occupational health for support. Additionally, the following resources and information may be of assistance:

- The Compassionate Mind organisation
- Mind for better mental health

Appendix S: **Supporting information**

Version 1.1 14/09/2023

Thank you for taking part in this study, we appreciate your time and efforts.

It is important to note that experiences of emotional distress, and feelings of anxiety, guilt or shame can be common experiences for busy healthcare professionals and are normal experiences for individuals working in potentially threatening environments.

Should you be affected by the topics raised in this questionnaire, please contact you GP, HR team or occupational health for support. Additionally, the following resources and information may be of assistance:

- The Compassionate Mind organisation
- Mind for better mental health

Support specifically for NHS staff

- NHS People Helpline: text FRONTLINE to 85258 for 24/7 support
- Access support through the NHS staff mental health and wellbeing hubs
- The NHS has partnered with Headspace, UnMind and Big Health to offer apps free of charge to support NHS staff

Appendix T: Emotional Climate in Organisations Scale

Emotional Climate in Organizations Scale

(Albuquerque, I., Matos, M., Galhardo, A., Cunha, M., Palmeira, L., Lima, M., Gilbert, P., & Irons, C. 2018)

PART 1

Everybody experiences different emotions in relation to the place where they work or study. There is nothing wrong in having these emotions.

This questionnaire assesses the frequency in which you feel each of these emotions in the place where you work or study. Please mark the response that best describes the way you felt in your place of work/study in the last two weeks. There are no right or wrong answers, the important is to respond in an authentic and honest way. This questionnaire is anonymous and confidential.

Please ***circle*** the number that best describes the way you feel in the place where you work/study.

In the organization where I work I feel...

		Never	Seldom	Sometimes	Often	Always
1.	**irritated T**	0	1	2	3	4
2.	**content S**	0	1	2	3	4
3.	**calm S**	0	1	2	3	4
4.	**connected S**	0	1	2	3	4
5.	**lively D**	0	1	2	3	4
6.	**excited D**	0	1	2	3	4
7.	**nervous T**	0	1	2	3	4
8.	**active D**	0	1	2	3	4
9.	**relaxed S**	0	1	2	3	4
10.	**frustrated T**	0	1	2	3	4
11.	**safe S**	0	1	2	3	4
12.	**inadequate T**	0	1	2	3	4
13.	**enthusiastic D**	0	1	2	3	4
14.	**energetic D**	0	1	2	3	4
15.	**anxious T**	0	1	2	3	4

Please check that you answered all the questions. Thank you.

Appendix U: Submissive Compassion Scale

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SUBMISSIVE COMPASSION SCALE

Instructions

The statements below relate to ways in which one thinks or feels about being compassionate or caring towards other people. We know that there are many reasons for being caring such as: being moved by others distress, enjoying being helpful, to avoid conflicts or to be liked. We are interested in these different reasons. So read each reason for being caring and consider how important that reason is for you, and **how 'like you' it would be to act for that reason**. Please circle the number which best describes it, using the scale below.

0	1	2	3	4
Not at all like me	**A little bit like me**	**Moderately like me**	**Quite a bit like me**	**Extremely like me**

1.	When I am caring for others, I hope they will see me as a nice person.	0 1 2 3 4
1.	I worry that if I am not caring enough, people will reject me.	0 1 2 3 4
2.	I try to do what others want so I won't be alone.	0 1 2 3 4
3.	I try to help people as much as I can so that they appreciate me.	0 1 2 3 4
4.	I make an effort to always be there for others so that they think I'm important in their lives.	0 1 2 3 4
5.	I agree to help but can regret the demands on me later	0 1 2 3 4
6.	I try to be caring and helpful to avoid arguments and conflicts	0 1 2 3 4
7.	I pay attention to others so that they see me as caring person.	0 1 2 3 4
8.	I try to show that I care for other people's feelings so that they see me as thoughtful and sensitive.	0 1 2 3 4
9.	I always put the needs of others on top of mine, because that's what it takes to be loved.	0 1 2 3 4

SCORING

A total score for the submissive compassion scale is calculated by adding all the individual item scores. Total scores can range from 0 to 40.

DESCRIPTION

Submissive Compassion Scale

This scale was developed by Catarino, Gilbert, McEwan, & Baião (2015). This 10-item scale was developed for the purpose of analysing to what extent one's kind and compassionate actions are related to submissive behaviour, i.e. to the desire of appearing likeable and feel appreciated, hence reducing the fear of rejection. The items are rated on a 5-point Likert scale, ranging from 0 ("Not at all like me") to 4 ("Extremely like me"). The scale had good internal consistency with a Cronbach's alpha of .89.

REFERENCE

Catarino, F., Gilbert, P., McEwan, K., & Baião, R. (2014). Compassion motivations: Distinguishing submissive compassion from genuine compassion and its association with depression, anxiety and stress. *Journal of Social and Clinical Psychology*, *33*(5), 399-412. doi: 10.1521/jscp.2014.33.5.399

Appendix V: **Moral Injury Symptom Scale for Healthcare Professionals**

Appendix

Moral Injury Symptom Scale: Healthcare Professionals Version (MISS-HF)

*The following questions **may be difficult**, but they are common experiences of busy healthcare professionals*. They concern your experiences on your job as a health professional and **how you are feeling now**. Try to answer every question. Circle a single number between 1 (strongly disagree) and 10 (strongly agree) to indicate how much you personally agree or disagree with each statement.

1 **I feel betrayed by other health professionals whom I once trusted.**

1	2	3	4	5	6	7	8	9	10
Strongly disagree		Mildly disagree		Neutral		Mildly agree		Strongly agree	

2 **I feel guilt over failing to save someone from being seriously injured or dying.**

1	2	3	4	5	6	7	8	9	10
Strongly disagree		Mildly disagree		Neutral		Mildly agree		Strongly agree	

3 **I feel ashamed about what I've done or not done when providing care to my patients.**

1	2	3	4	5	6	7	8	9	10
Strongly disagree		Mildly disagree		Neutral		Mildly agree		Strongly agree	

4 **I am troubled by having acted in ways that violated my own morals or values.**

	2	3	4	5	6	7	8	9	10
Strongly disagree		Mildly disagree		Neutral		Mildly agree		Strongly agree	

5 **Most people with whom I work as a health professional are trustworthy.**

1	2	3	4	5	6	7	8	9	10
Strongly disagree		Mildly disagree		Neutral		Mildly agree		Strongly agree	

6 **I have a good sense of what makes my life meaningful as a health professional.**

1	2	3	4	5	6	7	8	9	10
Strongly disagree		Mildly disagree		Neutral		Mildly agree		Strongly agree	

7 **I have forgiven myself for what's happened to me or to others whom I have cared for.**

1	2	3	4	5	6	7	8	9	10
Strongly disagree		Mildly disagree		Neutral		Mildly agree		Strongly agree	

8 **All in all, I am inclined to feel that I'm a failure in my work as a health professional.**

1	2	3	4	5	6	7	8	9	10
Strongly disagree		Mildly disagree		Neutral		Mildly agree		Strongly agree	

9 **I sometimes feel God is punishing me for what I've done or not done while caring for patients.**

1	2	3	4	5	6	7	8	9	10
Strongly disagree		Mildly disagree		Neutral		Mildly agree		Strongly agree	

10 **Compared to before I went through these experiences, my religious/spiritual faith has strengthened.**

1	2	3	4	5	6	7	8	9	10
Strongly disagree		Mildly disagree		Neutral		Mildly agree		Strongly agree	

11 Do the feelings you indicated above cause you significant distress or impair your ability to function in relationships, at work, or other areas of life important to you? In other words, if you indicated any problems above, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

☐ Not at all	☐ Mild	☐ Moderate	☐ Very much	☐ Extremely

Appendix W: CEAS Self-Compassion sub-scale

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THE COMPASSIONATE ENGAGEMENT AND ACTION SCALES

Self-compassion

When things go wrong for us and we become distressed by setbacks, failures, disappointments or losses, we may cope with these in different ways. We are interested in the degree to which people can **be compassionate with themselves**. We define compassion as "a sensitivity to suffering in self and others with a commitment to try to alleviate and prevent it." This means there are two aspects to compassion. The *first* is the ability to be motivated to engage with things/feelings that are difficult as opposed to trying to avoid or supress them. The *second* aspect of compassion is the ability to focus on what is helpful to us. Just like a doctor with his/her patient. The first is to be motivated and able to pay attention to the pain and (learn how to) make sense of it. The second is to be able to take the action that will be helpful. Below is a series of questions that ask you about these two aspects of compassion. Therefore read each statement carefully and think about how it applies to you if you become distressed. Please rate the items using the following rating scale:

Never **Always**
1 2 3 4 5 6 7 8 9 10

Section 1 – These are questions that ask you about how motivated you are, and able to engage with distress when you experience it. So:

When I'm distressed or upset by things…

1. I am *motivated* to engage and work with my distress when it arises.
Never **Always**
1 2 3 4 5 6 7 8 9 10

2. I *notice,* and am *sensitive* to my distressed feelings when they arise in me.
Never **Always**
1 2 3 4 5 6 7 8 9 10

(r)3. I avoid thinking about my distress and try to distract myself and put it out of my mind.
Never **Always**
1 2 3 4 5 6 7 8 9 10

4. I am *emotionally moved* by my distressed feelings or situations.
Never **Always**
1 2 3 4 5 6 7 8 9 10

5. I *tolerate* the various feelings that are part of my distress.
Never **Always**
1 2 3 4 5 6 7 8 9 10

1

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6. I *reflect on* and *make sense* of my feelings of distress.

Never **Always**

1 2 3 4 5 6 7 8 9 10

(r)7 I do not tolerate being distressed.

Never **Always**

1 2 3 4 5 6 7 8 9 10

8. I am *accepting, non-critical and non-judgemental* of my feelings of distress.

Never **Always**

1 2 3 4 5 6 7 8 9 10

Section 2 – These questions relate to how you actively cope in compassionate ways with emotions, thoughts and situations that distress you. So:

When I'm distressed or upset by things…

1. I direct my *attention* to what is likely to be helpful to me.

Never **Always**

1 2 3 4 5 6 7 8 9 10

2. I *think* about and come up with helpful ways to cope with my distress.

Never **Always**

1 2 3 4 5 6 7 8 9 10

(r)3. I don't know how to help myself.

Never **Always**

1 2 3 4 5 6 7 8 9 10

4. I take the *actions* and do the things that will be helpful to me.

Never **Always**

1 2 3 4 5 6 7 8 9 10

5. I create inner feelings of *support, helpfulness and encouragement*.

Never **Always**

1 2 3 4 5 6 7 8 9 10

NOTE FOR USERS: REVERSE ITEMS (r) ARE NOT INCLUDED IN THE SCORING

Appendix X: CEAS Compassion to others sub-scale

Compassion to others

When things go wrong for other people and they become distressed by setbacks, failures, disappointments or losses, we may cope with their distress in different ways. We are interested in the degree to which people can be **compassionate to others**. We define compassion as "a sensitivity to suffering in self and others with a commitment to try to alleviate and prevent it." This means there are two aspects to compassion. The *first* is the ability to be motivated to engage with things/feelings that are difficult as opposed to trying to avoid or supress them. The *second* aspect of compassion is the ability to focus on what is helpful. Just like a doctor with his/her patient. The first is to be motivated and able to pay attention to the pain and (learn how to) make sense of it. The second is to be able to take the action that will be helpful. Below is a series of questions that ask you about these two aspects of compassion. Therefore read each statement carefully and think about how it applies to you when **people in your life** become distressed. Please rate the items using the following rating scale:

Never **Always**
1 2 3 4 5 6 7 8 9 10

Section 1 – These are questions that ask you about how motivated you are, and able to engage with other people's distress when they are experiencing it. So:

When others are distressed or upset by things…

1. I am *motivated* to engage and work with other peoples' distress when it arises.
Never **Always**
1 2 3 4 5 6 7 8 9 10

2. I *notice* and *am sensitive* to distress in others when it arises.
Never **Always**
1 2 3 4 5 6 7 8 9 10

(r)3. I avoid thinking about other peoples' distress, try to distract myself and put it out of my mind.
Never **Always**
1 2 3 4 5 6 7 8 9 10

4. I am *emotionally moved* by expressions of distress in others.
Never **Always**
1 2 3 4 5 6 7 8 9 10

5. I *tolerate* the various feelings that are part of other people's distress.
Never **Always**
1 2 3 4 5 6 7 8 9 10

3

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6. I *reflect on* and *make sense* of other people's distress.

Never **Always**

1 2 3 4 5 6 7 8 9 10

(r)7 I do not tolerate other peoples' distress.

Never **Always**

1 2 3 4 5 6 7 8 9 10

8. I am *accepting, non-critical and non-judgemental* of others people's distress.

Never **Always**

1 2 3 4 5 6 7 8 9 10

Section 2 – These questions relate to how you actively respond in compassionate ways when other people are distressed. So:

When others are distressed or upset by things…

1. I direct *attention* to what is likely to be helpful to others.

Never **Always**

1 2 3 4 5 6 7 8 9 10

2. I *think about and come up* with helpful ways for them to cope with their distress.

Never **Always**

1 2 3 4 5 6 7 8 9 10

(r)3. I don't know how to help other people when they are distressed.

Never **Always**

1 2 3 4 5 6 7 8 9 10

4. I take the *actions* and *do the things* that will be helpful to others.

Never **Always**

1 2 3 4 5 6 7 8 9 10

5. I express feelings of *support, helpfulness and encouragement* to others.

Never **Always**

1 2 3 4 5 6 7 8 9 10

NOTE FOR USERS: REVERSE ITEMS (r) ARE NOT INCLUDED IN THE SCORING

Appendix Y: Fears of Compassion from others sub-scale

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Scale 2: Responding to the expression of compassion from others

1.	Wanting others to be kind to oneself is a weakness	0	1	2	3	4
2.	I fear that when I need people to be kind and understanding they won't be	0	1	2	3	4
3.	I'm fearful of becoming dependent on the care from others because they might not always be available or willing to give it	0	1	2	3	4
4.	I often wonder whether displays of warmth and kindness from others are genuine	0	1	2	3	4
5.	Feelings of kindness from others are somehow frightening	0	1	2	3	4
6.	When people are kind and compassionate towards me I feel anxious or embarrassed	0	1	2	3	4
7.	If people are friendly and kind I worry they will find out something bad about me that will change their mind	0	1	2	3	4
8.	I worry that people are only kind and compassionate if they want something from me	0	1	2	3	4
9.	When people are kind and compassionate towards me I feel empty and sad	0	1	2	3	4
10.	If people are kind I feel they are getting too close	0	1	2	3	4
11.	Even though other people are kind to me, I have rarely felt warmth from my relationships with others	0	1	2	3	4
12.	I try to keep my distance from others even if I know they are kind	0	1	2	3	4
13.	If I think someone is being kind and caring towards me, I 'put up a barrier'	0	1	2	3	4

2

Appendix Z: SPSS Output

Table Z1. Descriptive statistics, skew and kurtosis values for each variable in the analysis.

Descriptive Statistics

	N	Range	Minimum	Maximum	Mean		Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
age	403	52	20	72	39.10	.634	12.719	161.773	.443	.122	-.988	.243
NHStime	406	48.00	.00	48.00	12.6565	.57607	11.60740	134.732	.933	.121	-.146	.242
Threat	406	18	2	20	10.84	.159	3.199	10.235	-.102	.121	-.381	.242
Drive	406	20	0	20	11.32	.177	3.566	12.715	-.244	.121	-.442	.242
Soothe	406	19	0	19	10.90	.164	3.304	10.919	-.275	.121	-.272	.242
SCS	406	39	1	40	20.72	.442	8.904	79.288	-.166	.121	-.708	.242
MISSHP	406	80.0000000	10.0000000	90.0000000	36.3957307	.706908776	14.2438172	202.886	.663	.121	.336	.242
SelfCom	406	90	10	100	63.93	.726	14.621	213.781	-.215	.121	-.087	.242
CompassiontoOthers	406	90	10	100	80.29	.643	12.958	167.905	-1.263	.121	3.245	.242
FearofC	406	52	0	52	15.10	.553	11.149	124.305	.763	.121	-.127	.242
Valid N (listwise)	403											

Table Z2. Tests of normality for all variables.

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
SCS	.057	406	.003	.983	406	<.001
Threat	.088	406	<.001	.986	406	<.001
Drive	.091	406	<.001	.983	406	<.001
Soothe	.077	406	<.001	.983	406	<.001
MISSHP	.068	406	<.001	.969	406	<.001
SelfCom	.050	406	.016	.994	406	.102
CompassiontoOthers	.075	406	<.001	.927	406	<.001
FearofC	.104	406	<.001	.937	406	<.001

a. Lilliefors Significance Correction

Table Z3. Variance Inflation Factor for each variable

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Correlations			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	30.420	2.018		15.071	<.001					
	age	-.161	.034	-.230	-4.757	<.001	-.236	-.231	-.230	.997	1.003
	gender	-3.069	1.390	-.107	-2.207	.028	-.119	-.110	-.107	.997	1.003
2	(Constant)	4.303	4.709		.914	.361					
	age	-.144	.032	-.206	-4.561	<.001	-.236	-.224	-.203	.976	1.024
	gender	-2.341	1.311	-.081	-1.785	.075	-.119	-.090	-.080	.955	1.047
	ECOSThreat	.634	.169	.228	3.751	<.001	.227	.186	.167	.536	1.866
	ECOSDrive	.253	.142	.102	1.779	.076	.011	.089	.079	.609	1.643
	ECOSSoothe	.574	.182	.214	3.160	.002	-.036	.157	.141	.434	2.302
	MISSHP	.078	.037	.125	2.121	.035	.212	.106	.095	.570	1.754
	SelfCompassion	-.049	.034	-.080	-1.423	.155	-.140	-.072	-.063	.629	1.589
	CompassiontoOthers	.079	.034	.115	2.330	.020	.103	.117	.104	.811	1.233
	FearofCompassion	.172	.043	.217	4.001	<.001	.303	.198	.178	.677	1.478

a. Dependent Variable: SCS

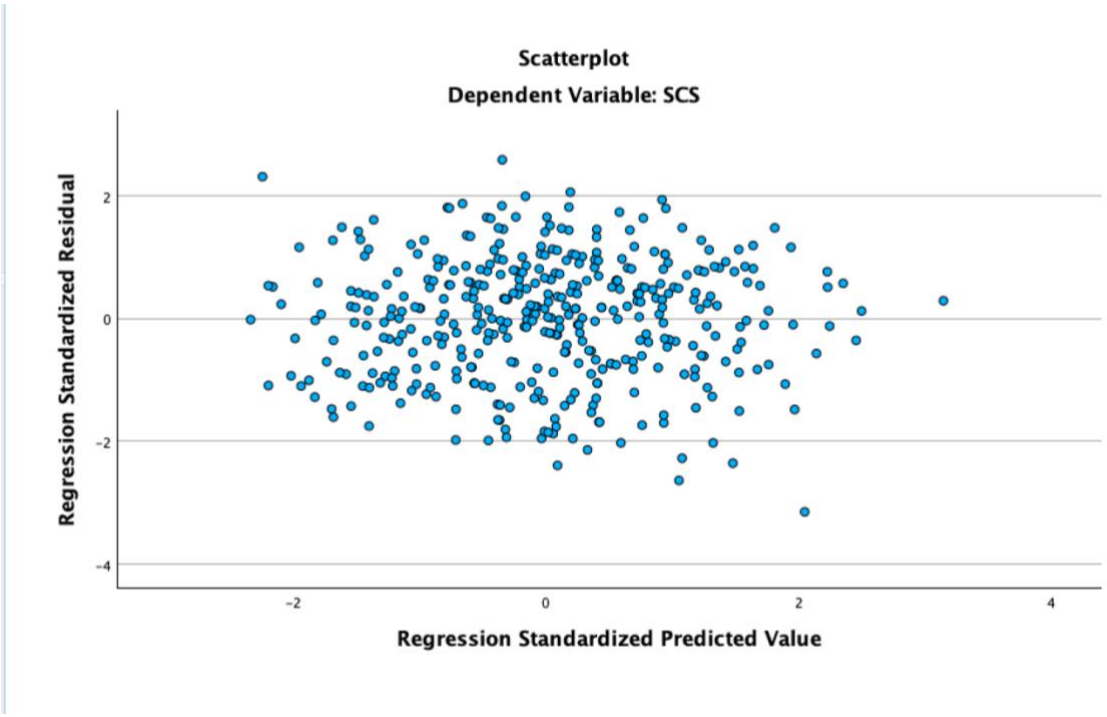

Figure Z1. Scatterplot for dependent variable to determine heteroscedasticity.

Table Z4. Analysis of variance used to measure the fit of the model for submissive compassion scores.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2127.157	2	1063.578	14.367	<.001[b]
	Residual	29612.486	400	74.031		
	Total	31739.643	402			
2	Regression	6944.153	9	771.573	12.229	<.001[c]
	Residual	24795.490	393	63.093		
	Total	31739.643	402			

a. Dependent Variable: SCS

b. Predictors: (Constant), gender, age

c. Predictors: (Constant), gender, age, ECOSDrive, FearofCompassion, CompassiontoOthers, ECOSThreat, SelfCompassion, MISSHP, ECOSSoothe

Table Z5. Bootstrap coefficient values for the multiple regression.

Bootstrap for Coefficients

Model		B	Bootstrap[a] Bias	Std. Error	Sig. (2-tailed)	95% Confidence Interval Lower	Upper
1	(Constant)	30.420	-.007	1.985	<.001	26.410	34.283
	age	-.161	.000	.032	<.001	-.226	-.098
	gender	-3.069	.006	1.429	.027	-5.825	-.273
2	(Constant)	4.303	.017	4.849	.364	-4.980	14.202
	age	-.144	-.001	.031	<.001	-.206	-.082
	gender	-2.341	.032	1.313	.083	-4.905	.305
	ECOSThreat	.634	.000	.169	<.001	.298	.964
	ECOSDrive	.253	-.006	.144	.078	-.049	.528
	ECOSSoothe	.574	.004	.178	.002	.237	.923
	MISSHP	.078	-.001	.036	.031	.004	.146
	SelfCompassion	-.049	-.002	.038	.201	-.124	.027
	CompassiontoOthers	.079	.002	.042	.062	.000	.166
	FearofCompassion	.172	.001	.044	<.001	.087	.261

a. Unless otherwise noted, bootstrap results are based on 2000 bootstrap samples

Table Z6. PROCESS moderation analysis. Associations of threat emotions and submissive compassion, moderated by self-compassion.

Variables	**Beta**	**SE**	***t***	**p-*value***	**R-Squared Change**
Prediction of threat emotions					
Age	-0.147	0.033	-4.383	0.001	
Gender	-2.680	1.367	-1.962	0.051	
Threat emotions	0.501	0.137	3.669	0.001	
Self-Compassion	-0.460	0.030	-1.545	0.123	
Threat emotions x Self-Compassion	-0.002	0.009	-0.287	0.774	0.001

Table Z7. PROCESS moderation analysis. Associations of moral injury and submissive compassion, moderated by self-compassion.

Variables	**Beta**	**SE**	***t***	**p-*value***	**R-Squared Change**
Prediction of moral injury					
Age	-0.153	0.033	-4.579	0.001	
Gender	-2.823	1.367	-2.065	0.040	
Moral injury	0.108	0.032	3.385	0.001	
Self-Compassion	-0.035	0.031	-1.116	0.265	
Moral injury x Self-Compassion	-0.001	0.002	-0.392	0.696	0.001

Table Z8. PROCESS moderation analysis. Associations of threat emotions and submissive compassion, moderated by fear of compassion from others (FOCOS).

Variables	**Beta**	**SE**	***t***	**p-*value***	**R-Squared Change**
Prediction of threat emotions					
Age	-0.134	0.033	-4.063	0.001	
Gender	-3.135	1.334	-2.350	0.019	
Threat emotions	0.338	0.136	2.489	0.013	
FOCOS	0.196	0.039	5.011	0.001	
Threat emotions x FOCOS	0.001	0.011	-0.003	0.998	0.001

Table Z9. PROCESS moderation analysis. Associations of moral injury and submissive compassion, moderated by FOCOS.

Variables	**Beta**	**SE**	***t***	**p-*value***	**R-Squared Change**
Prediction of threat emotions					
Age	-0.140	0.033	-4.281	0.001	
Gender	-3.249	1.335	-2.435	0.015	
Moral injury	0.049	0.033	1.477	0.141	
FOCOS	0.194	0.042	4.640	0.001	
Moral injury x FOCOS	0.001	0..002	0.486	0.627	0.001