Volume One: Research Component

THE RELATIONSHIP BETWEEN MORAL DISTRESS AND BURNOUT IN HEALTHCARE PROFESSIONALS: A META-ANALYSIS

AND

PHYSICAL RESTRAINT AND THE THERAPEUTIC RELATIONSHIP: A NURSE PERSPECTIVE

by

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Thesis Overview

This thesis was submitted in partial fulfilment of the requirements for the degree of Doctor of Clinical Psychology at the University of Birmingham. This thesis is presented in two volumes: a research component (Volume One) and a clinical component (Volume Two).

Volume One

Volume One presents three research papers. The first paper is a meta-analysis of the relationship between moral distress and burnout in healthcare professionals. The second paper consist of a research paper which utilises Interpretative Phenomenological Analysis (IPA) to explore how nursing staff working in psychiatric intensive care units experience the therapeutic relationship in the context of using physical restraint. The final paper is a public dissemination document which summarises the literature review and research paper.

Volume Two

Volume Two consists of five clinical practice reports (CPRs) completed over the course of the training. CPR One presents a case formulation from a cognitive behavioural and psychodynamic perspective. CPR Two is a service evaluation, which investigates the needs of young adults transitioning from child services to the local adult Community Learning Disability Team. CPR Three consists of a single-case experimental design to evaluate the effectiveness of a cognitive-behavioural intervention for a 35-year-old male experiencing health anxiety. CPR Four presents a case study of a 13-year-old girl experiencing intrusive thoughts and compulsions. Finally, an abstract of an oral case presentation (CPR Five) is included in this thesis which describes the case of a 71-year-old female experiencing anxiety and low mood.

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LITERATURE REVIEW

The Relationship between Moral Distress and Burnout in Healthcare Professionals: A Meta-Analysis

Abstract

Background: Healthcare professionals experience a variety of types of psychological distress including burnout and moral distress. In recent years there has been growing interest in the relationship between burnout and moral distress in healthcare professionals, with research studies and reviews drawing conclusions about this relationship. This review is the first meta-analysis exploring the relationship between burnout and moral distress in healthcare professionals.

Methodology: Systematic searches of the literature were completed using five databases. Ten studies reporting correlations between burnout and moral distress in healthcare professionals met the inclusion criteria and were used in this review. Methodological quality was rated against quality criteria adapted from existing frameworks.

Results: The fixed effects model was used to analyse the data due to the small number of studies and high levels of heterogeneity. The results of this meta-analysis indicate that there is a substantial amount of variation in the reported correlations between moral distress and burnout.

Discussion: This analysis suggests that there are confounding or uncontrolled factors, creating a range of disparate effect sizes and therefore conclusions should be drawn with caution. It is important for future research to attempt to homogenise or standardise both the phenomenon being investigated and the methodology used in future research. Recommendations have been made in light of these findings.

1. Introduction

1.1 Burnout

The term ‘burnout’ was first introduced in the scientific literature by Freudenberger (1974) who described it as ‘a state of mental and physical exhaustion’ caused by the workplace placing ‘excessive demands on energy, strength, or resources’. This definition was expanded by Maslach and Jackson (1981) who described burnout as a psychological syndrome involving an emotional reaction to external stressors, particularly in jobs that involve working with people in situations that could be challenging (Maslach, Jackson, & Leiter, 1997). They suggest that burnout involves three core dimensions: emotional exhaustion (to be depleted of emotional and physical resources), depersonalisation (negative and cynical feelings and detachment from the job) and reduced accomplishment (lack of achievement and diminished sense of personal accomplishment) (Maslach, 2001). Maslach and Jackson (1981) developed the ‘Maslach Burnout Inventory’ (MBI) based on this definition, which is referred to as the “gold standard” for measuring burnout (Pantaleoni, Augustine, Sourkes, & Bachrach, 2014) and is currently the most widely used measure of burnout (Halbesleben & Demerouti, 2005; O’Connor, Neff, & Pitman, 2018). This measure has three subscales (emotional exhaustion, depersonalisation, and personal accomplishment) based on the three core dimensions of burnout, which are considered separately and not combined into a total score (Maslach et al., 1997). Although other definitions of burnout have been proposed, the above definition has been the most prominent so far in burnout research (O’Connor et al., 2018), and it is agreed amongst the literature that emotional exhaustion is the core component of burnout (Seidler et al., 2014).

The prevalence of burnout in the general population in Western countries is said to range from 13% to 27% however this is suggested to be higher in healthcare professionals, with prevalence ranging from 30-70% in physicians, between 30-50% in physical health nurses

(Wilkinson, Whittington, Perry, & Eames, 2017) and 40% in mental health professionals (O'Connor et al, 2018).

One important determinant of burnout in healthcare professionals is said to be the work environment and work-related factors. Factors such as excessive workload and work pressures (Garcia-Izquierdo, & Rios-Risquez, 2012), lack of perceived job control such as perceived autonomy and ability to influence decisions (Browning, Ryan, Thomas, Greenberg, & Rolniak, 2007; O'Connor et al., 2018), low job resources (Adriaenssens, De Gucht, & Maes, 2015; Hu, Schaufeli, & Taris, 2017), and a lack of organisational support, colleague support and role clarity (Maslach, & Leiter, 2016; O'Connor et al., 2018). An individual's ability to cope has also been suggested to determine burnout. Individuals who use passive and avoidant, or emotional coping strategies are more likely to experience burnout (Adriaenssens et al., 2015; Shin et al., 2014).

Research suggests that burnout in healthcare professionals is associated with a decrease in mental wellbeing (Hall, Johnson, Watt, Tsipa, & O'Connor, 2016), job turnover, and sickness related absenteeism (Potter et al., 2010), lower job satisfaction (Rheajane, Labrague, & Rosales, 2013), and lower patient satisfaction and quality of care (Panagioti et al., 2018; Salyers et al., 2017). Individual burnout is also reported to negatively affect colleagues by disrupting job tasks, causing personal conflicts, and impacting the functioning of the team (Bakker, LeBlanc, & Schaufeli, 2005; Gonzalez-Morales, Peiro, Rodriguez, & Bliese, 2012).

1.2 Moral Distress

The concept of moral distress was first developed by Jameton (1984), who defined it as the psychological distress arising from a situation where an individual is unable to act in a way that they perceive to be morally right. Moral distress can be caused by institutional or hierarchical constraints such as policies and priorities that conflict with care needs, lack of collegial relationships and communication between colleagues, lack of administrative support, cost constraints and organisational pressure (Hamric, Borchers, & Epstien, 2012). It has also been suggested to be caused by internal constraints such as self-doubt, lack of courage, passive rule-following, identification with patients and believed ineffectiveness of past actions (Hamric et al., 2012; Wilkinson, 1988). Moral distress has been clarified to be different to moral dilemma, moral uncertainty, and moral disengagement (Canadian Nurses Association, 2017).

Since the coining of this term, research investigating moral distress has been undertaken, particularly following the development of the Moral Distress Scale (MDS; Corley, Elswick, Gorman, & Clor, 2001). The MDS was the first questionnaire developed to measure moral distress as defined by Jameton (1984) in critical care nurses. Subsequently, the initial body of research focused on nursing (e.g. Corley, Minick, Elswick, & Jacobs, 2005; Elpern, Covert, & Kleinpell, 2005; Pauly, Varcoe, Storch, & Newton, 2009) and only recently moral distress has been studied in other healthcare professionals (Lamiani, Borghi, & Argentero, 2017).

Since the development of the MDS, a variety of revised versions have been developed and validated in different countries and for nurses in a variety of healthcare settings (Badolamenti, Fida, Biagioli, Caruso, Zaghini, & Sili., 2017; Hamric, & Blackhall, 2007; Lazzarin, Biondi, & Di Mauro, 2012; Ohnishi et al., 2010). Subsequently, Hamric et al., (2012) developed the Moral Distress Scale – Revised (MDS-R) to include more causes (internal and external constraints), to be used for a variety of healthcare professionals and to reflect current practice across settings. The original MDS provided an ‘intensity’ and ‘frequency’ of moral distress score. The authors reported that these scores could not be combined to produce a ‘total’ moral distress score due to the measure not meeting the criteria for uni-dimensionality and reported that a ‘total’ scale score would not be meaningful (Corley et al., 2001). The MDS-R on the other hand does allow for a ‘total’ score to be calculated.

It has been suggested that over time, the definition of moral distress has lost conceptual clarity (McCarthy, & Deady, 2008) and it has been found that different understandings of moral distress have been applied to some nursing studies (Hamric, 2012). A narrative synthesis into moral distress (Morley, Ives, Bradbury-Jones, & Irvine, 2017) concluded that the direct causal relationship between a ‘moral event’ and ‘psychological distress’ are necessary and adequate conditions for moral distress. However, according to Hanna (2004) the most widely accepted definition is still that of Jameton (1984). The definition of Jameton (1984) is used in nursing ethics (Canadian Nurses Association, 2017), and most quantitative research into moral distress utilise measures based upon this definition (MDS, MDS-R, Moral Distress Scale – Psychiatric Nurses [MDS-P; Ohnishi et al., 2010]) (McCarthy, & Deady, 2008).

Research has found that factors contributing to moral distress include controversies in end-of-life care, cost constraints, and poor communication (Dodek et al., 2016; Whitehead et al., 2015), negative ethical climate and being compelled to act in ways that are perceived to not be in the patient’s best interest (Oh, & Gastmans, 2015). It has been reported that moral distress may compromise quality of care, contribute to job dissatisfaction, absenteeism, increased attrition (Spenceley, Witcher, Hagen, Hall, & Kardolus-Wilson, 2015) and burnout (Lamiani et al., 2017).

1.3 Burnout and Moral Distress

Recently, there has been an increased focus on the association between moral distress and burnout in healthcare professionals, and reviews have started to draw conclusions about this relationship. In a systematic review, Lamiani et al. (2017) reported that moral distress was found to be associated with burnout, and in a quantitative review of the literature, Oh and Gastmans (2015) concluded that emotional exhaustion and depersonalisation (two elements of burnout) are significantly related to moral distress. Similar conclusions have been drawn in other reviews (Lerkiatbundit, & Borry, 2019; McAndrew, Leske, & Schroeter, 2018). Conceptual models have also been developed based on this association with the aim of describing the relationship between moral distress and burnout (Dzeng, & Curtis, 2018).

It is particularly important to understand burnout and moral distress in healthcare professionals because of the impact that they can have on the individual, patients and organisation. Due to recent research investigating the relationship between burnout and moral distress, and the conclusions that are being drawn from this research, a meta-analysis was considered timely and appropriate in order to summarise the findings of this quantitative literature.

1.4 Research Questions

This review is the first meta-analytic review of the research into moral distress and burnout.

Research question 1:
What is the evidence for an association between moral distress and levels of emotional exhaustion (EE) in healthcare professionals?

Research question 2:
What is the evidence for an association between moral distress and levels of depersonalisation (DP) in healthcare professionals?

Research question 3:
What is the evidence for an association between moral distress and levels of personal accomplishment (PA) in healthcare professionals?

2. Method

2.1 Identifying Primary Studies

2.1.1 Search of electronic databases.

The guidelines provided by the PRISMA group (Moher, Liberati, Tetzlaff, Altman, & The PRISMA Group, 2009) for conducting meta-analyses and systematic reviews were utilised. A systematic search of the literature was completed in September 2018 using the following online databases: PsychINFO, Embase, OVID Medline, Web of Science (Core Collection) and CINAHL (EBSCO Host). Google Scholar was also used to search for any additional articles, and the reference lists of the identified papers were searched systematically.

The search terms used in the online databases were as follows: 1) moral distress (“moral distress” OR “ethic* distress” OR “ethic* stress” OR “moral stress” OR “moral residue” OR “moral suffer*) AND ("burnout" OR "stress" OR "compassion fatigue" OR "emotional exhaustion" OR "depersonalization" OR "personal accomplishment"). The searches were limited to the English language and peer-reviewed articles.

These search terms were guided by the literature on moral distress and burnout and by previous literature reviews (O’Connor et al., 2018; Oh & Gastmans, 2015). Please see Figure 1 for search strategy and Table 2 for rationale.

2.1.2 Inclusion criteria.

Studies were excluded if they were reviews, meta-analyses, abstracts or used qualitative methodology. Articles were also excluded if they misreported the MBI scores (reporting a ‘total’ burnout score rather than separate scores for emotional exhaustion, depersonalisation and personal accomplishment as instructed by the authors) and if they did not use a 'total' moral distress score. The full inclusion and exclusion criteria are detailed in Table 1.

Table 1

Inclusion and Exclusion Criteria for Search Strategy

Inclusion Criteria	Justification
The study measured moral distress as defined by Jameton (1984) or Corley (2001).	Previous literature reviews have defined moral distress in this way. This definition is the most widely used definition in research (Hanna, 2004), and documented in nursing code of ethics (Canadian Nurses Association, 2017). The quantitative measures of moral distress are based on Jameton's (1984) concept of moral distress.
The study measured a component of burnout based on the definition by Maslach and Jackson (1981).	This is the most widely used definition of burnout. The 'Maslach Burnout Inventory' (MBI) is based on this definition, which is referred to as the "gold standard" for measuring burnout (Pantaleoni et al., 2014) and currently the most widely used measure of burnout (Halbesleben & Demerouti, 2005; O'Connor et al., 2018). The measure yields separate scores for the three subscales: emotional exhaustion, depersonalisation, and personal accomplishment.
Participant Focus The study researches moral distress and burnout in professionals working in healthcare settings who have face to face contact with service users. This can include mental and physical health professionals.	This is to encompass all healthcare professionals. Most recent research does not focus on one healthcare professional. This is also to build upon a previous literature review into moral distress (Lamiano et al., 2017) which included all healthcare professionals.

Inclusion Criteria	Justification
Outcome Data The study reports a Pearson's correlation coefficient between moral distress and burnout, or the statistic reported can be converted into a statistical equivalent.	This is to ensure that the outcome data can be compared between studies and is looking at the correlation between the two variables.
Type of article	
The following article types were excluded: meta-analysis/theoretical papers/ reviews/ commentaries/ clinical guidance/ qualitative studies/ non-outcome focused studies i.e. longitudinal/ association studies/ case studies/ validation of psychometric scales.	The appropriate outcome data is not provided in these articles for this meta-analysis.
Articles were excluded if they were not peer reviewed or if the articles were not full text papers and in the English language.	This is to ensure that the data and information in the studies can be accessed.
Articles were excluded if the correlation was not computed between a 'total' moral distress score and burnout (e.g. moral distress was separated into different outcomes such as intensity and frequency scores) and could not be transformed into a 'total' moral distress score.	This is to ensure that the data is comparable.
Articles were excluded if they misreported the MBI measure by providing a 'total' burnout score, rather than a score per subscale of the MBI as required.	This data will have been misreported and therefore not reliable.

2.1.3 Results of the systematic search

As can be seen in Figure 1, the search produced 1548 articles. Once duplicates were removed 1027 articles remained. Any uncertainties were discussed with the author's research supervisor. The exclusion criteria were used to screen the articles by the study title (463 removed) and abstract (526 removed). Study titles and abstracts were reviewed after duplicates were removed. The full text was reviewed if the article was considered eligible. The full text of the remaining 38 articles were then reviewed according to the inclusion/exclusion criteria. The reference lists were also searched for papers of interest. Of these 38 articles, 30 articles were removed as they did not meet the full inclusion and exclusion criteria. Following these exclusions, a total of 8 articles were deemed appropriate for this meta-analysis. An additional 2 articles were identified through a Google Scholar search, both meeting the inclusion and exclusion criteria. Thus 10 papers were included in the analysis.

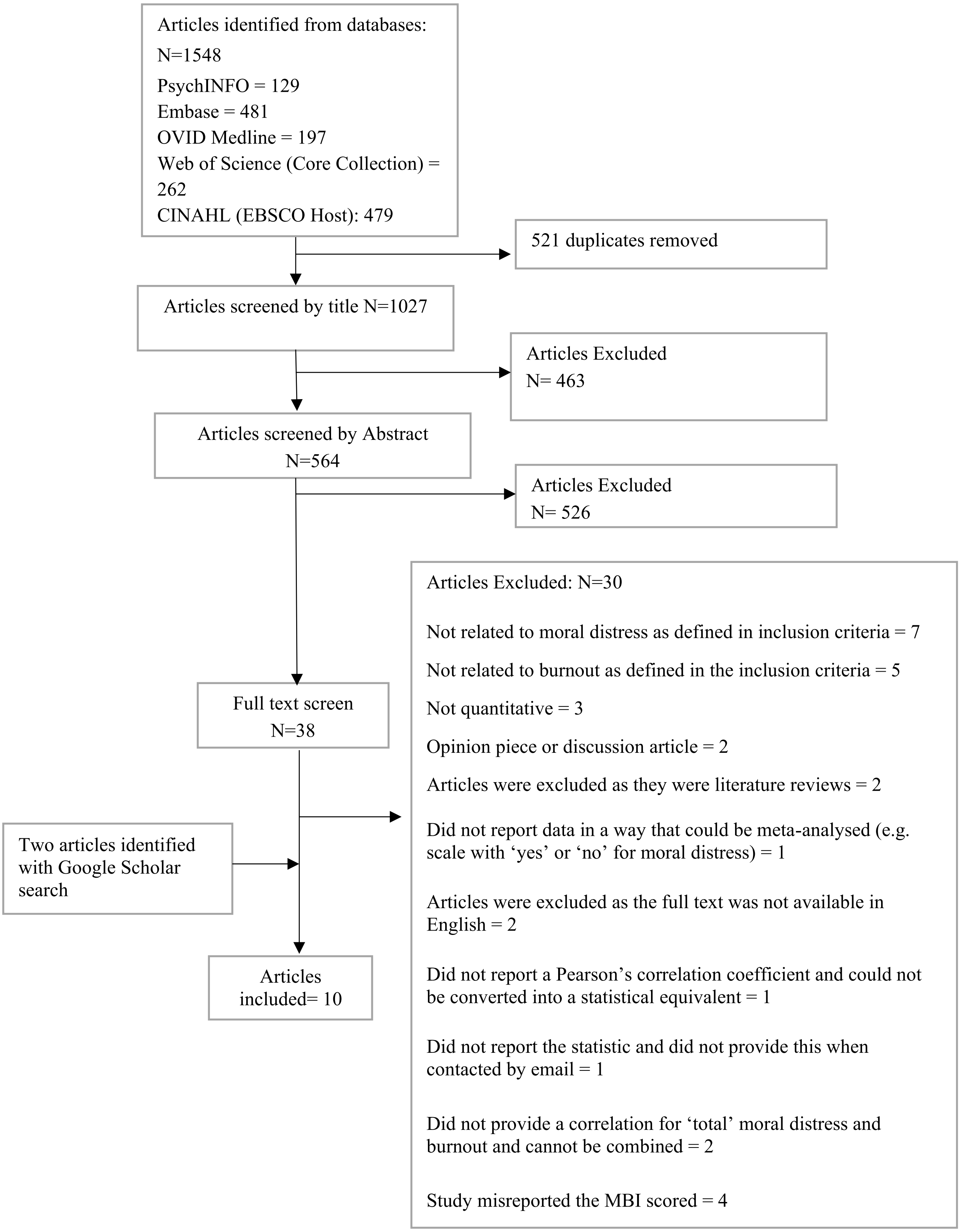

Figure 1: A PRISMA flowchart (Moher et al., 2009) detailing the search strategy and application of the inclusion criteria

2.2 Data Extraction and Quality Ratings

The studies included in this meta-analysis were reviewed by the author, data were extracted from the articles and the studies were rated for their methodological quality. The following data was extracted: author, year of publication, country of study, profession, healthcare service, sample size, and questionnaire used to assess moral distress and burnout. A second rater cross-validated 40% of the studies' quality ratings and data extraction and disagreements were discussed and documented. Authors of the studies were contacted via email in case of missing data. For a summary of the data extracted see appendix A.

2.2.1 Study population and study design.

The ten primary studies reported 2217 participants in total and were completed across four continents; two within Europe, five within North America, one within South America, and two within Asia. Two studies (Delfrate et al., 2018; Fried, & Fisher, 2016) recruited participants who worked within mental health settings. The other eight studies recruited from physical health hospitals. The majority of the sample consisted of nurses. Physicians, respiratory therapists and professionals conducting research were also recruited in the primary studies. The study which recruited professionals completing research (Fried, & Fisher, 2016) was included in this meta-analysis due to 74% conducting research in hospitals or medical centres and 19% conducting research in outpatient clinics. This sample included 59% of professionals with formal training in mental health counselling. Further to this, all participants in this sample had face to face contact with individuals with anxiety or mood disorders. Therefore, this sample was deemed to meet the inclusion criteria. The total sample of the primary studies consisted of 1576 female participants which equates to 71% of the sample.

2.2.2 Measurement of burnout.

There were three measures of burnout used in the primary studies. Eight studies used the Maslach Burnout Inventory (MBI; Maslach, et al., 1997), one study used the Professional Quality of Life – Version 5 (ProQOL; Stamm, 2005) and one study used the Research Job Burnout Scale (Fried, & Fisher, 2016) adapted from the Research Moral Stress Scale (RMSS; Fisher, True, Alexander, & Fried, 2013). The ProQOL was grouped under the ‘emotional exhaustion; EE’ outcome, since a review of the questions indicated that seven out of ten questions appeared to be investigating this component of burnout. This decision was discussed with and agreed by a second rater.

2.2.3 Measurement of moral distress.

There were five measures of moral distress used in the primary studies. Five studies used the Moral Distress Scale – Revised (MDS-R; Hamric et al., 2012), two studies used the Moral Distress Scale – Psychiatric Nurses (MDS-P; Ohnishi et al., 2010), one study utilised the Moral Distress Scale 11 (MDS-11; Badolamenti et al., 2017), one study used the Moral Distress Scale – 19 item version (MDS-19; Hamric, & Blackhall, 2007), and one study used the Moral Stress Scale – Clinical Research (MSS-CR; Fried, & Fisher, 2016).

2.2.4 Quality of studies.

The studies were assessed for risk of bias using a set of quality criteria (see Appendix B). These quality criteria assessed six sources of potential bias: selection bias, performance bias, detection bias, statistical bias, reporting bias and generalisability. The quality criteria were adapted from existing frameworks including: Downs & Black (1998), The Cochrane Collaboration Risk of Bias Tool (Higgins et al., 2011) and the Quality Appraisal Checklist – Quantitative Studies Reporting Correlations and Associations (NICE, 2012). Each domain was given a quality rating rated as either low, unclear or high risk based on the developed quality criteria (see Table 2). These ratings produce an overall quality rating from 0% to 100%, where 0% indicates studies with the highest risk of bias and 100% indicates studies with the lowest risk of bias. For each risk area two points are allocated for low risk, one point for unclear risk, and zero points for high risk. These points are then totalled per study and divided by the total number of points available to produce a percentage.

Overall the studies quality ratings ranged from 42% to 67% (see Table 2). Two studies (Delfrate et al., 2018; Ohnishi et al., 2010) have been rated separately per outcome of burnout (EE; DP; PA). One study (Delfrate et al., 2018) has been rated separately due to quality ratings differing for the PA burnout domain for detection bias and reporting bias. The study by Ohnishi et al., (2010) was rated separately due to quality ratings differing for the PA outcome for reporting bias and statistical bias.

Table 2

Summary of Applied Quality Criteria with Studies ordered Chronologically

Study	Selection Bias	Performance Bias	Detection Bias	Statistical Bias	Reporting Bias	Generalisability	Quality Index
Ohnishi et al., (2010) EE*	🟨	🟨	🟨	🟩	🟩	🟥	50%
Ohnishi et al., (2010) DP*	🟨	🟨	🟨	🟩	🟩	🟥	50%
Ohnishi et al., (2010) PA*	🟨	🟨	🟨	🟨	🟨	🟥	42%
Rushton et al., (2015)	🟨	🟨	🟨	🟩	🟩	🟥	58%
Sajjadi et al., (2015)	🟨	🟨	🟨	🟩	🟩	🟥	58%
Fried, & Fisher (2016)	🟨	🟥	🟨	🟩	🟩	🟨	58%
Austin et al., (2017)	🟨	🟨	🟨	🟩	🟩	🟨	67%
Badolamenti et al., (2017)	🟨	🟨	🟨	🟩	🟩	🟥	58%
Fumis et al., (2017)	🟨	🟨	🟨	🟩	🟩	🟨	67%
Larson et al., (2017)	🟨	🟨	🟨	🟩	🟩	🟨	67%
Ajoudani et al., (2018)	🟨	🟨	🟩	🟩	🟩	🟥	67%
Delfrate et al., (2018) EE*	🟨	🟨	🟨	🟩	🟩	🟥	58%
Delfrate et al., (2018) DP*	🟨	🟨	🟨	🟩	🟩	🟥	58%
Delfrate et al., (2018) PA*	🟨	🟨	🟥	🟩	🟨	🟥	42%
Rating Per Bias Domain	50%	46%	57%	96%	89%	14%	-

**Rated per burnout outcome.*

Red indicates high risk, amber indicates unclear risk and green indicates low risk as indicated by quality criteria (please see appendix B).

2.2.4.1 Selection bias.

All of the studies were rated as unclear risk for selection bias. This is due to each study employing convenience sampling and therefore it is unclear how biased this sample may or may not have been. All studies apart from one study (Fumis, Amarante, Nascimento, & Junior, 2017) clearly reported recruitment methods. Response rates were detailed in all but one study (Fried, & Fisher, 2016) and all response rates were of an acceptable level (above 50%).

2.2.4.2 Performance bias.

One study (Fried & Fisher, 2016) was rated as high risk for performance bias due to providing a reward for participation in the research. The remaining studies were rated as having an unclear risk for performance bias. For these studies it was unclear if participants were rewarded for their participation. Apart from two studies (Ajoudani, Baghaei, & Lofi 2018; Badolamenti et al., 2017) there was no clear distinction between early and late responders. It was unclear in all studies whether the information provided to participants would have influenced participant responses, or whether researchers observed participants completing the questionnaires which could create a Hawthorne effect. It was also unclear in three studies (Austin, Saylor, & Finley, 2017; Fumis et al., 2017; Rushton, Batcheller, Schroeder, & Donohue, 2015) if participation was confidential and anonymous.

2.2.4.3 Detection bias.

For detection bias, one study (Delfrate et al., 2018) has a different quality rating for the PA outcome (EE = unclear risk, DP = unclear risk, and PA = high risk). The PA outcome was rated as high risk due to a reported Cronbach's alpha of 0.47 indicating poor internal consistency for the PA subscale of the Italian version of the MBI. The DP outcome was rated as unclear due to unclear reliability of the DP subscale of the Italian version on the MBI (a =

0.63). The EE outcome of the Italian version of the MBI had adequate internal consistency, however, the adapted moral distress scale (MDS-P; Italian version) does not state whether it has construct validity, and therefore the domain for EE has also been rated as unclear.

Out of the remaining studies, eight studies were rated as unclear risk. One study (Rushton et al., 2015) used the 19-item version of the MDS (Hamric, & Blackhall, 2007) which does not report its validity. Four of the studies (Austin et al., 2017; Fumis et al., 2018; Larson, Dryden-Palmer, Gibbons, & Parshuram, 2017; Sajjadi, Wong, Norena, & Dodek, 2015) which were rated as unclear utilised the MDS-R which does not report test re-test reliability or the validity across different healthcare settings (Hamric et al., 2012). Three studies were rated as unclear risk due to adapting or translating the original MDS but providing inadequate or unclear information about the validity of the scale (Badolamenti et al., 2017; Fried, & Fisher, 2016; Ohnishi et al., 2010). One study was rated as low risk (Ajoudani, et al., 2018) due to this study translating the MDS-R into Farsi and providing adequate reliability and validity including test re-test reliability.

2.2.4.4 Statistical bias.

Overall, statistical bias was the lowest risk of bias for the studies. All studies reported appropriate statistical testing for the aims of the study. One study (Ohnishi et al., 2010; PA outcome) was rated as having unclear risk due to not reporting p values or confidence intervals.

2.2.4.5 Reporting bias.

For reporting bias, two studies (Delfrate et al., 2018; Ohnishi et al., 2010) have been rated as unclear for the PA outcome of burnout compared to low risk for the EE and DP outcomes of burnout. Both studies were rated as unclear for the PA outcome due to providing a narrative in the results section regarding the correlation between PA and moral distress and not a statistic.

Both authors were contacted, however only one study (Delfrate et al., 2018) replied and provided a statistic that could be used in the analysis. For the remaining studies the level of risk identified in these studies for reporting bias was low risk as the studies reported all results of measures as outlined in the method.

2.2.4.6 Generalisability.

All studies apart from four were rated as high risk for generalisability. A high risk rating was given due to studies having a sample that has a high representation (over 80%) of one professional and can therefore not be generalised to a variety of healthcare professionals. Three of the studies that were rated as unclear risk (Austin et al., 2017; Fumis et al., 2017; Larson et al., 2016) had some idiosyncratic features (e.g. were recruited from specific healthcare settings) and focused on specific professionals (e.g. nurses and physicians), although were not overly represented by one healthcare professionals or gender. The study by Fried and Fisher (2016) was rated as unclear due to the study not clarifying the profession of the mental health researchers.

2.3 Data Analysis Strategy

The correlations in the primary study were transformed to Fisher's Z Scores prior to numerical synthesis. However, the values presented in tables and figures have been back-transformed to their original format for clarity of presentation.

2.3.1 Normalisation and variance stabilisation.

The most common and straightforward method for calculating between studies variation (tau) for fitting the random-effects model is the DerSimonian and Laird method. This method assumes that the effect is normally distributed in the population and therefore the effects reported in the primary studies should also approximate a normal distribution. The transformation of the Pearson R correlations to Fisher's Z scores are performed to normalise the distribution of effects and stabilise the variance of the estimates prior to synthesis using the DerSimonian and Laird method.

2.3.2 The Omnibus test.

The fixed-effects or the random-effects models can be utilised to calculate the omnibus test.

The fixed-effects model assumes that the true effect is the same for all primary studies and that between-studies variation in the measured effect is due to sampling error. The fixed-effects model assigns weights to the different studies based on sample sizes and assumes that the information in the smaller studies can be ignored since the information about the effect size in larger studies is superior.

The fixed-effects model is appropriate to use if two conditions are met:

1. it can be assumed that all the primary studies are functionally identical (e.g. the different methodologies have equal power to detect the effect).
2. the analysis computes a common effect size for the identified population in the primary studies, rather than attempting to generalise to other populations.

Given that the fixed-effects model assumes that the effect is a single fixed value that the studies measure to various levels of precision, it is usually not appropriate for psychological constructs where estimates will vary due to uncontrolled factors such as the distribution of methodological weakness across studies, and due to natural variation.

In contrast, the random-effects model estimates the distribution of effects and therefore ensures that all effect sizes are represented in the summary estimate. Therefore, small studies are not discounted by assigning it a small weight and large studies are not over-represented by a large weight, as would the fixed-effect analysis. The estimate provided by a small study may not be as precise, but it is still important information about an effect that no other study has estimated. The random-effects model aims to estimate the mean effect in a range of studies, aiming to ensure that none of the studies are overly influential in this effect. The random-effects model acknowledges that the studies will probably be functionally different and therefore does not assume a common underlying effect size and is often the most appropriate analysis for psychological literature.

The exception to this would be when there are few studies to be synthesised (less than 10 studies). When there is a small number of studies, the random-effects model may systematically over-estimate heterogeneity. This is particularly difficult when there is a small number of studies with substantial heterogeneity, which is the case for the sample of studies in this review. In these instances, it may be better to use the fixed-effects model for descriptive purposes (due to it penalising for small samples), to describe the current literature, rather than use the random-effects model to calculate the distribution of effects (Borenstein, Hedges, Higgins, & Rothstein, 2011). This is because the distribution of effects shows marked and unexplained variation that cannot be attributed to the true effect that is being measured. A small number of studies also means that subgroup analyses and a meta-regression cannot be completed to identify significant moderators or mediators of the effect, and thus such variation cannot be investigated. Therefore, the fixed-effects model would be more appropriate for this sample of studies, to describe the literature rather than abstracting to the population. When using the fixed-effects descriptively, the confidence interval for the effect itself will be reported, but also the prediction interval which describes the literature rather than the effect in the population.

2.3.3 Handling problematic variance.

An effect is considered heterogeneous if it demonstrates variation from the meta-analytic synthesis that cannot be attributed to the true variation in the effect being observed, but rather uncontrolled and unknown variation. Heterogeneity can be caused by factors such as measurement error, uncontrolled individual differences, methodological variation, or moderating or mediating factors that are not controlled for. A common measure of heterogeneity is Higgins I^2, where larger values of I^2 demonstrate greater variation in the measured effect that are not attributable to true variation of the effect in the population. A Higgins I^2 value of over 75% has been identified as a cut off indicating problematic heterogeneity. Where problematic variance is identified then further analysis (e.g. sub-group analysis and meta-regression) should be undertaken to explore the possible causes.

However, in the situation where there is substantial heterogeneity from ten or less studies, as is the case in this review, then it may not be possible to explore the underlying causes of this heterogeneity. In such situations a more descriptive approach will be taken in which the fixed-effects model will be used to describe the averaged effect in the reported literature and the generalisation of this effect to the wider population will be suspended until the literature matures to the point where heterogeneity can be adequately explored. A description of the statistical methods that would have been used to investigate problematic variance if there had been more than ten studies has been provided below.

2.3.3.1 Identifying influential studies.

In cases where there are enough primary studies, the leave-one-out analysis is conducted to investigate if any studies are disproportionately influencing the overall meta-analytic effect by observing the impact of removing each study successively. A study is considered as being disproportionately influential when omitting the study results in an effect that resides outside of the 95% confidence interval. In these circumstances the study is removed from the omnibus test.

2.3.3.2 The quality effects model.

The quality effects model (Doi & Thalib, 2008) assumes that heterogeneity in effect sizes can be attributed to variation in the methodological quality of the studies. This model supplements the random-effects model by including ratings of methodological quality in addition to the size of the sample in the estimation of precision. If enough primary studies had been identified and included in this review, then the quality effects model would have been calculated using the total scores from the quality ratings in section 2.2.4. The quality effects model details the meta-analytic synthesis that would have been acquired if the methodological quality of the studies had been the same as the best study in the review.

2.3.3.3 Identifying publication bias and small study effects.

In cases where there are enough primary studies, visual and statistical inspections of funnel plots can be completed to look for publication bias and small study effects. The funnel plot is a visual aid for detecting systematic heterogeneity.

A funnel plot is a scatterplot of the effects using a measure of study precision. It can be used as a visual aid to identify systematic heterogeneity. If there is no publication bias, then it assumes that studies with high precision will be plotted near the average. If the studies have low precision, then they will be distributed evenly on either side of the average. This will create a funnel shaped distribution where the distance from the average inversely reflects the precision of the study. A funnel shape that is inverted, with a spread of data that is symmetrical demonstrates a ‘well-behaved’ data set indicating that publication bias is unlikely. A deviation from this inverted funnel shape can suggest publication bias particularly if there is a lack of studies in the area related with small samples sizes and non-significant effects.

If publication bias is identified, then a trim and fill procedure (Duval & Tweedie, 2000a; Duval & Tweedie, 2000b) is completed. The trim and fill procedure also assumes that any publication bias would create an asymmetrical funnel plot. This procedure uses an iterative algorithm to remove the most extreme small studies from the section of the funnel plot related to positive effects, whilst re-calculating the effect size at each iteration. This is repeated until the funnel plot is symmetrical, which in theory will produce an unbiased estimate of the effect size. However, whilst yielding the adjusted effect size, this trim method also reduces the variance of the effects, creating a narrow confidence interval. To compensate for this, the algorithm re-adds the removed studies back in, and inputs a mirror image for each study on the side of the funnel plot associated with negative effects.

In addition, the ‘Fail-safe N’ (Rosenthal, 1979) can be computed to estimate the number of missing studies needed for the observed effect to become non-significant. A large number of missing studies (relative to the number of studies in the meta-analysis) indicates that the omnibus test can be deemed robust and not effected by publication bias.

2.3.3.4 Planned contrasts.

In cases where there are enough primary studies, sub-group analysis can be completed to identify categorical moderators, and meta-regression can be calculated for continuous moderators.

3. Results

3.1 The Correlations between Moral Distress (MD) and the Three Burnout Dimensions

The Pearson correlation coefficients between moral distress and the three dimensions of burnout (EE, DP, and PA) derived from the primary studies are reported in Table 3.

Table 3

Summary of Correlation Coefficients between Moral Distress (MD) and the Three Dimensions of Burnout

Primary Study	MD and EE	MD and DP	MD and PA
Ajoudani et al., (2018)	0.59	0.61	-0.60
Austin et al., (2017)	0.33	-	-
Badolamenti et al., (2017)	0.19	0.18	0.11
Delfrate et al., (2018)	0.29	0.22	-0.16
Fried, & Fisher (2016)	0.60	-	-
Fumis et al., (2017)	0.43	0.25	-0.37
Larson et al., (2017)	-	0.52	-
Ohnishi et al., (2010)	0.27	0.36	-
Rushton et al., (2015)	0.49	0.42	0.20
Sajjadi et al., (2015)	0.29	0.39	0.07

3.2 The Relationship between Moral Distress (MD) and Emotional Exhaustion (EE)

The correlations between MD and EE derived from the primary studies are displayed in Figure 2. The random effects model suggested an average weighted correlation of r=0.39 (z = 7.07, p<0.0001) and a 95% confidence interval of between 0.28 and 0.5. However, a substantial level of heterogeneity was observed in the correlations between EE and total MD derived from the primary studies (tau^2 = 0.0231, Higgin's I^2 = 87%; Q= 63.75, p = 0.0001). This suggests that the estimates of the primary studies are biased by confounding or uncontrolled factors. Therefore, this sample of studies is not reporting a coherent and consistent effect size for the relationship between EE and MD. This heterogeneity cannot be explored further because of the small number of studies (K=9), and therefore it is more appropriate to use the fixed-effects estimate and the prediction interval to describe this literature.

The fixed-effects model suggested a weighted average correlation of r=0.41 (z = 21.45, p< 0.0001) and a 95% confidence interval of between 0.37 and 0.44. A correlation of 0.41 would be associated with a 17% association between EE and MD. The prediction interval reported a 95% confidence interval of between 0.01 and 0.77.

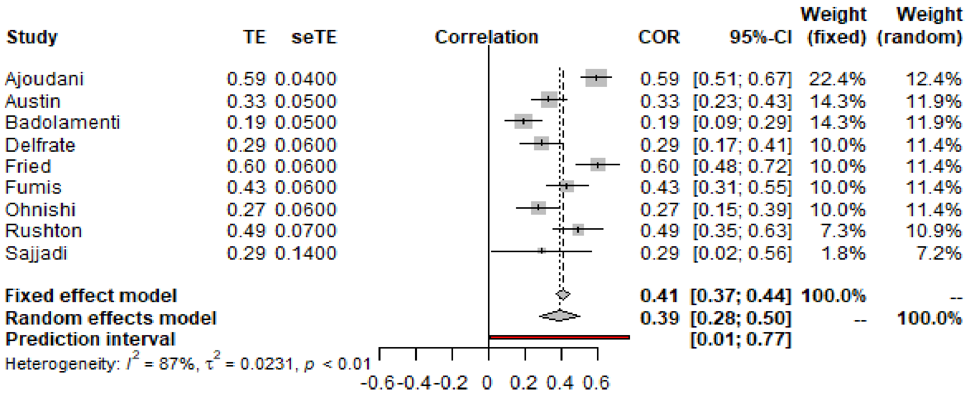

Figure 2: Fixed-effects model between EE and moral distress.

3.3 The Relationship between Depersonalisation (DP) and Moral Distress (MD)

The correlations between DP and MD derived from the primary studies are displayed in Figure 3. The random-effects model suggests an average weighted correlation of r=0.37 (z = 5.79, p<0.0001) and a 95% confidence interval of between 0.24 and 0.49. However, a significant level of heterogeneity in the correlations between DP and MD derived from the primary studies was observed (tau^2 = 0.0281, Higgin's I^2 = 89.8%; Q = 68.57, p = 0.0001). This suggests that the estimates of the primary studies are biased by confounding or uncontrolled factors. Therefore, this sample of studies is not reporting a coherent and consistent effect size for the relationship between DP and MD. This heterogeneity cannot be explored further because of the small number of studies (K=8), and therefore it is more appropriate to use the fixed-effects estimate and the prediction interval to describe the literature. The prediction interval may be a more appropriate measure of the spread of data because of this heterogeneity.

The fixed-effects model suggests a weighted average correlation of r=0.39 (z = 20.11, p< 0.0001) and a 95% confidence interval of between 0.36 and 0.43. A correlation of 0.39 would be associated with a 15% association between DP and MD. The prediction interval reported a 95% confidence interval of between -0.07 and 0.81.

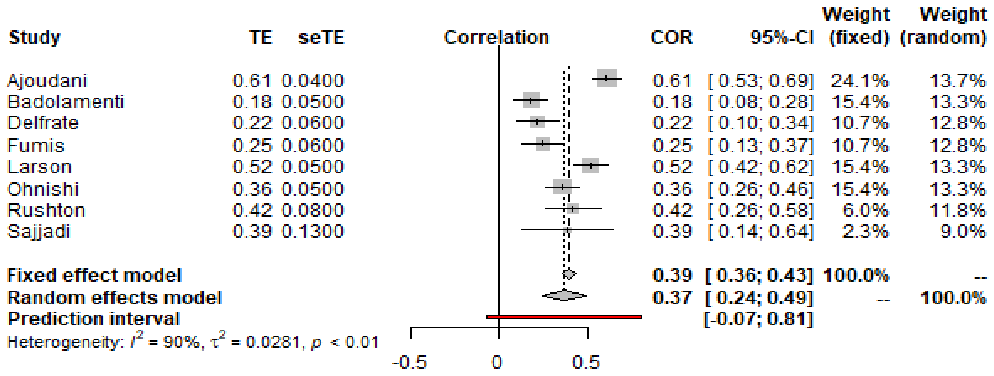

Figure 3: Fixed effects model between DP and MD

3.4 The Relationship between Personal Accomplishment (PA) and Moral Distress (MD)

The correlations between PA and MD derived from the primary studies are displayed in Figure 4. The random-effects model suggests an average weighted correlation of r= -0.29 (z = -1.50, p > 0.1328) and a 95% confidence interval of between -0.46 and 0.06. However, a significant level of heterogeneity in the correlations between PA and MD derived from the primary studies was observed (tau^2 = 0.1, Higgin's I^2 = 96.4%; Q = 137.26, p = 0.0001). This suggests that the estimates of the primary studies are biased by confounding or uncontrolled factors. Therefore, this sample of studies is not reporting a coherent and consistent effect size for the relationship between PA and MD. This heterogeneity cannot be explored further because of the small number of studies (K=6), and therefore it is more appropriate to use the fixed- effects estimate and the prediction interval to describe the literature. The prediction interval may be a more appropriate measure of the spread of data because of this heterogeneity.

The fixed-effects model suggests a weighted average correlation of r= - 0.2859 (z = -11.95, p< 0.0001) and a 95% confidence interval of between -0.33 and -0.24. A correlation of -0.29 would be associated with an 8% association between PA and MD. The prediction interval reported a 95% confidence interval of between -1.15 and 0.75.

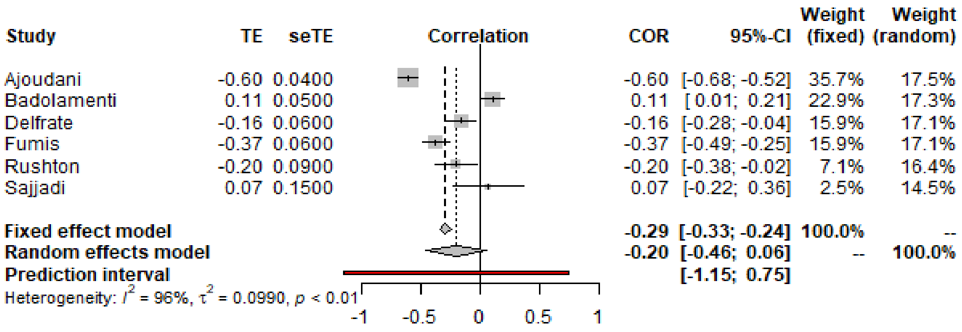

Figure 4: Fixed effects model between PA and MD

4. Discussion

This review used meta-analytic methods to examine the correlation between moral distress and burnout in healthcare professionals. A total of 10 studies were included in this meta-analysis. Many studies were excluded from the meta-analysis due to misreporting the MBI scores which decreased the usability of available studies. The fixed effect (overall correlation; see Section 3) is the average (weighted for study precision) in the existing literature, however the existing literature is extremely varied and therefore the conclusions should be proportionately cautious.

The results of this meta-analysis indicate that there is a substantial amount of variation in the reported correlations between moral distress and all burnout domains and it is, therefore, difficult to generalise these findings to contexts outside of the primary studies. Accordingly, the fixed-effects model was used to describe this small number of studies as they are reported and to quantify the levels of heterogeneity. The discussion of the synthesis will be restricted to a description of the existent literature and will eschew further abstracting to contexts outside of the primary studies. The discussion will explore the potential reasons for such high levels of heterogeneity and provide recommendations for future research in this area.

The high levels of heterogeneity in this literature could be explained by uncontrolled individual differences and confounding variables that are mediating or moderating the relationship between moral distress and burnout. A meta-analysis by O’Connor et al., (2018) investigated the determinants of burnout in mental health professionals and identified that factors such as increased work load, lack of job control and sense of autonomy, role conflict, and a lack of or inadequate clinical supervision are associated with increased rates of burnout in mental health professionals. O’Connor et al., (2018) also identified that feeling supported by colleagues and managers, being rewarded and treated fairly were important factors in protecting against burnout. Research has also suggested that there are differences in levels of burnout in healthcare professionals but that this variation is often mediated by increased workload (Johnson et al., 2012) and perceived job control (Sorgaard, Ryan, & Dawson, 2007). Other factors such as job dissatisfaction, a lack of organisational commitment, absenteeism and job turnover (Maslach, & Leiter, 2016), and the demand of therapeutic relationships (Rössler, 2012) have been found to be associated with burnout. Similar findings have been found for a variety of professionals such as medical students (Dyrbye, & Shanafelt, 2016), dementia care workers (Costello, Walsh, Cooper, & Livingstone, 2018), physicians (Bragard, Dupius, & Fleet, 2014), and physical health nurses (Adriaenssens et al., 2015; Browning et al., 2007). Indeed, research into burnout has highlighted the complex and diverse nature of the determinants and correlates of this phenomenon.

A similar conclusion can be drawn from reviewing the correlates of moral distress. A systematic review by Lamiani et al., (2017) who examined 17 studies, found that variables such as poor ethical climate (lack of support and respect), poor nurse-physician collaboration, instrumental leadership, low levels of autonomy, self-doubt, poor access to resources and low levels of psychological empowerment increased moral distress in healthcare professionals. A review by Oh and Gastmans (2015) identified that factors such a negative ethical climate (e.g. nursing shortages and working with incompetent staff) and providing medically futile care (life-sustaining medical treatment that is unlikely to result in survival or medical benefit; Meltzer, & Huckabay, 2004) were positively associated with moral distress, but that there were inconsistent findings regarding sociodemographic factors. Further to this there has been an association between moral distress and job dissatisfaction, absenteeism, and increased attrition (Spenceley et al., 2015). Two literature reviews (Lamiani et al., 2017; Oh, & Gastmans, 2015) also concluded that moral distress was significantly related to burnout.

The reviews into the correlates of burnout and moral distress highlight the diverse and numerous factors that are associated with both phenomena, with such factors potentially mediating or moderating the relationship between moral distress and burnout in this literature. Well-designed studies should implement controls to eliminate alternative explanations, such as other factors mediating or moderating the relationship. Without sufficient controls, alternative explanations of the causal relationship between two variables are possible (Raulin, & Graziano, 1994). Controls can be implemented into the study design e.g. randomisation, restriction and matching (Pourhoseingholi, Baghestani, & Vahedi, 2012). None of the studies in this review modified their study design to control for confounding variables. Confounding variables can also be controlled by recording the levels of confounders and adjusting for these factors through statistical models e.g. stratified and multivariate models (Pourhoseingholi et al., 2012). Two studies in the literature controlled for some confounding variables such as workplace bullying (Ajoudani et al., 2018) and demographic and specific work factors (Fried, & Fisher, 2016) using statistical models. The studies in this review collected some data on other potential confounding variables, mainly consisting of demographic factors, but did not control for these factors. Not controlling for such variables in the analysis could affect the correlation between moral distress and burnout. For example, many of the studies within this meta-analysis have grouped demographic factors such as profession, age and gender in the findings (e.g. Austin et al., 2017; Fumis et al., 2017; Sajjadi et al., 2015) which means that any differences between such variables cannot be identified. The small number of studies in this meta-analysis also means that uncontrolled individual differences and moderating or mediating factors identified and reported in the studies cannot be investigated.

The second cause of variation may be stemming from the lack of conceptual clarity of moral distress. Although there is a general consensus regarding the definition of moral distress (Campbell, Ulrich, & Grady, 2016; Canadian Nurses Association, 2017), it has been suggested that researchers describe the concept in a variety of ways, which has resulted in an 'umbrella term' lacking in conceptual clarity (Hanna, 2004; McCarthy, & Deady, 2008; Morley et al., 2017) and subsequently complicating efforts to study the phenomenon (Hamric, 2012). Different definitions may make it particularly difficult to develop adequate measures (Morley et al., 2017), as how moral distress is defined greatly influences the measurement used (Hamric, 2012). Although all studies in this meta-analysis used the most common definition of moral distress, there were a total of five different questionnaires used to measure moral distress in just ten primary studies. Only five studies utilised the MDS-R which is said to be the most rigorously checked measure for validity and reliability, with careful attention paid to the content and construct validity (Hamric et al., 2012). Further to this, not all of the measures used demonstrate construct validity (e.g. Fried, & Fisher, 2016; Ohnishi et al., 2010). Some of the studies provided limited information about the validity of the moral distress measure utilised (e.g. MDS-P; MDS-11). If there is only a vague idea of what is being measured, then questionnaires may become contaminated with confounding variables and underrepresent the concept, both of which lead to low construct validity (MacKenzie, 2003). Further to this, when a construct is not well-defined, it undermines the studies' hypotheses and may bias the reported relationships between variables, subsequently effecting the internal validity (MacKenzie, 2003; Miller et al., 2009).

Five of the studies included in this review were completed in North America, with the remainder undertaken in a variety of countries. Some of the studies adapted moral distress measures (MDS; MDS-R) to be used in a country that the original measure was not developed for. Cultural differences in the role of professionals, and the experience and understanding of moral distress may vary between countries which again may make it difficult to coherently and cohesively research the construct (Hamric, 2012).

Other causes of variation may be due to the methodology employed. The study quality in the existent literature is poor. Alongside detection bias, issues with selection bias, performance bias, and generalisability were consistently found. Better quality studies are needed, with more transparency regarding recruitment procedures and data collection. Such transparency may help to clarify the quality in the research and to better identify where improvements are required. Heterogeneity in study design may also be affecting the variation in the effects.

The studies all adopted a cross-sectional study design which, even if heterogeneity was controlled for, would not allow for firm causal conclusions to be made. The self-report methods of the study and the same source of data used add additional limitations. Much of the research has focused on nurses which does not provide insight into moral distress and burnout in other healthcare professionals.

4.1 Limitations of this Review

Due to the high levels of heterogeneity in the literature, and the small number of studies, investigations into problematic variance, and additional moderator analyses could not be completed. Further to this, although the fixed- effects model was deemed to be the most appropriate for this analysis, it is not without its limitations. The fixed-effects model reported in this review should be considered as providing only a descriptive analysis of the studies and, due to the uncontrolled variation/bias observed in the existent literature, generalisation to contexts outside that of the specific primary studies are unlikely to be correct.

4.2 Recommendations

This meta-analysis highlights the need for concept clarity and psychometrically sound measurements of moral distress. It is also crucial for research reporting to be transparent in order to learn from past research and improve future research. It is also important to continue developing and refining the MDS-R to establish test re-test validity and to improve its validity across settings and cultures. This may prevent the development of one-off new measures that may be adding to the heterogeneity of studies. It is also important that findings of moral distress and burnout are reported separately for each professional in order to identify any variation.

It is crucial that the criteria for a good quality study are identified. For example, one which demonstrates consistent and non-biased recruitment, uses valid and reliable measures of moral distress and burnout, clearly identifies and reports moderators and mediators, and utilises objective outcome measures alongside self-report measures (e.g. economic outcomes such as sickness levels). Once good quality studies are being produced, research can start to identify factors that may be affecting individual reported effects. However, it may be that tightening the methodology may not minimise heterogeneity enough, and that other factors are mediating and moderating the relationship between moral distress and burnout.

Further to this, it would be useful to establish an expert consensus panel to identify good quality methodology to which future research should adhere to, creating consistency in research design between studies. This expert panel could also identify factors that may moderate and mediate the relationship between burnout and moral distress. It is important that studies report and measure such variables so that their impact can be empirically estimated in potential future meta-analyses. Until then, effect sizes will remain too varied for specific conclusions to be drawn.

5 Conclusion

The conclusions that can be drawn from this review are limited due to the small number of studies and the large variation between the studies. This analysis would suggest that there are many uncontrolled factors that appear to be creating a range of disparate effect sizes. Before conclusions can be drawn regarding moral distress and burnout, a better understanding of the sources of variation are required. It is important for future research to attempt to homogenise or standardise the phenomena under investigation as well as *how* they are investigated.

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EMPRICAL RESEARCH PAPER

Physical Restraint and the Therapeutic Relationship: A Nurse Perspective

Abstract

Background: The therapeutic relationship has been found to be important in influencing service user outcomes in acute mental health settings. Within psychiatric intensive care units (PICUs), physical restraint is used as a last resort to manage risk. This research aims to explore how nursing staff within PICUs experience the staff-patient relationships in the context of the practice of physical restraint.

Method: A qualitative study was completed utilising a purposive sample of PICU nurses. Five male and two female nurses were recruited to participate. A semi-structured interview was conducted to explore participants' experiences. The interviews were transcribed verbatim and analysed using Interpretative Phenomenological Analysis (IPA).

Results: Four superordinate themes were identified from the data set. These were: *consequences of restraint, factors that protect the relationship, factors that threaten the relationship*, and *importance of rebuilding bridges.*

Conclusion: The findings of the present study provide insight into PICU nursing staff's experience of the therapeutic relationship in the context of using physical restraint. The findings demonstrate that the effects of physical restraint on the therapeutic relationship are both complex and varied. However, insight was gained relevant to the therapeutic relationship, including ways to prevent negative psychological consequences and protect the psychological well-being of both service users and staff members themselves. The results are discussed in the context of previous research and recommendations for future research and clinical practice are proposed.

1. Introduction

1.1 Mental Health Inpatient Services

Mental health inpatient services aim to provide person-centred care in a safe and therapeutic setting for individuals experiencing a broad range of mental health difficulties (Joint Commissioning Panel for Mental Health, 2013). In the United Kingdom, Psychiatric Intensive Care Units (PICUs) are inpatient services that provide short periods of high intensity support for individuals who are unable to be supported in a general acute ward due to their high levels of distress and risk (The National Association of Psychiatric Intensive Care and Low Secure Units (NAPICU), 2014). The support provided on a PICU includes psychological, psychosocial and pharmacological treatment, and is provided by a multi-disciplinary team (NAPICU, 2016). National Institute for Health and Care Excellence (NICE) Guidelines (2011; 2016) have emphasised the importance of building therapeutic relationships as early as possibly on an inpatient ward to encourage recovery, reduce risk, and to minimise feelings of coercion.

1.2 The Therapeutic Relationship

The term 'therapeutic relationship' has been defined in a number of ways which subsequently makes it difficult to operationalise (Clarke, 2012; Farrelly et al., 2014). However, there is a general consensus that the 'therapeutic relationship' refers to an emotional connection between the staff member and service user based on mutual trust, respect and compassion, with a focus on supporting the service user's treatment and recovery (Farrelly et al., 2014; Kitson, Conroy, Kuluski, Locock, & Lyons, 2013; NICE, 2016).

Research has found that the quality of the therapeutic relationship is a significant factor in the treatment of mental health difficulties (Roche, Madigan, Lyne, Feeney, & O'Donoghue, 2014). In a review of the therapeutic relationship between mental health professionals and service users, it was found that a good working alliance decreases service user mental health symptoms and improves levels of functioning, social skills and quality of life (DeLeeuw, Van Meijel, Grypdonck, & Kroon, 2012). Other research has found that having a therapeutic relationship increases inpatient mental health service users' medication adherence, insight into their mental health difficulties (Misdrahi, Petit, Blanc, Bayle, & Llorca, 2012; Roche et al., 2014) and improves service engagement and service user satisfaction (Roche et al., 2014).

Service users have also reported that the therapeutic relationship is crucial to their experience in inpatient mental health services (Gilburt, Rose, & Slade, 2008; Staniszewska et al., 2019) and is for them the most important factor influencing good psychiatric care (Johansson, & Eklund, 2003). In a review of qualitative studies, it was found that service users identified respect, effective communication, empathy and helpfulness as key factors to establish a high-quality therapeutic relationship in such settings (Staniszewska et al., 2019). In a previous review of qualitative studies by Ljungberg, Denhov, & Topor (2015), it was found that for service users with severe mental health difficulties being supported in a variety of mental health services, having a professional *and* interpersonal relationship is important, where staff spend time with service users, provide access to resources and are supportive and collaborative. Other research has suggested that service users place importance on having a friendly, warm, and approachable bond with staff (Attree, 2001) and appreciate staff communicating and caring for them in a person-centred way (McCabe, 2004).

Despite the significance of the therapeutic relationship for service user outcomes and satisfaction, it can be particularly difficult to establish and maintain such relationships in inpatient mental health settings (Dziopa, & Ahern, 2008). It has been found that high levels of coercion can hinder the therapeutic relationship (Gilburt et al., 2008; Ljungberg, Denhov, &

Topor, 2016) by jeopardizing the service user's trust in staff members. Other research has found that those who experience involuntary admission to hospital experience poorer therapeutic relationships (Roche et al., 2014; Sheehan, & Burns, 2011).

1.3 Restrictive Practice

Within mental health inpatient settings, restrictive practices can be used by members of staff. Restrictive practice has been defined as an act to restrict an individual's movement in order to take control of a dangerous situation, reduce danger to the person or others, and to only limit the freedom of the individual for no longer than is necessary (Department of Health, 2014).

There are different types of restrictive practice including physical restraint, mechanical restraint, chemical restraint and seclusion (DoH, 2014) with physical restraint the most commonly used form of restrictive practice (Mind, 2015). Physical restraint is a type of restrictive practice that involves physical contact implemented to restrict movement (DoH, 2014).

NICE guidelines (2015) state that if the use of restrictive practice is required, it should be the least restrictive method, used for no longer than absolutely necessary and must take into account the service user's preference and physical health. The guidance also emphasises the importance of building therapeutic relationships, creating a therapeutic environment and using person-centred approaches and proactive strategies over the use of restrictive practices.

1.3.1 Impact of physical restraint.

It is known that restrictive practices, including physical restraint, have significant negative effects on service users and staff, including physical injuries and negative emotional effects (Evans & Fitzgerald, 2002; Sequeira & Halstead, 2004). A study by Sequeira and Halstead (2002) found that feelings of anger, anxiety and mental upset were common for service users following physical restraint and often caused flashbacks of physical and sexual abuse (Sequeira, & Halstead, 2002; Wynn, 2004). Further to this, studies have highlighted that being placed in physical restraint can cause feelings of re-victimization, re-traumatization, and mistrust towards staff (Smith, 1995), and damage the staff-service user relationship (Wynn, 2004).

Physical restraint has also been found to have a negative impact on staff, such as physical injury and emotional distress, including anxiety, anger (Sequeira & Halstead, 2004), uneasiness, fear and guilt (Moran et al., 2009). Staff have expressed feelings of conflict between their role as a nurse (to protect and care) and the need to use physical restraint (Sequeira & Halstead, 2004) and have reported emotional detachment from the service user (Moran et al., 2009). This emotional detachment can prevent the development of therapeutic relationships and subsequently limit the success of de-escalation strategies and reduce effective communication between staff and service users (Ling, Cleverley, & Perivolaris, 2015; Moran et al., 2009), which in turn can increase the use of physical restraint (Bonner, Lowe, Rawcliffe, & Wellman, 2002; Meehan, Vermeer, & Windsor, 2000).

1.4 Physical Restraint and the Therapeutic Relationship

A review by Taylor et al., (2009) found that the use of physical restraint and the therapeutic relationship were two of eight main factors related to a service user’s recovery in mental health inpatient settings. However, there is limited research investigating the relationship between these two factors. Only two papers (Duffy, 2017; Knowles, Hearn, & Smith, 2015) have investigated the impact of physical restraint on the therapeutic relationship, with data collected from service users and members of staff in secure services. Knowles et al., (2015) found that service users perceived physical restraint to result in a power imbalance and disconnection between service users and staff. Duffy (2017), in an unpublished thesis, reports that service users of secure services believed that physical restraint damaged the therapeutic relationship and reported feeling dependent and disempowered.

1.5 Rationale

NICE (2015) has recommended that more research should be conducted investigating the potential consequences for those involved in physical restraint. Currently, no research has focused on how the therapeutic relationship may be affected by physical restraint, specifically from a nurse perspective within PICUs. Research into this topic may help to highlight ways to support the development and maintenance of therapeutic relationships in an environment where physical restraint may need to be used to facilitate quality care and encourage recovery. Therefore, this study aims to explore how nursing staff within PICUs make sense of and understand staff-patient relationships in the context of the practice of physical restraint.

2. Method

2.1 Methodology

Interpretative Phenomenological Analysis (IPA: Smith, 1996; Smith, Flowers & Larkin, 2009) is the chosen research method for this study. IPA is an idiographic approach and is suited to working with transcripts of semi-structured interviews (Willig, 2008). IPA focuses on personal experience and is particularly concerned with how people make sense and give meaning to their experiences (Pietkiewicz & Smith, 2014), in this case how nursing staff within PICUs make sense of and understand staff-patient relationships in the context of using physical restraint.

2.2 Recruitment

Ethical approval for the study was granted by the University of Birmingham Ethics Committee (ERN_15-0672; Appendix C), and sponsorship was agreed by the University of Birmingham Research Governance Team (RG_17-220; Appendix D). Approval was also gained from the National Health Service (NHS) Health Research Authority (IRAS 238304; Appendix E) as this research involved recruiting NHS employees. A purposive sampling strategy was utilised to identify and recruit nurses working within NHS PICUs in the West Midlands. Within IPA based research, it is recommended that a homogenous sample is used, for which the research question is relevant (Smith & Osborne, 2008). Therefore, the following inclusion and exclusion criteria were applied (see Table 1).

Table 1

Inclusion and Exclusion Criteria for Nurse Participants

Inclusion Criteria	Exclusion Criteria
- worked on the PICU for 6 months or more. - involved in at least one incident of using physical restraint in the last three months. - completed and up to date with physical restraint training.	- not regularly engaged in the practice of physical restraint. - not yet had training on the use of restrictive practice or are in the induction phase of the job (working on the PICU for less than 6 months). - do not understand verbal explanations or written information in English or have special communication needs.

Participants were not directly approached by the researcher during the recruitment phase. Ward managers of the two PICUs that agreed to partake in the study were asked to inform their ward staff of the research study during handover and team meetings and provide access to copies of the participant information sheet (Appendix F). The ward managers were asked to inform their staff to contact the researcher by email if they were interested in participating in the study.

2.3 Participants

Seven qualified nurses (5 male, 2 female) working within one PICU in the West Midlands volunteered to participate in a face-to-face semi-structured interview at their place of work. This sample size falls within the recommended range for the use of IPA (Smith et al., 2009). Participants were between 23 and 50 years of age and had a range of experience working as a nurse. For an overview of the sample recruited, see Table 2.

Five of the participants identified themselves as white British, one identified as African and another as Caribbean. Three of the participants were working as a Band 5 nurse, three as a Band 6 nurse, and one as a Band 7 nurse.

Table 2

*Participant Demographics (*range only in order to protect anonymity)*

Participant number	Pseudonym	Gender	Age*	Years qualified as a nurse*	Years working on PICU*
1	Doug	Male	30’s	>5 years	<5 years
2	Alex	Male	30’s	>5 years	<5 years
3	Steven	Male	30’s	<5 years	<5 years
4	Chris	Male	50’s	>10 years	>10 years
5	Jodie	Female	20’s	<1 year	<1 year
6	Bethany	Female	30’s	<5 years	<5 years
7	Robert	Male	30’s	<5 years	<5 years

2.4 Procedure

All those who contacted the researcher stating an interest in participating in the study were provided with another copy of the participant information sheet (Appendix F) via email. A date and time for the interview was then organised between the researcher and the participant. A suitable, quiet space for the interviews was identified with the help of the ward manager. Prior to the start of the interview, all participants were provided with the opportunity to ask any questions about the research and their potential involvement. Participants were then asked to complete an informed consent form (Appendix G). Prior to the semi-structured interview, participants were also asked to complete a demographic questionnaire (Appendix H).

Following the interview, participants were provided with a debrief. As part of the debrief, participants were asked how they found the interview, and were provided with information about how they may seek support if required (Appendix I).

2.5 Data Collection

A semi-structured interview schedule (Appendix J) was developed by the researcher in consultation with an expert by experience from the Experts By Experience Steering Committee, School of Psychology, University of Birmingham. It was thought important to have feedback on the interview questions from an individual who had experienced physical restraint in a mental health setting. The interview schedule was designed with prompts to provide an open dialogue focusing on the general aim of the interview (i.e. to capture an individual's lived experience) as well as providing flexibility to allow for individual variation (Smith & Osborne, 2008; Pietkiewicz & Smith, 2014). The interviews were conducted by the researcher and were audio recorded using an encrypted Dictaphone. The data were transcribed verbatim and anonymised.

Data were collected in November 2018 and December 2018. The interviews ranged from 45 minutes to 65 minutes (mean = 56 minutes; see Table 3).

Table 3

Duration of Interviews

Participant Pseudonym	Interview Duration
Doug	50 minutes
Alex	1 hour 5 minutes
Steven	45 minutes
Chris	1 hour
Jodie	1 hour
Bethany	1 hour
Robert	55 minutes

Data on the use of restrictive practice were gathered from the participating Trust's incident reporting system following the completion of the interviews. The data cover a one-year period (January 2018 to December 2018) and details both the type and frequency of restrictive practices used on the PICU ward from which the participants were recruited. This information is detailed in Table 4 and indicates that some interviews took place during a month where the frequency of restrictive practice was relatively high.

Table 4

Restrictive Intervention Report - January 2018 to December 2018

Type of Restraint	January	February	March	April	May	June	July	August	September	October	November	December
Physical Restraint – Prone Position	8	3	11	8	12	2	3	5	10	15	5	23
Physical Restraint - other	8	5	4	7	5	4	4	8	6	2	-	1
Rapid Tranquilization	7	2	9	8	13	4	5	5	11	15	5	22
Mechanical Restraint	-	-	-	-	-	1	-	-	-	-	-	-

2.6 Analysis

The data analysis was guided by the principles of IPA as described by Smith et al., (2009), and aims to be iterative and flexible. The analytic process consists of analysing the transcripts on a case-by-case basis. The first stage involves reading and re-reading the transcript to increase familiarity of the data, whilst noting initial thoughts, preconceptions and observations on a hard copy of the transcript (see Appendix K). The second stage consists of examining the transcript line-by-line and writing notes and exploratory comments regarding the participants experiential claims, understandings, and concerns in the left-hand margin. These comments consisted of descriptive notes, comments on the participant's language use, and conceptual comments (see Appendix L).

These exploratory comments were then developed into emerging patterns (themes) and documented in the right-hand margin of the transcript (Appendix M). Themes were then reviewed for potential connections and associations and grouped accordingly to establish higher order themes (superordinate themes). This process was then repeated for each transcript. Both new emergent themes and repeated themes were noted in subsequent transcripts. When new themes were identified, previous transcripts were examined to identify if the new theme was present (Smith, & Osborn, 2008). Connections between the themes were then made within and across transcripts (see Appendix N). Throughout the process, themes and superordinate themes were restructured, reordered, renamed or discarded. The final stage involved identifying master themes across the transcripts to describe participants' shared experiences (see Appendix O).

2.7 Reflexivity and Credibility

IPA is recognised as creating a 'double hermeneutic', whereby the researcher plays an active role in the interpretation of the data by using their own experiences and perceptions to understand the participants' 'sense-making' (Smith et al., 2009). Therefore, when using IPA it is important for the researcher to reflect on her own experiences, assumptions and biases, and be aware of how these may influence the interpretation of the data. Below is a personal reflection written by the researcher and is therefore written in first person.

Throughout my career within psychology, I have developed scepticism of the medical model and believe that this model has many limitations when explaining mental health difficulties. I am aware that this perception may differ from those of other mental health professionals.

Prior to conducting this research, I had experiences of working within mental health inpatient units and secure hospitals where physical restraint was used frequently. I was struck by the variation in relationships between staff and service users both prior to and following the use of physical restraint. Although I have never been involved in physical restraint, during one of my roles as an assistant psychologist I was asked if I would be willing to substitute a nurse engaging in physical restraint due to there being low levels of nursing staff on the ward. The service user being restrained was someone with whom I had developed a therapeutic relationship and was completing psychological work with. Due to concerns that my participation in the restraint would hinder our relationship and ability to complete future psychological work, I declined and instead offered my support with other duties. I was struck by how the nursing staff had not considered such potential consequences and wondered whether this was ever a concern of theirs. Following this experience, I was curious as to how staff-patient relationships were altered following restraint and believed that maintaining such relationships would be difficult.

Although the above experiences may support the interpretative process, they may also introduce bias into the analysis of the data. Therefore, the researcher kept a reflective journal throughout the data collection and analysis to reflect on her own presuppositions, perceptions and conceptions during the research process, to reduce bias and create transparency (Larkin & Thompson, 2011).

Data triangulation was completed by sharing and discussing samples of transcripts and interpretations of the data with colleagues with experience of IPA. This helped to reduce researcher bias and strengthen the validity of the results.

3. Results

Four superordinate themes were identified following analysis of the data (Table 5). A total of nine subthemes underpinning the superordinate themes were revealed. The final themes were determined by their regularity throughout the data and the emphasis that was placed on them by participants. A summary of the results can be found in Appendix P.

Table 5

Summary of themes identified

Superordinate Theme	Subtheme
3.1 Consequences of restraint	3.1.1 Psychological consequences for staff
	3.1.2 Effects on the relationship
3.2 Factors that protect the relationship	3.2.1 Power of communication
	3.2.2 The benefits of rapport
	3.2.3 Holding the patients in mind
3.3 Factors that threaten the relationship	3.3.1 Difficult restraints
	3.3.2 Service users' negative experiences and perceptions of restraint
3.4 Importance of rebuilding bridges	3.4.1 Power of understanding
	3.4.2 Making an effort

3.1 Consequences of Restraint

Participants focused on the psychological impact that physical restraint had on them and the impact that this in turn had on their relationship with service users.

3.1.1 Psychological consequences for staff.

All of the participants described physical restraint as unpleasant but talked about it as a necessary part of their jobs. The lack of detail in their statements suggests that some found it difficult to discuss the emotional impact that physical restraint had on them:

> *"Um, so yeah, I think it's, it's a necessary evil in a way I suppose really… You have to use it. You know, it's not something that any of us enjoy but it's something we know we have to use." [Alex, page 8, 247]*

> *"So physical restraints [pause]. It's not again, well, to be honest, again there's not much emotion about it. You just don't like doing it." [Robert, page 5, 121]*

In the quote above, Robert is contradicting himself and it may be that he is defended against the emotional impact that physical restraint may cause.

At times, participants appeared to dehumanise the service user and disconnect from the process of restraint by disembodying the service user through their language choice. It may be that this was a way for participants to cope with physical restraint:

> *"Erm, if you don't manage the head properly, someone is going to get bitten… you kind of just deal with it, whatever you're left to manage, whether it be the head, the legs." [Doug, page 4, 101]*

Other responses were characterised by feelings of guilt. Participants felt conflicted between needing to treat service users and maintaining the therapeutic relationship. Participants were concerned about giving injections during physical restraint and about how patients perceived them:

> *"I'm often the one pushing to get the injections to give medication to help people calm down. And it is quite stressful. And in the back of your head, you-you know, 'I'm forcing this person to have these meds. They probably don't like it right now. They're probably really frightened.' It, it is very… it does make you emotional at the time." [Bethany, page 4, 112]*

Below, Jodie highlights how she can worry and ruminate about whether her relationship with service users will be affected after physical restraint. Jodie appears to be grieving the lost relationship and appears both fearful and anxious of potential changes:

> *"You start to worry like, a lot of worry happens, as in how's the patient gonna view me now. 'Cause I've just helped them to the ground. Or I've just injected them with something that they didn't want. So, it's like, and I probably, you know, they, they, they probably don't wanna see me or whatever. You really think about or what I think about is um how is our relationship gonna develop from here? Like, how are we gonna go further from here? Um, how, yeah, how will I be able to talk to you normally? How will I be able to laugh and joke with you whenever the time allows for it? So, that's what I think about. So, it's kinda like worry and doubt that you won't be able to go back to how it was before or even if we didn't have relationship before that, we won't be able to develop a relationship after. So, that's, that's, yeah, that's with me. Yeah." [Jodie, page 4, 104]*

Participants also talked about fear during physical restraint, although they would rarely explicitly label this emotion. The two quotes below from Doug and Steven both use literary techniques to explain the contrast between outwardly being prepared to engage in physical restraint and inwardly anxious and uncertain, particularly about how the service user may respond during restraint.

> *"Erm it feels like, you know, you go up a gear. Erm… and then… it also [sigh], as much as your geared to contain the situation it often feels very, very uncontained because you don't know to what level that individual is going to be resistive or assaultive to you." [Doug, page 1, 10]*

> *"I'll give you the analogy of a swan, so we're all gliding about on the surface, it's all quite nice, calm, cool, collected, but underneath they're flapping. And for me, sometimes it's like that, like I might look cool on the outside, but on the inside, I'm thinking 'ah, am I gonna get hit?', erm, 'is someone gonna get hurt?', erm, 'am I gonna hurt the patient?', 'am I gonna hurt others?'" [Steven, page 8, 238]*

Other participants also discussed feelings of anger, disappointment and sadness towards service users:

> *"Sometimes, it's anger. Disappointment. 'Cause there could be a situation whereby they're moving so well and then they all of a sudden dipped. Sadness, kind of like sadness as in 'I didn't want it to go this way.' Or, 'I really, really cared about you as you're my patient.' Yeah." [Jodie, page 18, 571]*

3.1.2 Effects on the relationship.

All participants discussed the effects on the relationship such as a loss of rapport:

> *"Um, and I guess initially, uh, they lose some trust with the staff. Because initially, it's like, 'Oh you just, you just restrained me. I don't, therefore, trust you as much as I did before'." [Bethany, page 7, 204]*

and how interactions may decrease, and patients may disengage following the use of physical restraint:

> *"He's been a lot more closed since I've seen him in passing him and it was kind of like, 'You all right?' And it's kind of like gone from maybe a, 'Hi you*

> *all right?' Or a fist bump to a [brief raise of eyebrows] and that's it, you know, so…" [Alex, page 27, 861]*

> *"It becomes distorted. Um, patients are not willing to engage anymore. They'll seclude themselves in their room. They kind of like isolate themselves and stuff like that and then don't really engage with staff or with the other peers and you don't really want that. Because they're not gonna contribute towards their recovery." [Jodie, page 17, 547]*

Participants also commented upon how disengagement can make it difficult to do their job:

> *"It is difficult, because sometimes you have to get other staff members to speak to you on their behalf, or sometimes they don't want to speak to you, and it's just difficult, because as I said before, building that rapport on somewhere like this is so crucial." [Steven, page 16, 474]*

but were able to empathise with their patients' hostile responses after restraint had taken place:

> *"Other than being awkward, erm, people might tell you 'get the fuck out my room', you know, 'leave me on my own' or, erm, and that's the majority of the time. You get a tiny bit of protest, a tiny bit of hostility, erm, I think people are entitled to that." [Doug, page 17, 527]*

Participants talked of feeling wary that service users may seek revenge and hurt them, with some participants appearing to be accepting of this:

> *"Erm, but you might- you might accept that they might be coming for you after and giving them a wide berth. They might just, wanna act some sort of revenge afterwards, and if they try that, you just gotta, you know..." [Chris, page 12, 372-376]*

> *"Because they're upset now, and I'm put in a position whereby I have to be a bit on guard and on edge because they're upset with me, are they going to*

> *hit me? Are they gonna try and get me, or something like that? I'm kinda like that 'what's going to happen to me?'" [Steven, page 13, 378]*

Staff also experienced a 'cooling' of their own feelings towards the patient after restraint has taken place:

> *"We're not horrible but when it's been that bad of a restraint I think staff will naturally talk less, I think because a lot of people find it hard to then, and to kind of, get over what's happened… We are not as-as friendly. I don't know if friendly is the right word. It's kind of like rather than trying to - rather than maintaining that kind of calming, where you're just going, 'Okay, let's do this, let's do that.' It's more like, 'You need to calm down then we can let go'." [Alex, page 22, 718]*

Alex feels the need to defend staff's responses after physical restraint and appears concerned about how this may be perceived by the researcher.

> *"You distance yourself from the patient. Um, you'd rather, you'd rather have other staff members doing something for the patient than you do it. So, um, I'd say, if the worst-case scenario is when it's your personal patient as in you're the named nurse of the patient. That even makes it worse 'cause you have to go through care planning with the patient. So, it's like, 'How am I gonna do the care planning interview?' Um, all that kind of stuff. So, yeah. Like you can't, it's kinda like you can't do your job properly." [Jodie, page 18, 556]*

In the above quote, it appears that Jodie is conflicted between her desire to act in ways that she feels will help her to cope after physical restraint and the need to do her job. Perhaps not being able to process the emotional impact after restraint makes it harder to put emotions to one side and still support the service user.

Some participants touched upon changes to power dynamics within the relationship following the use of physical restraints (with both those being restrained and those witnessing restraint) and saw such changes as positive:

> *"I think [patients witnessing restraint] is completely positive. Because… I think it's even better, because once they - the service users witness someone who's disruptive, getting restrained, they realise that 'that is what is going to happen to me if I do what he does', and they're like 'I'm not going to do that because I don't want that the happen to me'. And also you realise, that they tell someone else 'you're not going to do that, because if you do that, this is what's going to happen', so they pre-warn them as well." [Robert, page 17, 499]*
>
> *"They realised like 'oh, okay, I have to behave in a certain way or else this is going to happen'. So, that is positive because the rules and boundaries are put in place, so that they knew they couldn't, you know, erm, run riot on the ward so to speak." [Steven, page 14, 418]*

In the quotes above, both Robert and Steven discuss how physical restraint sets boundaries and elicits control on the ward. It appears that Robert and Steven have experienced gains of dominance following physical restraint and perhaps this provides containment and security for them.

Only one participant described not having experienced any negative effects on the relationship following physical restraint:

> *"No, I can't … I've witnessed something negative happen to others, but I haven't had it happen to myself. So, because I haven't had it happen to myself, I can't think about it linked to myself…Of what's a negative experience to be honest." [Robert, page 16, 471]*

Here, Robert appears to perceive retaliation as the identifying factor for negative effects on the relationship. It may be that it was difficult for Robert to recognise other subtle changes to staff-patient relationships.

3.2 Factors that Protect the Relationship

Many of the participants spoke about how the negative effects that physical restraint can have on the relationship can be minimised. The subthemes detail the protective factors identified in the data set: 'power of communication', 'the benefits of rapport' and 'holding the patient in mind'.

3.2.1 Power of communication.

All of the participants discussed how communicating with the service user can help to proactively prevent physical restraint from occurring, which in turn means that relationships are protected from the impact of restraint. Participants discussed trying hard to engage service users in conversation to help them to understand physical restraint and the system that they are in:

> *"We've avoided so many incidences of having to enforce depot using restraint, because the staff work so hard in talking and saying, and just laying it out really. Just talking about the pathway, talking about the reasons for it, you know, talking about history. Whatever is needed to motivate that person to get them where they need to go." [Doug, page 14, 432]*

Participants also discussed how informing the service user about what physical restraint is and how it may be implemented on the ward can help reduce uncertainty and fear:

> *"I put a lot of emphasis on talking about things, and just letting people know what the pathway is going to be, and I feel that there is a lot less anxiety,*

> *you know, that they are not gonna get jumped at 5 every morning for their depot injection, which you know, I know happens in areas. Erm, and I guess that is kind of driven by fear, and it creates fear and anxiety, and suddenly you've got a horrible place for service users to be, which doesn't help with restraints and relationships." [Doug, page 10, 298]*

> *"And um, I think it's quite useful that they know that it's a possibility before… Like, part of our care planning is about put- well one of the main parts to care plan to people is the risk section and what we're going to do to reduce your risk. I think it's quite… because we always put in there, 'Oh, if you do such and such behaviour, this might lead to…' Like, we obviously base it on what they've been doing. 'But if, if you've been lashing out at people, if you do that here, this is what we're gonna respond with', so it's kind of like… yeah, there's, there's some kind of awareness that 'this is what might happen.' So, it's not completely out of the blue. Well, I guess it's just, it's just communicating." [Bethany, page 29, 923]*

Participants also spoke about how communicating during the process of physical restraint can help to minimise any potential negative effects and in turn protect the relationship:

> *"Sometimes when we tend to put hands on they are like 'woah, what's happening', then you explain what is going to happen, and then they willingly take it, kinda like 'thank you' kinda thing. It's weird, because to be honest you don't expect it!" [Steven, page 15, 457]*

> *"It can be positive as in the way that the, the staff member like deals with the situation because you have to communicate with the patient throughout…. But literally like, 'I know we're holding you down right now, I know you don't like it. I don't, I know it's not a really nice experience, but do you understand why we're doing this?' So, 'You can't breathe, okay, that's fine, we'll tuck your arms back in so your chest is lifted from the floor and you can breathe properly again. You wanna lie on your back? Okay, that's fine, we're gonna turn you around but we have to follow a protocol in order to do that.' Things like that, so, it's um, yeah, you just need to be, you need to*

> *engage so, it depends on the staff and it depends on the patient. But yeah." [Jodie, page 16, 487]*

In the above quote, Jodie demonstrates the responsibility of the staff member to communicate and minimise the service user's distress. It appears that there may be a delicate balance between doing the restraint as required by protocol whilst still being informative and providing the service user with a choice. It may be that empowering service users and providing them with some control can help to minimise negative effects on the relationship.

For Robert, the action of communicating with a service user during such an intimate and significant event can make the relationship closer:

> *"You get – you're restraining them, you're very close to them, your hands on with them, you know, and like literally, if the communication is there, and good between you and them, and they are understanding tha-th-that their communicating with you well, and you are communicating with them well back, then the relationship will be closer." [Robert, page 14, 413]*

3.2.2 The benefits of rapport.

Many of the participants spoke about how having a rapport with the service users can help reduce any negative effects of physical restraint on the relationship:

> *"You know, and if you do have that good relationship with someone prior to going into the restraint, you can be, like, 'What's going on here', kind of thing, talking to them. And having a bit of a laugh, and when they start to laugh, the body relaxes so much." [Alex, page 36, 1157].*
>
> *"The other thing that's useful is having a really good relationship with the patients. Because if you're restraining somebody that you know really well, they kind of understand that you, you know, respect them and don't actually want to hurt them or scare them or anything." [Bethany, page 3, 76]*

Here, Bethany highlights how a good relationship prior to the use of physical restraint can help service users to trust her during the physical restraint and feel more protected and secure during the process.

The participants also spoke about how rapport can prevent restraints by providing staff with the ability to respond proactively to any difficulties. Participants discussed the importance of trust, effective communication, and being interested as factors that can help to prevent physical restraint:

> *"Erm, because if people identify that you're interested in them, erm, that you remember things about them, erm and that they've got a relationship with you, and if you say to them, 'let's calm the situation down, please can we go and speak 1:1 in the bedroom, in the side room', you're gonna be successful with that. Whereas if I've got no relationship, you can't do that." [Doug, page 22, 701]*

> *"An hour ago, another guy came up to me and said, 'I don't want my depot', and you don't have to be strict as such because I had that rapport with him, we just talked through it, and he got over it kinda thing. I think it's the same with physically restraining, you always have to have that communication, and good rapport." [Steven, page 4, 114]*

In the above quotes, Doug and Steven appear to convey a sense of nonchalance, perhaps highlighting their ease in using the therapeutic relationship as a tool to prevent restraints.

Participants also discussed the need to treat service users like human beings and how this helps to build rapport and protect the relationship. Here, Bethany highlights how connecting on a human-human level can support the relationship:

> *"And also, I think it's important that, um, the patients get to know you a little bit. Obviously, it's difficult about how much you can disclose, but if they can*

> *see me as a human being, that makes a huge difference. And I, I had a patient the other day say, 'You're the only one who talks to me like a human.' Which I thought was really sad. But, again, it's like, having a human relationship that… it's not so much nurse-patient, even though it still is, but it's human-human more than anything." [Bethany, page 16, 471].*

3.2.3 Holding the patients in mind.

This subtheme describes the importance of knowing the patient well, being able to empathise with service users' experiences of restraint and being sensitive to their circumstances. Participants spoke about how this knowledge can help to tailor physical restraints and ensure that any negative effects are minimised:

> *"You know, you know, knowing the patient well is very, very important, you know, what works for one might not work for another, erm, you know 'I hate being grabbed, it brings back all sorts of memories', you know." [Doug, page 14, 436]*

> *"Um, care plans, care planning, really. 'Cause sometimes, you have patients that will really tell you that, 'I prefer to be restrained on my side.' Or, 'I prefer to be restrained on my front or my back.' Or, 'I prefer to have female staff members on my feet. I prefer to have female staff members on my head.' Things like that. Um, 'I don't like being talked to when I'm being restrained.' So, basically like, kind of like still giving them the choice, doing their restraint but then you have to make sure the staff are aware of this." [Jodie, page 29, 920]*

Participants also talked about how knowing the service user can help to understand and formulate their difficulties, which in turn helps to prevent future problems and increases the ability to intervene proactively:

> *"Uh, on the whole, I like to get to know the patients as soon as I possibly can in terms of… just sit down with people, talk to them, find out like - let*

> *them talk to me. Um, just so that they know that I'm somebody that they can talk to… Um, they'll sit and they'll disclose things. And you'll get to know. And you get to know more, like why they do certain behaviours and what's the motivation behind it and if there are any needs that need to be met that could help, that could prevent future problems, and the potential use of restraint." [Bethany, page 12, 365]*

Other participants discussed how it is important to think of the effects that restraints may have on those on the receiving end as well as those witnessing the restraint:

> *"And I see [members of staff] talking to the patients, and reassuring, you know. And we try and avoid prone restraints in communal areas, and all this, and the kind of things that distress other people." [Doug, page 13, 395]*
>
> *And you've also got to think of the other patients, they've seen err, peers being grabbed – well what it looks like to them, is being forcibly taken to another room, medicated. Can't be nice for them, so sometimes you've got to feed back to them as well, without breaking confidentiality." [Chris, page, 19, 591]*

Chris demonstrates his empathy towards service users who may be experiencing staff members laughing and joking during restraint, and how this lack of sensitivity towards the service user can be demeaning. Chris shows his frustration at other staff members' perceived lack of professionalism and how they may be unaware of the impact that this may have on service users:

> *"I think, show the patients more dignity, because that doesn't happen sometimes, people don't realise. Like I said before… you could be involved in a heavy restraint, the patient is having medication and are being restrained, and all they can hear is staff walking down the corridor laughing and joking. Whether it is directed at them or not, they need to show more professionalism and dignity. 'Cause you know I've heard that, it's not deliberate, but it can't be nice." [Chris, page, 19, 584]*

3.3 Factors that Threaten the Relationship

Participants spoke about the impact that difficult restraints can have on the relationship and the impact of the service user's perspective and experience of physical restraints.

3.3.1 Difficult restraints.

Many participants spoke about how violence from the service user during the physical restraint process can hinder the staff-patient relationship. These two quotes link with the subtheme 1.2 (effects on the relationship) whereby participants' negative feelings towards the service users are aggravated by the level of violence during the restraint:

> *"The bad ones where it's hectic and messy and everything like that […] The bad ones are when they start to hit and kick out, and that's when you start to kinda feel bad, and sometimes you may feel some negative – you may start to have negative feelings towards the patient – how dare they try and punch me or hit me, how dare they try to spit at me." [Steven, page 2, 47]*

> *"So, I intervened and then the restraint ended… and I ended up having my head stamped on four times and my scalp almost ripped and he bit me- Yeah, that really kind of soured the relationship after that." [Alex, page 21, 663]*

Alex speaks in detail about the assault, emphasising the seriousness and impact of the violence. He also stops before he has finished this description, perhaps demonstrating difficulties talking about the incident.

> *"It will still like, affect you emotionally because you will have a sort… literally a sour taste in your mouth whenever you talk about the patient or even look at the patient. And you're gonna be like, 'Yeah. You were the one that spat in my face.' Or 'You're the one that bit me.' Or 'You're the one that did this.'" [Jodie, page 5, 144]*

Jodie provides more detail about what ‘sour’ may mean and demonstrates that she may feel angry, resentful and blaming of service users following the incident.

Participants also touch on the importance of carrying out restraints properly and effectively, and highlight how staff members’ recklessness and incompetence can affect the relationship and the service user’s experience of restraint:

> *“The staff members who are doing it. Yeah the staff members, the amount of people… Because the more people, the more intimidating it is. For them. Um, um, the skillset of the staff members as well. ‘Cause if the staff members, and those that don’t know what they’re doing and they’re hurting the patient, it’s not gonna be a nice experience.” [Jodie, page 28, 892]*

> *“If a staff member just comes up in the same manner and is reckless like the patient, and then you come up and you’re reckless in the way you restrain someone, then the two don’t really go well together. They’re gonna be angry, and mad, and you’re gonna be angry and mad because they’re inflicting you with their emotions, and with their anger, and their physical aggression, and then you just feel like doing the same back.” [Robert, page 5, 148]*

In the above quote Robert talks about the necessity to be controlled and cautious using restraint and the negative impact of mirroring service users’ behaviours. He highlights the importance of managing emotions and behaviour, with the verb ‘inflicting’ suggesting that showing emotions can cause suffering.

3.3.2 Negative experiences and perceptions of restraint.

This subtheme describes how a negative experience or negative perception and understanding of physical restraint can increase the likelihood of the relationship being affected negatively.

> *“It’s not a nice thing to do, and people bare grudges. Especially if they are, you know, they think it’s unnecessary or think it was prolonged.” [Chris, page 4, 96]*

> *“‘Cause- ‘cause, well, quite a lot of the time they don’t feel it’s necessary in the first place, they feel they’ve done nothing wrong. Maybe that was because they were mentally ill, their-their mental state wasn’t stable enough to realise. Or they are just so angry. Or, you know, they can’t justify it.” [Chris, page 14, 417]*

This point is also highlighted by Bethany in these two quotes:

> *“I think the person is way more frightened if, especially if they're really psychotic and they don’t understand what's going on. And they genuinely think, ‘Staff are attacking me.’ Like you see it from their perspective, and they don’t know why it's happening. And that's really hard because you have to do this thing to someone and they don’t understand what's going on and you can't explain it in a language that they understand. That's frightening for them.” [Bethany, page 4, 96]*

> *“And it's usually when the person's really poorly. Really out of control of their own behaviour. So at that time, they're probably really, really paranoid. Don’t understand what the medication's doing. You're forcibly giving it to them, um, they're literally being held down. And they want to probably kill everyone that did that to them [laughs]. So, at the time, that really does affect your relationship, I guess, 'cause ‘everyone's out to get me, you're all pinning me down’.” [Bethany, page 18, 549]*

It appears that for Bethany a service user’s distress can impact on her ability to communicate with them to explain what is happening. It appears that she feels ineffectual in minimising service users’ fears and changing their perspectives of restraint. In the second quote Bethany laughs after describing service users’ anger at staff members, which may be a way of protecting herself from considering further the impact of '*forcibly giving'* medication, and *'holding them down'*.

3.4 Importance of Rebuilding Bridges

All but one participant discussed the superordinate theme 'importance of rebuilding bridges'. Robert did not contribute to this superordinate theme which links with his experience of his staff-patient relationships not being affected by physical restraint (see 1.2).

Within this superordinate theme, participants spoke about 'power of understanding', and 'making an effort'.

3.4.1 Power of understanding.

Participants discussed how explaining to service users the rationale for the use of physical restraint was a beneficial way of building their understanding and in turn helping to rebuild bridges and re-establish rapport. This is highlighted in the quotes below from Steven and Chris:

> *"If you are upfront and straight and explain why you do what you do, the patients, kinda, not kinda, I think they do respect you a lot more. You've got to be very open, and very honest because you know, as I've explained before, physical restraint it's not a nice thing, but if you've explained why you've done it, then they are a bit more understanding to it. As well, I think it helps them as well and rebuilds rapport" [Steven, page 18, 547]*

Steven discusses the importance of being open and honest when explaining the use of physical restraint, and how this approach is often respected by service users.

> *"It's not, it's not, you know, it's not a requirement to try and explain to them afterwards. It's just something that if it's needed then I'll do it… To get*

> *some sort of rapport back. 'Cause that's what you know, for them – [sigh] – I don't know. Like I tell you, you can't make friends with everyone, and not everyone is gonna like you. But, I don't want to be perceived as a bully, or a – you know, or anything like that, so…" [Chris, page 14, 432]*

Here, Chris speaks about how talking to the service user and building understanding is a choice, but his sighing and hesitancy appears to emphasise the enormity of the task. He also highlights his concern for others' perceptions of him and how explaining the reason for restraint may help reassure him that he is not viewed negatively.

Bethany also shares the experience that explaining the reason for the use of physical restraint can benefit the relationship:

> *"Usually even the negative ones afterwards um, once you've talked it through and explained, 'This is the reason we did this… this is why we were doing this', and people start to understand why what happened, happened. Like I think that's one of the main important things is having like the debrief afterwards to make sure everyone knows what on earth just happened. And why it happened and how to try not to do that again." [Bethany, page 3, 61]*

Bethany highlights how confusing restraint can be for everyone; '*what on earth just happened'*. Bethany also adds that these conversations can help to prevent future restraints and any negative effects on relationships. In the quote below, Bethany discusses the benefits of this understanding in more detail. She talks about the differences in perspectives and the required skills of empathising, validating and understanding the service user's experience to rebuild the relationship:

> *"Um, so making sure that the patient understands the staff's perspective of what went on. Because obviously the, the perspectives don't match at all. Um, describing what went on. Like, 'This is what you experienced.' Empathising that, 'Yeah, no, that must have been really traumatic. Yeah,*

> *let's try not to do that again. How are we gonna, how we gonna do things differently?' 'Um, if there is another restraint, have you got any preferences that we might or might not be able to adhere to.' Um, yeah, and just basically, 'What ended up in you getting to the point where you were so distressed or angry that we had to do that? We had to…' Yeah. So work out what happened. And try and find a way of that not happening again."*
> *[Bethany, page 23, 713]*

Alex also spoke about the importance of understanding the experience of the service user, and how this understanding can facilitate forgiveness:

> *"I can be extremely, I don't wanna say forgiving, but if I've been attacked by service users and had to restrain them, when it's, I can tell this is someone who's so acutely unwell they don't know which way is up, even if they've given me a black eye and broken glasses, I can forgive them very quickly. I can then just maintain that because I know this is born out of just uh, you know, a, a mental, a mental illness and something that can't be helped."*
> *[Alex, page 28, 912].*

3.4.2 Making the effort.

Participants spoke about the benefits of reaching out to the service user after physical restraint and making the first move to start rebuilding the relationship:

> *"If it was me, and I know that that had happened, and I'd been restrained, I'd feel a bit hesitant going back to that staff member if I'm the one that's punched them or it was them that grabbed me in the restraint. But I think showing them that, you just walk up to them and go, 'You all right mate?' Just that kind of showing them that you don't harbour any grudges, you're not angry with them, you know this isn't... you know, you're not in any way wanting revenge or anything like that. I think it helps them a lot because then they can go, oh, okay then yeah, that's fine. You know, we can pick up from where we left off in a way." [Alex, page 31, 995]*

The two quotes below from Jodie and Bethany highlight a common theme amongst the participants; that showing service users that you are willing to make the effort and do things for them can help to rebuild bridges and rapport:

> *"So, when they're sitting there on that bed and they're literally cooking on the inside. Maybe you're just being like, 'Oh, um, so-and-so, do you want, here I have a coffee for you. Here, I have a hot chocolate for you and some biscuits. I have a tea for you and some biscuits.' Um, that might literally bring all the tension out. And you actually become best friends again because it will be like, they will understand, 'Okay, yeah. It's not too bad.' Yeah." [Jodie, page 20, 644]*

> *"Quite often you have to almost prove that you're working with that person. So like, 'Oh yeah, I will make this phone call to so and so for you. I will try and help you sort out your benefits. I will try my hardest to get you such and such a nice meal that you so request.' Like, just trying to give a little, kind of builds back that trust." [Bethany, page 19, 603]*

It appears that participants have a strong desire to rebuild the relationship, with some of the participants mentioning positive risk taking and the need to test the waters after restraint:

> *"Y-y-you, and also you take, eh – I suppose it's called positive risk. You, you're taking a chance, making someone a cup of tea, you might get it thrown back in your face, or you might just say to someone, 'Do you want a chat? Or do you want some quiet time on your own? Fresh air?'" [Chris, page 15, 447]*

In the above quote, Chris highlights the importance of needing to take risks to be able to have the chance to rebuild relationships. He appears to accept, as does Alex in the quote below, that the initial reaction from service users may not be positive.

> *"Um, you know, and that really is, it's like a litmus test, you know, as you walk past them, you say, 'You all right mate?' And you get, you know, a, a,*

> *they turn away or they give you a dead stare, and then it's kind of like, oh, okay then, well this is not the time to try and rebuild these things. If you do it to them and they're like, 'Oh, you all right?' You think, oh well, I can maybe try and rebuild things. I think if you give the service user their space, they'll respect that bit as well, and then, you know, often, we are trying to make the first move to try and repair these relationships and I think they respect that as well." [Alex, page 32, 1031]*

In contrast, Doug spoke about the conflict he experiences when making the first move to rebuild bridges. He explains how contrasting ways of perceiving the service user after restraint can create a moral dilemma for him:

> *"I guess it's very difficult with however you view it, I always find it difficult with the idea of making the victim have to be the person that seeks the help, you know, it should be delivered to them, and you could put them as a victim, because they've been a victim of restraint. But at the same time if they hadn't done what they did to start that restraint then th-th-d-d… but they came from aggressor to being a victim, and I guess that's quite complicated" [Doug, page 17, 536]*

4. Discussion

This study aimed to explore how nursing staff within PICU's experience the therapeutic relationship in the context of using physical restraint. The findings provide insight into ways that nurses protect the therapeutic relationship from the impact of physical restraint, and how ruptures are repaired. Through the IPA process four superordinate themes were identified: *consequences of restraint*, *factors that protect the relationship*, *factors that threaten the relationship*, and *importance of rebuilding bridges*. Although the superordinate themes and subthemes are presented separately in this discussion, many of the themes appear to interlink.

For example, the subtheme ‘power of communication’ appears to run throughout other themes such as ‘power of understanding’, ‘making an effort’, and ‘benefits of rapport’.

4.1 Findings in the Context of Previous Research

Other researchers have also reported that staff experience a variety of emotional responses such as anger, fear, anxiety, and guilt (Bigwood, & Crowe, 2008; Bonner et al., 2002; Moran et al., 2009; Sequeira & Halstead, 2004) and often feel conflicted between needing to provide treatment as part of the job and maintaining the therapeutic relationship (Bigwood, & Crowe, 2008; Duffy, 2017; Middlewick, 2000; Rutledge & Pravikoff, 2003). Further emotions were highlighted in the present study, such as sadness and disappointment, particularly if the use of physical restraint was perceived as a setback in the service user’s recovery journey. One participant discussed physical restraint causing closeness and connection with the service user, which is also reported by Bigwood and Crowe (2008).

Whilst some of the participants in this study were able to acknowledge the emotional impact of physical restraint, others appeared to find it hard to do so. The denial, suppression or disconnection from emotional experiences during and following restraint is not uncommon for members of staff (Duffy, 2017; Moran et al., 2009; Sequeira & Halstead, 2004). Similar to findings by Moran et al. (2009), some participants in this study referred to service users in a detached way when discussing the process of physical restraint, for instance by using language that disembodied service users (e.g. “*manage the head*”). This may be a coping strategy or defence mechanism (Crowe, 2004; Sequeira & Halstead, 2004), however, unlike findings previously reported (Moran et al., 2009; Morse, 1991), this disconnection did not appear to hinder the staff members’ ability to build or maintain the therapeutic relationship.

One of the effects of restraint experienced by participants was a ‘cooling’ of feelings towards the service user during the physical restraint, which may impact on their ability to be compassionate. A lack of compassion during restraint can be experienced as dehumanising by service users (Wilson, Rouse, Rae, & Kar Ray, 2017). Similarly, in a study by Sequeira and Halstead (2004) it was found that service users were aware of staff’s negative feelings towards them during restraint. This has important implications for the therapeutic relationship and highlights the need to manage emotions during physical restraint.

Other effects identified by participants include a loss of rapport and disengagement from service users, subsequently making it difficult for participants to do their job and support service users in their recovery. This finding has also been reported in other research (Haw, Stubbs, Bickle, & Stewart, 2011; Ling et al., 2015; Wilson et al., 2017). Service users may actively or passively disengage with members of staff (Duffy, 2017; Knowles et al., 2015), with the decision to disengage based on their evaluation of the physical restraint (Duffy, 2017; Knowles et al., 2015). Participants also reported that service users may at times want to seek revenge for the physical restraint and reflected on feelings of wariness and a desire to disengage from the service user. However, it was apparent that participants endeavoured to overcome this desire in order to continue doing their job. To the researcher’s knowledge there has been no research yet investigating such responses. However, research has highlighted the risk of disengagement whereby staff members view physical restraint as ‘part of the job’ (Bigwood, & Crowe, 2008), and become ‘hardened’ to the impact of physical restraint (Sequeira, & Halstead, 2004). Such perceptions and coping strategies may allow staff members to continue to do their job but are likely to have a negative impact on the therapeutic relationship.

Some participants in the present study believed that a positive change to the therapeutic relationship after an episode of restraint was the attainment of control and power. Similarly, other authors have reported that staff members view the acquirement of power and control through physical restraint as an integral part of the job, creating a safer environment (Bigwood, & Crower, 2008). However, it has also been found that service users view such power and control as negative (Cusack, Cusack, McAndrew, McKeown, & Duxbury, 2018; Wilson et al., 2017), resulting in service users segregating themselves from staff (Knowles et al., 2015) and feeling fearful of being subjected to restraint if they do not follow staff orders (Wynn, 2004), all of which can further damage the relationship.

Although participants identified that physical restraint can create negative changes and rupture the therapeutic relationship, factors that help protect the relationship were frequently discussed. First, the role of communication appears to be important in both the maintenance and protection of the relationship, and useful before, during, and after the use of physical restraint. Communication is said to be one of the most important factors in building and maintaining the therapeutic relationship (Gilburt et al., 2008; Ljungberg et al., 2015) and can help to de-escalate service users when they are distressed, prevent the need for physical restraint (Cusack, McAndrew, Cusack, & Warne, 2016; Moran et al., 2009; Wilson et al., 2017) and allow service users to problem solve and 'let off steam' (Knowles et al., 2015).

The participants in this study also identified the importance of communicating information about physical restraint to help minimise uncertainty and reduce fear for the service user. Fear, uncertainty and anxiety about what may happen during physical restraint has been found to damage service users' relationships with staff members (Knowles et al., 2015; Meehan et al., 2002; Sequeira, & Halstead, 2002) and therefore measures to prevent this state of uncertainty are crucial. Providing service users with information about physical restraint can be beneficial and have a positive impact on service users' experiences (Wilson et al., 2017), with knowledge about restrictive interventions helping to minimise the need for them (Cusack et al., 2016; Meehan et al., 2002).

Communication has also been found to be an important process during the use of restraint, with a lack of communication found to have a negative impact on the experience of restraint (Brophy, Roper, Hamilton, Tellez, & McSherry, 2016). In the present study, participants found that providing reassurance, being informative, listening and responding to service user preferences helped to minimise negative effects. Being unheard and not listened to can fuel service users' anger further and contribute to ruptures in the therapeutic relationship (Ling et al., 2015). Service users often feel disempowered and out of control during the use of physical restraint and find that this has negative effects on the therapeutic relationship (Knowles et al., 2015; Sequeira, & Halstead, 2002; Wilson et al., 2017).

It is suggested that relationships based on trust and rapport are more able to withstand damage caused by a conflict situation (Gerace, Oster, O'Kane, Hayman, & Muir-Cochrane, 2018). As found by Moran et al., (2009), participants in the present study reported that having a rapport, built on trust and respect, helps to facilitate communication between service users and staff. Indeed, research has found that trust is an important factor in the development of the therapeutic relationship (Gerace et al., 2018; Ljungberg et al., 2015), and that without trust there can be a decrease in staff-service user interactions, particularly following the use of physical restraint (Knowle et al., 2015). Participants in the present study also reported that having a rapport allowed service users to feel able to seek support from staff and confide in them. Similarly, it has been found that trusting relationships enable service users to be more open with staff, in turn increasing psychological wellbeing and adherence to rules (Chorlton, Smith, & Jones, 2015) and reducing the need for coercive measures (Looi, Engström, &

Sävenstedt, 2015). Participants also felt that having a rapport was containing for service users during restraint, as service users felt able to trust staff and felt safe. An ideal clinical outcome would be that staff members become a trusting attachment figure for the service user, which helps them to contain and modulate anxiety (Adshead, 1998).

Participants also emphasised the importance of 'holding the patient in mind' by knowing the service user well enough to facilitate de-escalation and provide person-centred restraints to minimise suffering. Other studies have found that knowing an individual helps to implement effective person-centred de-escalation (Perkins, Prosser, Wiley, & Whittington, 2012), and that service users' value individualised restraint procedures (Bonner et a., 2002). Knowing the service user is essential for individualised care (Moyle, 2003) and a lack of individualised care can trigger further resentment following the use of physical restraint (Ling et al., 2015).

Participants also reported that empathy can support sensitivity during the restraint process and help to reduce staff members' resentment and increase forgiveness following restraint. Little research has investigated the role of empathy in this context, however, one study found that staff members with above average empathy ratings were less likely to use physical restraint (Yang, Hargreaves, & Bostrom, 2014). Service users have also reported that a lack of empathy during the restraint process increases the likelihood that the therapeutic relationship will be affected negatively (Chien, Cham, Lam, & Kam, 2005; Sequeira, & Halstead, 2002).

Alongside factors that protect the therapeutic relationship, participants also discussed factors that can aggravate the impact of physical restraint on the therapeutic relationship. One of the main factors that threatened the relationship was a 'difficult' physical restraint, which involved violence. Participants discussed feeling angry at the service user if they themselves were physically hurt during the restraint process and how violence often soured the relationship. Other studies have also found that staff members feel particularly angry and fearful following violence from service users and experience a desire to avoid and withdraw from the service user (Maluleke, & van Wyk, 2017; Stevenson, Jack, O'Mara, & LeGris, 2015).

Participants also reported that physical restraints conducted by incompetent staff were more likely to create ruptures in relationships due to causing unnecessary emotional and physical pain. Other research has suggested that if physical restraint techniques are utilised by unskilled members of staff, both staff and service users may experience injuries and behaviours may escalate (Wright, 1999). Service users have reported that physical restraint is sometimes misused by staff, for example by using too much force (Wynn, 2004) or using it as punishment (Haw et al., 2011), and that longer durations of physical restraint are more likely to negatively impact the therapeutic relationship (Khatib, Ibrahim, & Roe, 2018).

Participant also discussed the increased chances of a rupture in the therapeutic relationship if service users perceived the physical restraint negatively (as unjust or unnecessary) or did not understand the need for physical restraint. Similarly, it has been found that if service users perceive the restraint to be unfair, they feel more hostility and frustration towards to staff member, which leads to increased difficulties in the therapeutic relationship (Duxbury, 2002; Knowles et al., 2015; Sequeira, & Halstead, 2002). Further to this, participants discussed difficulties helping the service user to understand the need for physical restraint when they are particularly unwell. Research has found that various communication skills are ineffective if the service user is experiencing severe symptoms and distress (Cleary, Edwards, & Meehan, 1999; Perkins et al., 2012; Scanlon, 2006).

Participants in this study reflected upon the processes of rupture and repair; although the relationship can be damaged by physical restraint, it can also be repaired. One method identified in this study to repair the relationship was to talk to the service user about the restraint process to help build insight and understanding. Similarly, service users found it beneficial for staff to explain the incident, as it helped them to process the events, understand the staff members' rationale (Bonner et al., 2002) and rebuild trust (Khatib et al., 2018). Service users have also reported that they feel victimised and resentful when they are unsure as to why physical restraint has been used (Ling et al., 2015). Not addressing this can affect the service user's ability to trust members of staff and subsequently impact on treatment engagement (Ling et al., 2015; Wynn, 2004). Other research has focused on debriefing following restraint and found that service users and staff members benefit from such experiences (Bonner et al., 2002; Bonner, & Wellman, 2010). It is particularly important that interaction with service users following restraint is completed in a timely manner as service users reported that being left alone after physical restraint can further decrease trust in staff (Khatib et al., 2018).

Participants also discussed the need to understand service users' perspectives, as this can facilitate forgiveness and help to identify ways to support the service user and prevent future uses of physical restraint. Service users have reported that negative relationships develop with staff members who have not taken time to understand their viewpoints (Adnøy Eriksen, Arman, Davidson, Sundfør, & Karlsson, 2014; Ljungberg et al., 2015). Moreover, conveying understanding has been identified as one of the most important factors when building a therapeutic relationship in mental health nursing (Cleary et al., 1999; Dziopa, & Ahern, 2008) as it helps to increase connectedness and provide a sense of importance for the service user (Shattell, McAllister, Hogan, & Thomas, 2006).

Participants also described how making an effort with service users can help to rebuild the therapeutic relationship and regain trust, for example, by showing the service user that they care about them. Service users have reported that perceived kindness and attention from staff helps to minimise the negative effects of physical restraint (Bonner et al., 2002), and that investing time in service users, making them feel valued and important, and ‘going the extra mile’ by providing them with things that they need can help to build and maintain the therapeutic relationship (Dzopia, & Ahern, 2008; Ljungberg et al., 2015).

The themes identified in this study are supported by previous findings. In addition, participants in this study highlighted ways to prevent and minimise the negative effects that physical restraint may have on the therapeutic relationship, including ways to prevent service users experiencing a loss of control and power during restraint. Participants also discussed emotions after physical restraint that have not been previously reported such as disappointment and sadness.

4.2 Limitations

It is possible that the recruitment process introduced a sampling bias in favour of nursing staff who perceived their relationship with service users and their ability to maintain such relationships as positive. However, the findings of this present study are similar to that of other studies on the therapeutic relationship and physical restraint (Duffy, 2017; Knowles et al., 2015).

Although this study aimed to recruit a homogenous sample as required for an IPA analysis (Smith & Osborne, 2008), the participants in this study consisted of five males and two females, who differed in ethnicity, and years of experience. However, homogeneity was retained in two ways. Firstly, all participants possess characteristics which are focal to the phenomenon being studied (nurses working within a PICU), and secondly through the shared experience of the phenomenon in question (experience of therapeutic relationship in the context of using physical restraint).

Since IPA analysis is interpretative and creates a ‘double hermeneutic’, a level of subjectivity may have been present in the data analysis. However, procedures to encourage reflexivity, reduce researcher bias and strengthen the validity of the results were used to strengthen the credibility of the findings. Verbatim extracts from the transcripts which support the interpretations are also presented in the results section, allowing the reader to independently evaluate the findings.

4.3 Future Research Directions

This research provides a preliminary conceptualisation of PICU nursing staff’s experience of the therapeutic relationship in the context of using physical restraint. To the author’s knowledge, this is the first research exploring the therapeutic relationship and physical restraint within a PICU setting, with a focus on ways to prevent and repair ruptures.

Due to the paucity of research into ways to rebuild relationships following physical restraint, it is particularly important that further research investigates this from both a staff and service user perspective. Focus could be placed on examining the use of debrief with the aim of identifying ways to optimise its benefits or on ways to promote re-engagement with service users following physical restraint. This could be completed by further exploring service users’ perspectives, leading to the development and trialling of protocols within services. Research could also investigate further the role of staff members’ empathy in helping to maintain the therapeutic relationship after physical restraint. It may also be useful to further explore ways to prevent negative effects of physical restraint on service users, such as investigating ways to reduce feelings of diminished power and control during the physical restraint process.

4.4 Clinical Recommendations

Although it is important not to overgeneralise findings, the following clinical recommendations have been made in consideration of the current findings:

- Service users may benefit from being informed about the use of physical restraint upon admission to acute mental health settings. Although issues regarding capacity may arise within such settings, reasonable adjustments should be made to communicate the information.
- For person-centred de-escalation strategies to be identified and utilised consistently by members of staff to prevent situations where physical restraint may be required.
- For staff members to ensure that individualised restraint procedures are implemented. It may be useful for staff members to facilitate discussions with service users upon admission to PICUs about how service users would prefer to be restrained if such an intervention is ever required. For this preference to be documented clearly in a suitable location to ensure that all significant members of staff can access this information. It is important that this information is also reviewed regularly with the service user.
- Staff members should facilitate communication with service users during and after the use of physical restraint in a compassionate way. Debriefs should be completed in a timely manner to prevent disengagement, with a focus on establishing mutual understanding of the restraint process and identifying ways to avoid future conflict.
- The use of team formulation sessions may help staff members to increase their empathy and understanding of the service user (Johnstone, 2014) which in turn may reduce the need for physical restraint and prevent ruptures to the therapeutic relationship. Specific formulation frameworks focusing on the staff-patient relationship (e.g. systemic and/ or psychodynamic) may be useful to help staff

members understand and manage difficulties within such relationships, particularly in the context of using physical restraint.

- Training to be provided for members of staff on ways to build and maintain therapeutic relationships in the context of using physical restraint.
- Clinical supervision to be offered regularly to nurses in order to provide support for potential psychological consequences or ruptures in the therapeutic relationship after restraint.
- Further organisational support to be implemented into services to support staff members to manage any difficulties resulting from the use of physical restraint such as psychological consequences and changes to the staff-patient relationship. This support could be provided through reflective practice groups, peer support forums, mentoring new staff members and joint working.

For protocols to be developed with input from staff members and service users detailing the desired procedures before, during and after the use of physical restraint with a focus on the methods that will protect both the psychological well-being of staff and service users and the therapeutic relationship. Such protocols should be trialled in clinical settings.

5. Conclusions

For the participants in this present study the effects of physical restraint on the therapeutic relationship are complex and varied. However, insight was gained relevant to the therapeutic relationship, and ways to prevent harm and protect psychological well-being for both service users and staff members were highlighted. The results are discussed in the context of previous research and a number of suggestions for future research and for clinical practice are proposed on the basis of the current findings.

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PUBLIC DISSEMINATION DOCUMENT

Public Dissemination Document

1. Introduction

This document summarises the research component of a thesis submitted in partial fulfilment for the Doctorate in Clinical Psychology, University of Birmingham. The research component consists of a literature review and a research study.

2. Literature Review

The Relationship between Moral Distress and Burnout in Healthcare Professionals: A Meta-Analysis

Background: Burnout is described as a state of emotional and physical exhaustion caused by stressful demands of a job and can include feelings of cynicism and detachment (Maslach, & Leiter, 2016). Burnout can be experienced by anyone, but the prevalence of burnout is suggested to be higher in healthcare professionals. Burnout can be caused by factors such as high workload, a lack of job control, and a lack of organisational and colleague support. Moral distress is another psychological difficulty that can occur in healthcare professionals. This is defined as a type of distress that occurs from a situation where an individual is unable to act in a way that they perceive to be morally right (Jameton, 1984). Recently research has been looking at how burnout and moral distress are associated with one another (Lamiani et al., 2017).

Aim: The aim of this review was to evaluate the existing research investigating the relationship between moral distress and burnout in healthcare professionals using a statistical technique called a *meta-analysis*.

Method: A systematic search of research databases was completed to identify all existing literature looking at the relationship between moral distress and burnout in healthcare

professionals. Inclusion and exclusion criteria were used to help ensure that the studies were appropriate for the review. Ten studies were deemed appropriate and were rated for their methodological quality.

Results: The results of the reviewed studies demonstrated that there was a lot of variation in the findings of each of the ten studies reviewed. This suggests that the results are biased by uncontrolled or confounding factors.

Discussion: Possible causes of such variation in the literature investigating burnout and moral distress were explored. The variation could be caused by uncontrolled individual differences such as demographic factors, and/or confounding variables such as factors that have been found to be associated with burnout and moral distress (e.g. high workload, low levels of work autonomy, and lack of support). Many of the studies in the literature did not clearly identify or report factors that could confound the findings. Other causes of variation could be due to problems defining moral distress, which subsequently make it difficult for questionnaires to be developed to accurately measure the phenomenon. A variety of questionnaires were used in the literature to measure moral distress, with most measures used having unclear reliability and validity. The methodological quality in the studies was poor, and there was variation in the way that the studies were conducted. Issues with detection bias, selection bias, performance bias, and generalisability were consistently found.

Conclusion: The conclusions that can be drawn from this review are limited due to the small number of studies and the large variation between the studies. This analysis would suggest that there are many uncontrolled factors that appear to be creating a range of disparate effect sizes. Before conclusions can be drawn from this literature, a better understanding of the sources of variation are required. It is also important for future research to attempt to

homogenise or standardise both the phenomenon being investigated and *how* they are investigated.

3. Research Study

Physical Restraint and the Therapeutic Relationship: A Nurse Perspective

Background: The ‘therapeutic relationship’ is defined as an emotional connection between a healthcare professional and a service user based on mutual trust, respect and compassion, with a focus on supporting the service user’s treatment and recovery journey (Farrelly et al., 2014). The therapeutic relationship has been found to be important, particularly within mental health inpatient services, such as Psychiatric Intensive Care Units (PICUs). It has been found that the therapeutic relationship can help to improve mental health service users’ levels of functioning, quality of life, service engagement, service user satisfaction and medication adherence.

However, it has been found that high levels of coercion can hinder the therapeutic relationship. Physical restraint is often used in PICUs and is a type of restrictive practice involving physical contact to restrict movement to reduce and prevent danger to the person or others (DoH, 2014). Service users have reported negative consequences from the use of restraint such as injury, anger and anxiety, mistrust towards staff, and re-traumatisation. Likewise, staff members have reported uneasiness, fear and guilt, conflict in their job role, and emotional detachment from service users.

Aim: NICE (2015) has highlighted the need for research to investigate the consequences of physical restraint. Currently, no research has focused on how physical restraint may affect the therapeutic relationship, specifically from a nurse perspective working in a PICU setting. Therefore, this study aims to explore how nursing staff within PICUs make sense of and understand staff-patient relationships in the context of the practice of physical restraint.

Methodology: Seven nursing staff (five male, two female) working in a PICU setting were recruited to take part in semi-structured interviews asking about their therapeutic relationship with service users in the context of using physical restraint. A qualitative analysis called Interpretative Phenomenological Analysis was used to analyse the interview data. This analysis attempts to identify themes to gain insight into the participants' experiences.

Results: The experiences of the participants were captured in four main themes and seven subthemes. The main themes identified were: 1. *consequences of restraint,* 2. *factors that protect the relationship,* 3. *factors that threaten the relationship*, and 4. *importance of rebuilding bridges.* The first theme captures the variety of consequences resulting from the use of physical restraint such as psychological consequences for nursing staff, and the various and complex changes to the therapeutic relationship such as disengagement, lack of trust, revenge, and power and control. However, as captured in theme two, participants frequently discussed factors that help to protect the relationship such as communication, having a rapport beforehand and holding the patient in mind. In contrast, the third theme captures factors that threatened the relationship which included things such as difficult restraints involving violence or incompetent staff, and the service user's negative experiences and perceptions of physical restraint. The fourth and final theme focused on ways that ruptures in the therapeutic relationship could be repaired such as by helping the service user to understand the need for restraint and by making an effort with the service user, for example, by showing the service user that they care about them.

Clinical Recommendations: Although it is important not to overgeneralise findings, the following clinical recommendations were made in light of the current findings:

- To inform service users about physical restraint upon admission and to discuss with service users how they would like to be restrained if this intervention is ever needed. This is to support the implementation of individualised restraint procedures.
- De-escalation strategies are strategies used to help reduce conflict without using restrictive interventions. It is important for such strategies to be person-centred and utilised consistently by members of staff.
- Staff members should communicate with service users during and after the use of physical restraint in a compassionate way. Debriefs should also be completed in a timely manner to help build understanding of the need for physical restraint and to identify ways to avoid future conflict.
- *Formulations* are used as a way of explaining and understanding an individual's difficulties. It may be useful for team formulation meetings to be held to help staff members to increase their empathy and understanding of the service user, particularly in the context of physical restraint.
- To provide training to staff members on ways to build and maintain the therapeutic relationship whilst using physical restraint.
- Clinical supervision to be offered regularly to nurses to provide support for potential psychological consequences or ruptures in the therapeutic relationship after restraint. Other support could be provided through reflective practice groups and peer support forums.
- For protocols to be developed with input from staff members and service users detailing the desired procedures before, during and after the use of physical restraint.

Conclusion: This present study provides insight into how PICU nurses experience the therapeutic relationship in the context of using physical restraint. The effects that physical restraint had on the therapeutic relationship were complex and varied for the participants in this study. The findings also provided additional insight into ways that the therapeutic relationship can be protected from the effects of physical restraint, and how ruptures to the therapeutic relationship can be repaired following physical restraint. It would be useful for future research to further investigate ways to rebuild therapeutic relationships following the use of physical restraint from both a staff and service user perspective.

4. References of Public Dissemination Document

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APPENDICES FOR VOLUME ONE

Appendix A: Table summarising data extracted from the studies

Study	Country	Participants	Number of Participants	Setting	Moral Distress Measure	Burnout Measure
Ajoudani et al., (2018)	Iran	Nurses	278	Physical Health	Moral Distress Scale - Revised	Maslach Burnout Inventory
Austin et al., (2017)	USA	Physicians and Nurses (Combined)	314	Physical Health	Moral Distress Scale - Revised	ProQOL
Badolamenti et al., (2017)	Italy	Nurses	347	Physical Health	Moral Distress Scale-11	Maslach Burnout Inventory
Delfrate et al., (2018)	USA	Nurses	228	Mental Health	Moral Distress Scale - P	Maslach Burnout Inventory
Fried, & Fisher (2016)	Brazil	Professionals completing clinical research	125	Hospitals and outpatient settings	Moral Stress Scale - Clinical Research	Research Job Burnout Scale

Fumis et al., (2017)	Jordan	A sample of physicians (n=29), nurses (n=51), nurse technicians (n=85), respiratory therapists (n=50) were used but they were combined in the analysis.	215	Physical Health	Moral Distress Scale - Revised	Maslach Burnout Inventory
Larson et al., (2017)	Canada	Physicians and Nurses (Combined)	206	Physical Health	Moral Distress Scale - Revised	Maslach Burnout Inventory
Ohnishi et al., (2010)	Canada	Nurses	264	Mental Health	Moral Distress Scale - P	Maslach Burnout Inventory
Rushton et al., (2015)	USA	Nurses	114	Physical Health	Moral Distress Scale - 19 item version	Maslach Burnout Inventory
Sajjadi et al., (2015)	Canada	Physicians	43	Physical Health	Moral Distress Scale - Revised	Maslach Burnout Inventory

Appendix B: Quality Criteria

Domain	Details	Low Risk	Unclear Risk	High Risk
Selection Bias	Selection bias in epidemiological studies occurs when there is a systematic difference between the characteristics of those selected for the study and those who are not. Randomisation cannot be applied to observational studies or within-subject intervention designs and the effects of selection bias in these studies should be considered and, potentially, penalised.	The characteristics of the study population are clearly described and without evidence of bias. Non-response rate is reported and of an acceptable level (set at 50%). The source population is well described, and the study reports the characteristics of the sample e.g. the study details subgroups. The recruitment method is clearly reported and well defined.	Non-response rate is not reported. The characteristics of the study population are not clearly reported. For example, the country, setting, location, population demographics were not adequately reported. Further to this, characteristics related to burnout, moral distress and healthcare were not adequately reported e.g. type of occupation, years in service, client group population. The recruitment process/ sampling method of individuals are unclear or has not been reported. Convenience sampling was used.	Includes an unacceptable (reporting less than 30% of the data) level of non-response rate. Target sampling was used. The characteristics of the study population are not reported.

		The article provides some reassurance that there is no selection bias		
Performance Bias	Performance bias in correlation studies refers to exposure to factors that may influence their responses.	Study reports level of confidentiality and anonymity. There is a distinction made between early and late responders (e.g. those that are reminded/ prompted to respond vs. those that are not). Participants were not rewarded for their participation in the study. It is clear that information is provided in a way that would not cause a response bias. It is clear that participants were not observed completing the questionnaires.	The study does not report levels of confidentiality and anonymity. There is not a clear distinction between early and late responders. It is not clear if participants were rewarded for their participation (e.g. motivation to respond in a certain way). It is unclear how much information was provided to the participant prior to taking part in the study. It is unclear whether participants were observed completing the questionnaires and therefore unclear as to whether a Hawthorne effect was created.	Responses are not confidential or anonymous. More than 50% of responders were late responders. Participants were rewarded for their participation in the study. Participants were told what questionnaires they were completing and why and were informed of any proposed hypotheses.

Detection Bias	Detection bias refers to whether the design of the study is optimised to detect the effect in question. Ratings of design bias shown therefore reflect the position of the study design within the hierarchy of possible designs, with less optimal designs receiving some penalty.	The outcome measures are clearly defined, valid and reliable, and are implemented consistently across all participants. The research question was clearly stated.	Information regarding the outcome measures are either not reported or not clearly reported e.g. definition, validity, reliability. Cronbach's Alpha is between 0.6 and 0.7. It is not clear if the measure was implemented consistently across all participants. The research question is unclear. Unclear if the questionnaire has been translated.	The outcome measures were implemented differently across participants. The research question was not appropriate for the study design. The outcome measures used had poor reliability and validity reported e.g Crobach's Alpha below 0.6. States that it has been translated but does not detail how this was conducted or clear problems in translation. Only using one dimension/ subscale of the scale or separating the subscales/ dimensions in the analysis.

Statistical Bias	Bias resulting from the (inappropriate) statistical treatment of the data. Indicate if appropriate statistical methods used for correlation studies.	Appropriate statistical testing was used. The study has reported a Pearson’s value or the statistic can be transformed into a statistical equivalent. Confidence intervals or exact p-values for effect estimates were given or possible to calculate. Attrition rate – data loss is reported at analysis at an acceptable level (50%).	Unclear what statistical test was used. Appropriate statistical test was used but the statistic cannot be transformed into a Pearson's value. Confidence intervals or exact p-values for effect estimates were not reported and could not be calculated. Attrition rate – data loss is not reported at analysis and is therefore unclear.	Statistics were not reported. Wrong statistical test was used and not appropriate for the study design. Attrition rate – data loss is reported at analysis at an unacceptable level (30%).
Reporting Bias	Reporting bias refers to systematic differences between reported and unreported findings. Within a published report those analyses with statistically significant correlations are more likely to be reported. This sort of ‘within-study publication bias’ is usually	Reported all results of measures as outlined in the method.	Not all descriptive and/or summary statistics are presented. There is a description (narrative) in the results but do not record statistics. Reported more than one correlation.	Not reported full outcome measures that are stated in the method section/ reported only a subsample of results/only significant results.

	known as outcome reporting bias or selective reporting bias and may be one of the most substantial biases affecting results from individual studies.			
Generalisability	Generalisability describes the extent to which research findings can be applied to settings other than that in which they were originally tested. This includes any differences between the study participants and those persons to whom the review is applicable.	Sufficient sample for generalisation and representative of target population. A sample size justification, estimate and power analysis was provided. The sample size is adequate to detect an effect.	Sufficient sample for generalisation but with some idiosyncratic features. A sample size justification, estimate and power analysis were not provided.	Small sample with or without idiosyncratic feature. High percentage (over 80%) of sample is represented by one professional and cannot be generalised to a variety of healthcare professionals. The sample size is not adequate to detect an effect.

Appendix F: Participant information sheet

Participant Information Sheet

Project Title

The impact of physical restraint on the staff-patient relationship: a nurse perspective.

Researcher

My name is Samantha Beasley and I am a Trainee Clinical Psychologist training at the University of Birmingham. This research will be completed as part of my course programme and is sponsored by the University of Birmingham.

What is the purpose of this research?

The project aims to understand how nurses in Psychiatric Intensive Care Units experience staff-patient relationships, and how they experience this relationship in the context of having to use physical restraint.

Why have I been invited to take part?

Currently there is no research looking at PICU nurses' perspectives of the staff-patient relationship in the context of physical restraint. Therefore, it would be really useful to gain an understanding of your experiences of this.

The inclusion criteria for this study is as follows. You must have:

- been working on the wards in this PICU for 6 months or more
- experience of using physical restraint in the last 3 months
- completed induction training, and be up to date with AVERTS training
- and be able to speak and understand the English language

What will I have to do?

You will be asked to complete a semi-structured interview with myself which will take no longer than 1 hour. You will also be asked to fill out a demographic questionnaire which will ask your gender, age, ethnicity, and general details about your job. Before all this happens, you will be asked if you have any more questions about the study, and then you will be asked to sign a consent form. The total time expected for your participation is 1 hour and 30 minutes maximum.

What will happen if I agree to take part?

Participation in this study is voluntary. If you would like to take part, please send me an email [redacted]) from your work email address, and we can arrange a date and time for the interview to take place. The interview will take place during your place of work, within your working hours. Your manager will be aware that this interview is taking place, and that cover will need to be provided for you whilst you are participating. It will be your responsibility to liaise with your ward manager for cover to be provided during your participation in the interview. Due to this, it may be obvious to your ward manager, and other members of staff that you are participating in the research. However, your ward manager will be asked to not inform others of your participation, and I will conduct the interviews as discretely as possible and negotiate with you where and when to meet.

You also have the option to review your transcript (typed up version of the interview). If you choose to do this, once your transcript has been typed up it will be posted to you at your work address along with a cover letter explaining the procedure, and a pre-addressed stamped envelope for you to send the edited transcript back to me. You will have two weeks to do this from the date on the cover letter, and you will be required to highlight any parts of the transcript that you would like to be removed.

What will happen if I do not want to carry on with the study?

You can withdraw from the study without giving a reason up until four weeks after your interview. After these four weeks, the information you have provided will be used for the research project. If you want to withdraw from the study you can send me an email and your data will be destroyed and will not be used in the research. A decision to withdraw, or a decision not to take part, will not affect you in any way.

Expenses and payments
Payments or expenses will not be given for participation in this research.

What will happen to the results of the research study?

After the research project has finished, you will be emailed on your work email address to see if you would like a summary of the research findings. If yes, then these will be emailed across to you. The result of the study is expected to be published in a scientific journal and shared with relevant clinical groups such as the [redacted] within [redacted] Your name will never be published, and all data will remain completely confidential at all times.

How will my information and interview be used and stored?

Personal data such as consent forms and demographic questionnaires will be stored separately in locked cabinets at each of the research sites and will be kept separate from other data (e.g. transcriptions and audio recordings) so that it cannot be matched up.

The interview will be recorded using a password protected audio recording device. These data will be kept confidential by transferring it onto a password protected memory stick. The audio interview will then be deleted off the audio recording device. The audio recordings on the memory stick will be transferred as soon as possible onto a secure, password protected computer system at the University of Birmingham, meaning they will be kept on secure University of Birmingham servers. These individual files will also be password protected. Once they have been transferred they will be deleted straight away from the encrypted memory stick. When the interview is typed up (transcribed) on a secure University of Birmingham computer, a false name will be given to you so that your quotes are confidential. All the information on the computers will also be password protected. All participant demographic information will be grouped together and commented upon using descriptive statistics. This means that your demographic information will be confidential and cannot be linked to your quotes.

An analysis of the transcripts will be conducted, which will look for themes within, and between the transcripts. My Academic Supervisor will also check this analysis for consistency. The typed-up interviews will be analysed on a University of Birmingham computer, but will hold no personal identifying information. This transcription will be password protected also. Following the completion of the research, the interview transcriptions will be stored on a University system, be password protected, and have no identifying information. In line with the University's guidelines on records management, research data will be kept for ten years from the date of collection. Should you withdraw from the study, your research data will be destroyed, and subsequently your data will not be included in any publications.

What are the possible disadvantages and risks of taking part?

The interview topic may be emotional for some participants, and therefore there may be a risk that participants become distressed. At the end of the interview, you will be given a debrief, where you will be provided with information on how to seek additional support if needed.

What happens if the research project stops?

I will contact you if the research project stops. Any data you have provided, if it is not still being used in the research, will be destroyed. If you have any questions you can contact myself on the email provided or follow the complaints procedure if you would like to log a complaint.

What happens if new information about the research comes along?

It is not expected that new information about the research will develop. However, if it does, you will be told of this new information, and asked if you would still like to take part in the research study.

What if there is a problem or something goes wrong?

If you have a concern about any aspect of this study, you should ask to speak with the researchers who will do their best to answer your questions ([redacted]). If you remain unhappy and wish to complain formally, you can do this through the NHS Complaints Procedure (or Private Institution). You can also contact Dr Sean Jennings (independent sponsor of the project). His contact details are at the end of this information sheet.

Will anyone else know I'm doing this?

All information which is collected about you during the course of the research will be kept strictly confidential. Any information about you which leaves your place of work, will have your name and address removed so that you cannot be recognised from it. Any information that does have personally identifiable information (e.g. the consent form that you will need to sign), will be kept in a locked cabinet at the NHS site. The hard copies of the consent form and demographic questionnaire will be transferred to the Chief Investigator's academic supervisor on completion of the project for safe storage according to University Policy. Your data may be reviewed by members of the research team, or by the sponsor representative if they choose to conduct an audit. Your ward manager will also know that you are taking part in the research as cover will need to be organised for you on the ward, however they will not have access to the information that you provide.

If you told me something during the interview that made me think that you, or anyone else was at harm then I may have to break confidentiality to make sure that you and others are safe. I will talk to you about this after the interview so that you are aware of this, and know what will be happening.

Who has reviewed the study?

Before any research goes ahead it has to be checked by an Ethics Committee. They make sure that the research is OK to do. This project has been checked by the NHS/ HSC Research and Development Offices (IRAS application to R&D), and the University of Birmingham Ethics Committee.

Data Protection Information:

The University of Birmingham is the sponsor for this study base in the United Kingdom. We will be using information from you in order to undertake this study and act as the data controller for this study. This means that we are responsible for looking after your information and using it properly. The University of Birmingham will keep identifiable information about you for 10 years after the study has finished.

Your rights to access, change or move your information are limited, as we need to manage your information in specific ways in order for the research to be reliable and accurate. If you withdraw from the study, we will keep the information about you that we have already obtained. To safeguard your rights, we will use the minimum personally-identifiable information possible.

You can find out more about how we use your information at https://www.birmingham.ac.uk/university/governance/policies-regs/data-protection.aspx.

The Chief Investigator (Samantha Beasley) will collect information from you for this research study in accordance with our instructions.

The Chief Investigator will keep your name, and contact details (work email address and place of work if you opt to receive your transcript) confidential and will not pass this information to the University of Birmingham. The Chief Investigator will use this information as needed, to contact you about the research study, and make sure that the relevant information about the study is recorded for your care, and to oversee the quality of the study. Certain individuals from the University of Birmingham and regulatory organisations may look at your research records to check the accuracy of the research study. The University of Birmingham will only receive information without any identifying information. The people who analyse the information will not be able to identify you and will not be able to find out your name or contact details.

The Chief Investigator's Academic Supervisor will keep identifiable information about you from this study for 10 years.

Thank you for reading.

If you would like to take part, or discuss any aspect of this research please contact me:
Email: [redacted]

Or you can contact my Academic Supervisor (Dr Biza Stenfert Kroese):
Email: [redacted]

You can also contact the independent Sponsor of the project [redacted]**) if you have any queries or complaints:**
Email: [redacted]

Appendix G: Participant consent form

Centre Number:
Participant Identification Number for this trial:

CONSENT FORM

Title of Project: The impact of physical restraint on the staff-patient relationship: a nurse perspective.
Name of Researcher: Samantha Beasley

Please initial box

1. I confirm that I have read and understand the information sheet dated .... (version ....) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐

2. I understand that my participation is voluntary and that I am free to withdraw until four weeks after the date of my interview, without giving any reason, and without my legal rights being affected. ☐

3. I understand that my interview will be recorded using an encrypted audio recording device, with possible use of verbatim quotation in the write up of the study. ☐

4. I understand that my identity, and my data will be confidential. ☐

5. I understand that members of the research team and the sponsor representatives may have access to the data if they choose to conduct audits or review the research data. ☐

6. I understand that upon completion of the project, my data will be stored securely at the University of Birmingham according to University policy. This data will be safely stored for 10 years and then disposed of securely. ☐

7. YES, I would like to receive a copy of the transcript once the interview has been transcribed. I understand that the transcript will be sent to my place of work, addressed to me, and that I have two weeks to send it back to the researcher in a pre-addressed stamped envelope. I understand that this means that I will need to provide information on the demographic form about where I work, and what ward I work on. ☐

8.. I agree to take part in the above study. ☐

________________________ ________________ ____________________

Name of Participant Date Signature

________________________ ________________ ____________________

Researcher Date
Signature

One copy for the participant and one copy for the researcher site file.

Appendix H: Participant demographic questionnaire

Demographic Questionnaire

This questionnaire will be administered prior to the interview. Some of the questions are multiple choice (please tick the ones that best describe you), and others need a written answer on the dotted line. All questions are optional, however please fill out as much information as you can; this informational will be kept confidential. If you have any questions, please feel free to ask the interviewer.

1. **What is your age?**
   ………………………………………………………………………………

2. **What is your gender?**

   ☐ Male
   ☐ Female
   ☐ Other *(please state):* …………………………………………………...
   ☐ Rather not say

3. **What is your ethnic group?**

White
☐ English / Welsh / Scottish / Northern Irish / British
☐ Irish
☐ Gypsy or Irish Traveller
☐ Any other White background *(please state):*...

Mixed / Multiple ethnic groups
☐ White and Black Caribbean
☐ White and Black African
☐ White and Asian
☐ Any other Mixed / Multiple ethnic background *(please state):*.......................

Asian / Asian British
☐ Indian
☐ Pakistani
☐ Bangladeshi
☐ Chinese
☐ Any other Asian background *(please state):*……………………………………

Black / African / Caribbean / Black British
☐ African
☐ Caribbean
☐ Any other Black / African / Caribbean background *(please state):*………..

Other ethnic group
☐ Arab

☐ Any other ethnic group (*please state):*

……………………………………………………

4. Where do you work?

☐ Female PICU	☐ Forensic female PICU
☐ Male PICU	☐ Forensic male PICU

5. How long have you been working as a nurse in this PICU to the nearest year?

……………………………………………………………………………………

6. What is your nurse role?

……………………………………………………………………………………

7. What is your banding?

☐ Band 5
☐ Band 6
☐ Band 7
☐ Band 8a
☐ Other (please state):

7. How many years have you been qualified as a nurse?

……………………………………………………………………………………

8. Have you been required to, and utilised physical restraint within the last three months?

☐ Yes
☐ No

9. On average, how often are you required to use physical restraint on a shift?

……………………………………………………………………………………

10. Have you received AVERTS (Approaches to Violence through Effective Recognition and Training for Staff) training?

☐ Yes
☐ No

ii. If you completed this training over a year ago, when did you last update this training?

☐ 0 – 6 months ago
☐ 6 months – 1 year ago
☐ 1 year – 1 year 6 months ago
☐ Over 1 year and 6 months

10. What is your work email address?

………………………………………………………………………………………………

Please complete the below information if you would like to receive a copy of your transcript to review as this will be sent to your place of work.

11. **Which site and ward do you work on?**

………………………………………………………………………………………

………………………………………………………………………………………

12. If there is any other information the researcher needs to be able to send you a copy of your transcript, please provide them below:

………………………………………………………………………………………………

Appendix I: Additional support for participants

Additional Support

Please find below information on additional support available if you feel that you need this following the interview.

1. **Contact with your supervisor or your line manager**

2. [redacted] **Employee Assistance Programme (EAP)**

   [redacted] EAP offers a range of services that have been designed to take good care of the physical and mental health of their workforce.

   The Employee Assistance Programme (EAP) is a free, confidential service, to help staff access guidance and support when they need it. EAP is available 24 hours a day, 365 days of the year.

   More information about this service can be found online [redacted] or you can contact them by phone [redacted]

3. **Cavell Nurses' Trust**

   Cavell Nurses' Trust provides support for UK nurses, midwives and healthcare assistants, both working and retired, when they're suffering personal or financial hardship.

   They are a charity who provide a listening ear and practical support.

   More information can be found online: https://www.cavellnursestrust.org/

   Or you can contact them on this number: **01527 595 999**

4. **MIND**

   MIND provide advice and support to empower anyone experiencing a mental health problem.

   More information can be found online: https://www.mind.org.uk/

5. **Samaritans**
   Samaritans offer a confidential telephone service to allow you to talk any time you like about whatever is getting to you. They are available 24 hours a day, 365 days of the year. More information can be found online: https://www.samaritans.org/

   You can telephone them for support on: **116 123**
   You can email them on: jo@samaritans.org
   Or you can write to them: **Freepost RSRB-KKBY-CYJK, PO Box 9090, STIRLING, FK8 2SA**

Appendix J: Semi-structured interview schedule

Semi-Structured Interview Questions

Introduction

Introduce what physical restraint is and clarify that there is a correspondence between the participant's and researcher's understanding of this restrictive practice. The researcher should also specify that the interview will focus on the participants working relationship with patients (staff-patient relationship). The researcher will ensure that the rationale for the research is explained, and to emphasise that the research is to explore what it is like for nurses who engage in restrictive practices, and how this may impact their staff-patient relationships. The researcher will remind participants not to use service users' names to ensure confidentiality.

Can you tell me about your understanding of physical restraint?

Prompts: What is your understanding of physical restraint? How do you view physical restraint and the use of physical restraint? What training have you received?

Can you tell me about your experiences of using physical restraint?

Prompts: What is your understanding of physical restraint? What are the positive/ negative experiences? How do you feel the use of physical restraint affects you/ the service user (emotionally/ physically)? I was wondering how you cope/ respond to any of these effects? When do you usually use physical restraint? What alternatives to physical restraint are also used?

How would you describe your relationships with service users?

Prompts: Clarify staff-patient relationship if needed. What does a relationship mean to you? What are your experiences of the relationship with service users? How do you utilise this relationship in your day to day practice? How do you view this part of your job?

Can you tell me whether physical restraint has any effect on your relationship with service users? If yes, how so?

Prompts: How does using physical restraint impact on your relationship with that specific service user? How does it affect other service users on the ward and your relationship with them? How do you feel it affects other staff members relationships? Are there any positive effects? Are there any negative effects?

I was wondering if you had any ideas as to why it may affect your relationship with service users?

Prompts: What factors in relation to physical restraint do you think affects the relationship? From a service user perspective, why do you think physical restraint may affect the relationship? Does the use of physical restraint change how you, and service users interact and relate to each other? How does the use of physical restraint effect how you work as a nurse?

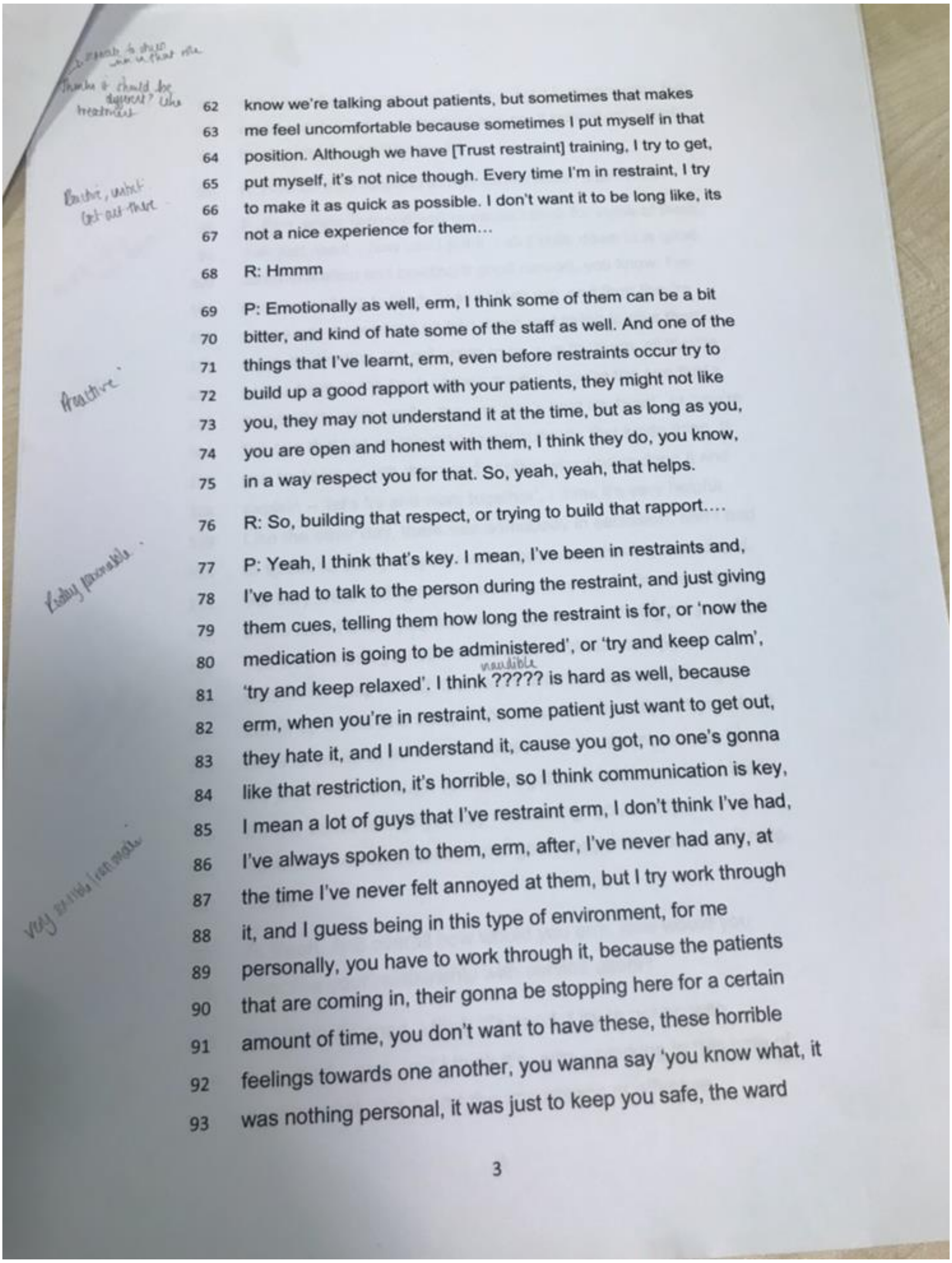
How do you manage any changes in the relationship?

Prompts: For example, reconciliation, mediation etc? Is there a difference between how you feel you should manage these changes, and how you may have to manage these changes? What support/ guidelines are in place to help you manage any changes? How do these ways on managing any changes help/ not help?

What do you think would help to decrease any negative changes in the relationship?

Prompts: Changes to guidelines/ clearer policies regarding the use of restrictive practices? What would you like more of/ less of? Is there anything the ward could do to support you? E.g. systemic support, staffing levels, debriefing, training, mediation with service user, support to understand different presentations.

Appendix K: Extract of transcript detailing stage one of analysis; initial thoughts



[illegible] in that role

Thinks it should be different? Like treatment

know we're talking about patients, but sometimes that makes me feel uncomfortable because sometimes I put myself in that position. Although we have [Trust restraint] training, I try to get, put myself, it's not nice though. Every time I'm in restraint, I try to make it as quick as possible. I don't want it to be long like, its not a nice experience for them…

Brutal, unfair get out there

R: Hmmm

P: Emotionally as well, erm, I think some of them can be a bit bitter, and kind of hate some of the staff as well. And one of the things that I've learnt, erm, even before restraints occur try to build up a good rapport with your patients, they might not like you, they may not understand it at the time, but as long as you, you are open and honest with them, I think they do, you know, in a way respect you for that. So, yeah, yeah, that helps.

Proactive

R: So, building that respect, or trying to build that rapport….

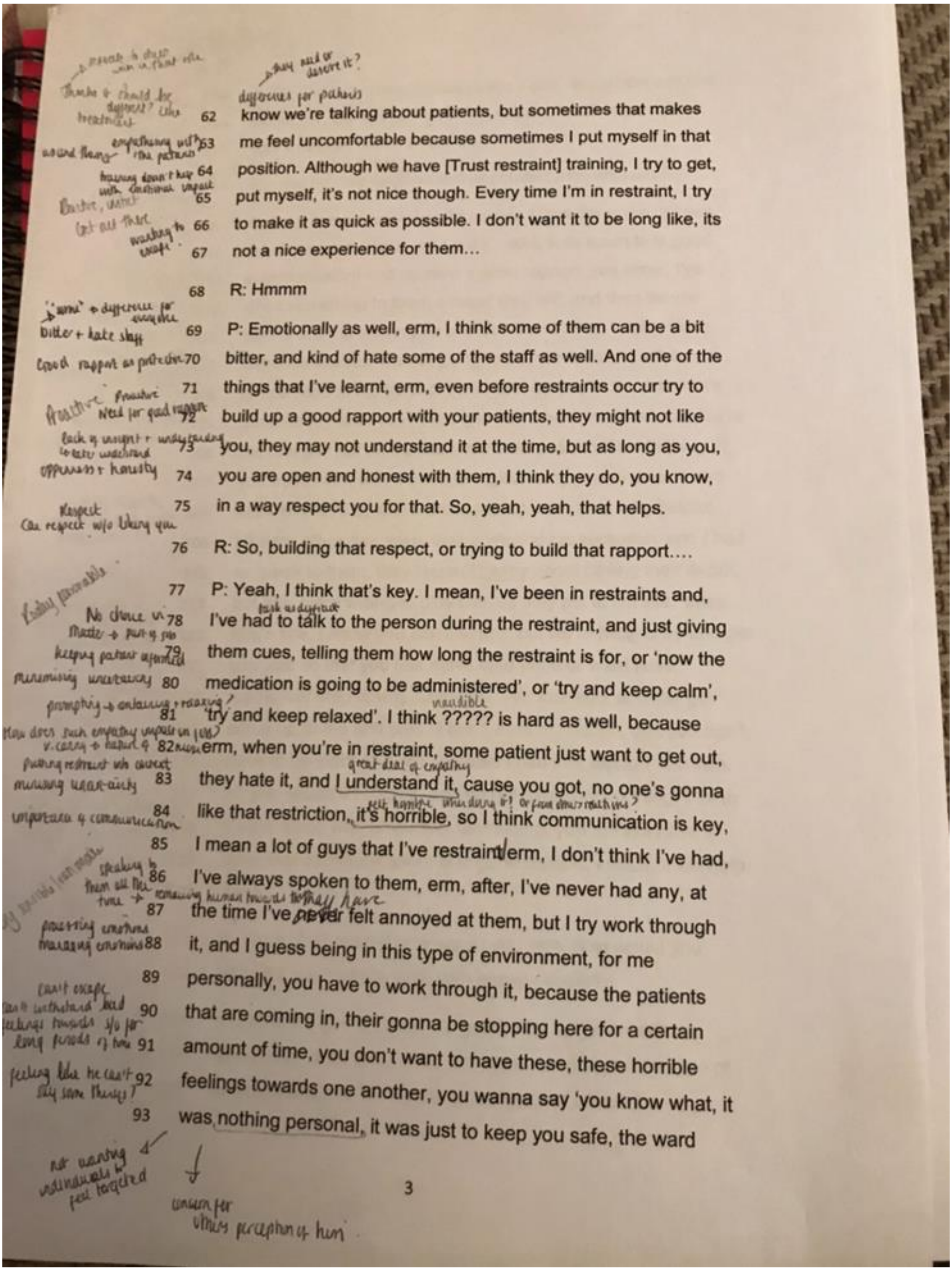
P: Yeah, I think that's key. I mean, I've been in restraints and, I've had to talk to the person during the restraint, and just giving them cues, telling them how long the restraint is for, or 'now the medication is going to be administered', or 'try and keep calm', 'try and keep relaxed'. I think ????? (inaudible) is hard as well, because erm, when you're in restraint, some patient just want to get out, they hate it, and I understand it, cause you got, no one's gonna like that restriction, it's horrible, so I think communication is key, I mean a lot of guys that I've restraint erm, I don't think I've had, I've always spoken to them, erm, after, I've never had any, at the time I've never felt annoyed at them, but I try work through it, and I guess being in this type of environment, for me personally, you have to work through it, because the patients that are coming in, their gonna be stopping here for a certain amount of time, you don't want to have these, these horrible feelings towards one another, you wanna say 'you know what, it was nothing personal, it was just to keep you safe, the ward

Feeling passionate

very sensible / reasonable

3

Appendix L: Extract of transcript detailing stage 2 of analysis; exploratory comments



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R: Hmmm

P: Emotionally as well, erm, I think some of them can be a bit bitter, and kind of hate some of the staff as well. And one of the things that I've learnt, erm, even before restraints occur try to build up a good rapport with your patients, they might not like you, they may not understand it at the time, but as long as you, you are open and honest with them, I think they do, you know, in a way respect you for that. So, yeah, yeah, that helps.

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3

→ they need or deserve it?

differences for patients

Thinks it should be different? Like treatment

empathising with the patients

training doesn't help with emotional impact

Barrier, [illegible]

Get out there

wanting to escape

→ 'same' + difference for everyone

bitter + hate staff

Good rapport as protective

Proactive

Proactive

Need for good rapport

lack of insight + understanding to later understand

openness + honesty

Respect

Can respect w/o liking you

Feeling powerless

No choice in matter + [illegible]

talk as difficult

keeping patient informed

minimising uncertainty

prompting + calming + relaxing?

inaudible

How does such empathy impact on [illegible]?

v. caring + [illegible]

[illegible] restraint w/ [illegible]

great deal of empathy

minimising uncertainty

felt horrible when doing it? Or from others reactions?

importance of communication

speaking to them all the time + remaining human towards them

they have

processing emotions

managing emotions

can't escape

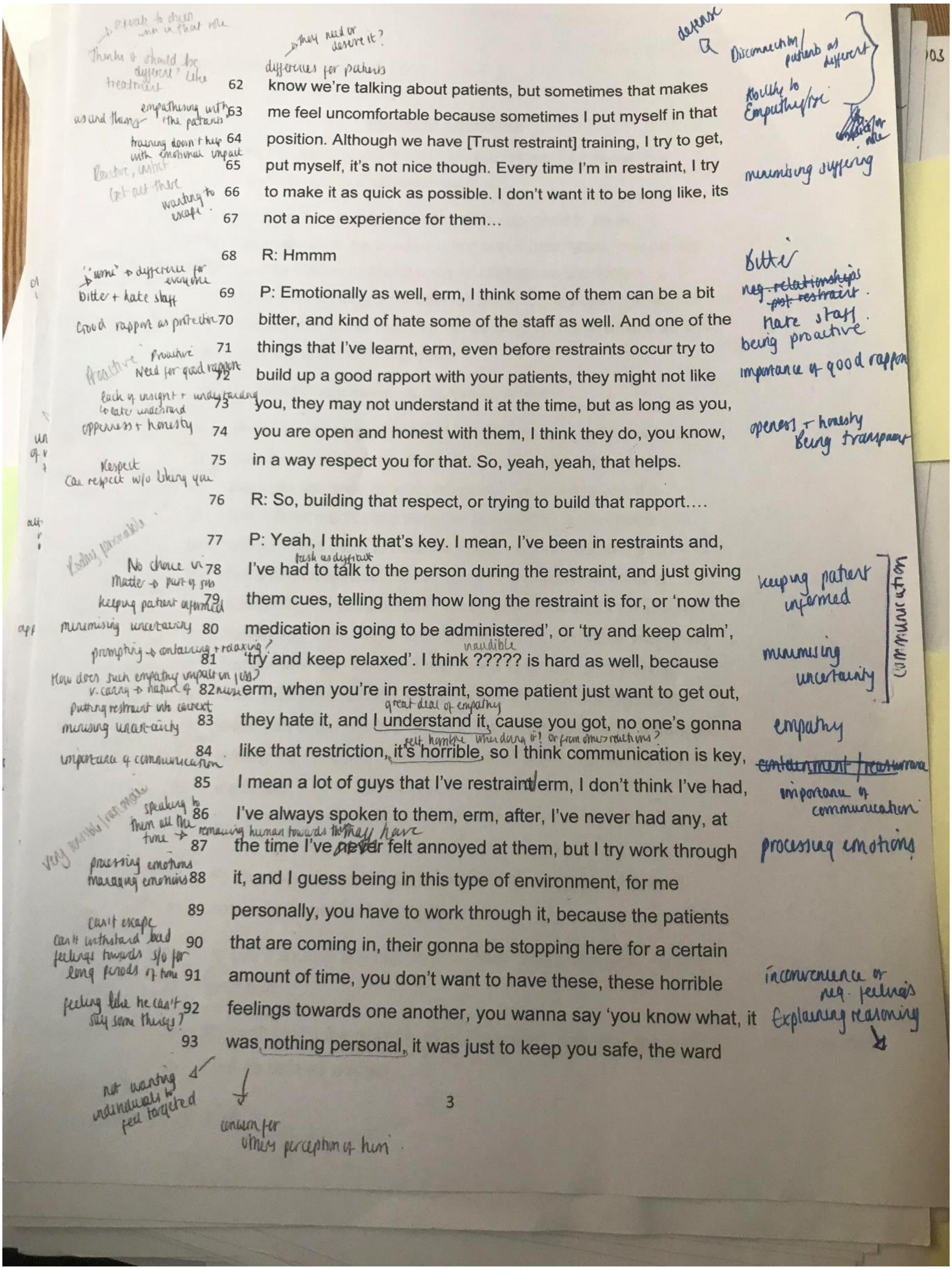
can't withstand bad feelings towards s/u for long periods of time

feeling like he can't say some things?

not wanting individuals to feel targeted

concern for others perception of him

Appendix M: Extract of analysis detailing stage 3 of analysis; emergent themes



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R: Hmmm

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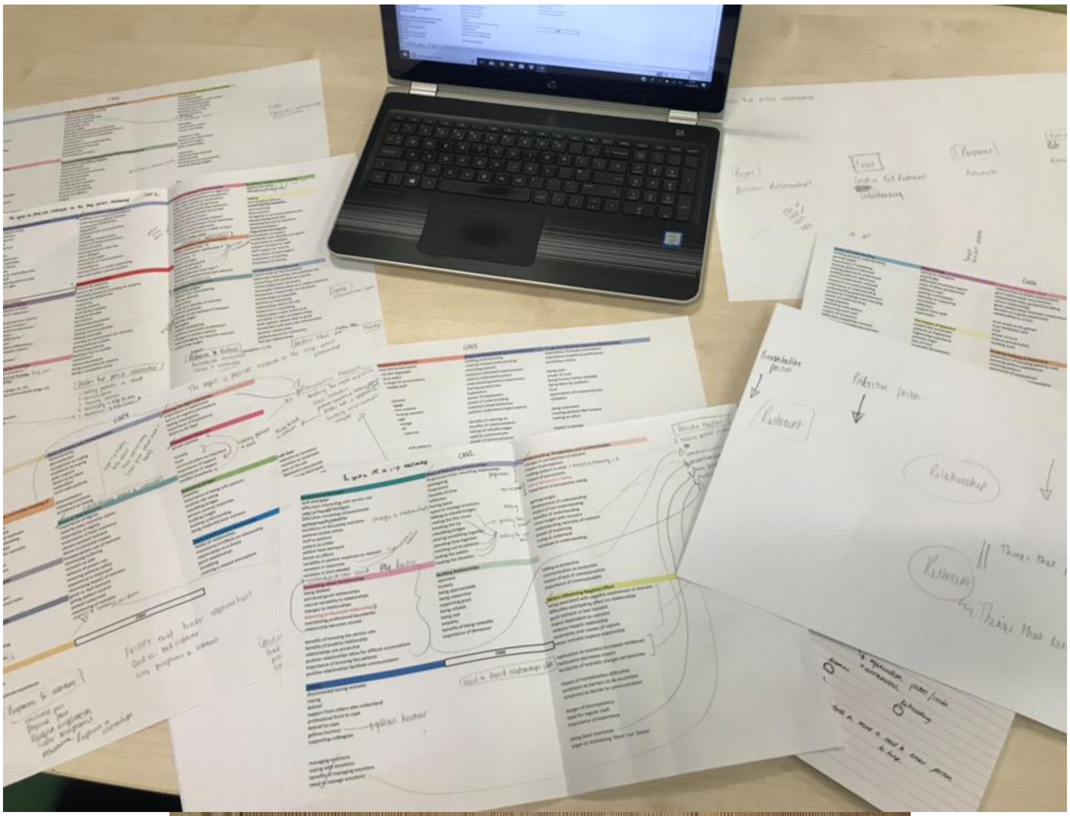
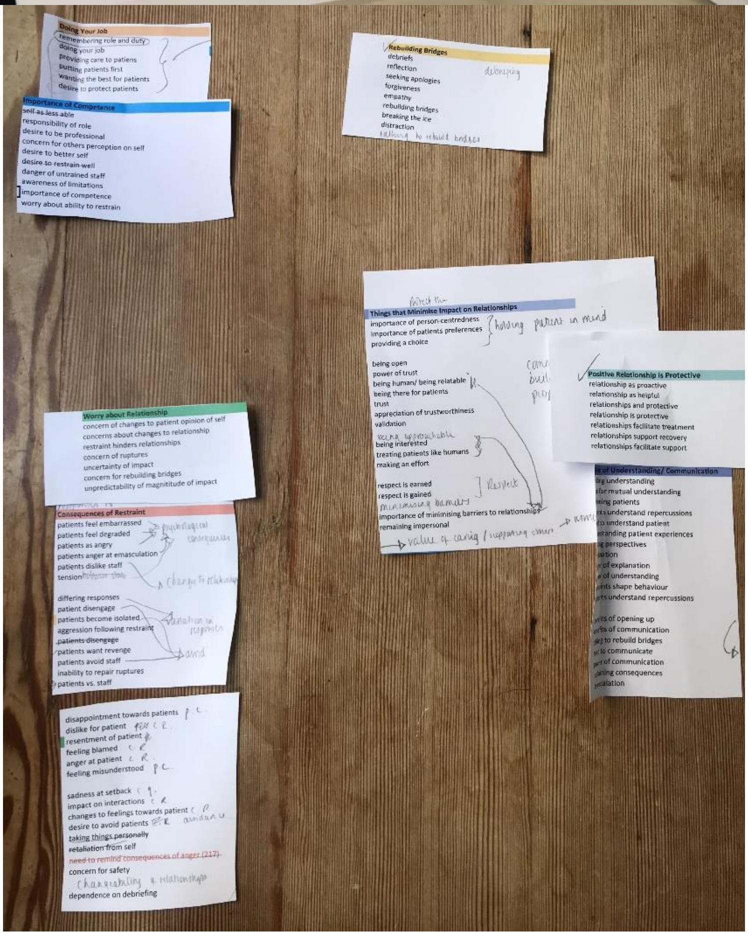
3

→ repeats to others when in that role
Thinks it should be different? Like treatment
→ they need or deserve it?
differences for patients
as and then — empathising with the patients
training doesn't help with emotional impact
Reactive, instinct
Get out there
wanting to escape
'some' → difference for everyone
bitter + hate staff
Good rapport as protection
Proactive
Proactive
Need for good rapport
lack of insight + understanding to later understand
openness + honesty
Respect
Can respect w/o liking you
Feeling powerless
No choice in matter → part of job
task as difficult
keeping patient informed
minimising uncertainty
prompting → containing + relaxing?
inaudible
How does such empathy impact on you?
v. caring → nature of nurse
Putting restraint into context
minimising uncertainty
great deal of empathy
felt horrible when doing it? Or from others reactions?
importance of communication
very sensible/rational
speaking to them all the time → remaining human towards them
processing emotions
managing emotions
can't escape
can't withstand bad feelings towards s/o for long periods of time
feeling like he can't say some things?
not wanting individuals to feel targeted
concern for others perception of him

defence
Disconnection/ patients as different
Ability to Empathise
minimising suffering
bitter
neg. ~~relationships post restraint~~
hate staff
being proactive
importance of good rapport
openess + honesty
Being transparent
keeping patient informed
minimising uncertainty
Communication
empathy
~~containment/reassurance~~
importance of communication
processing emotions
inconvenience of neg. feelings
Explaining reasoning

Appendix N: Photo of stage four of analysis; identifying connections





Doing Your Job
remembering role and duty
doing your job
providing care to patiens
putting patients first
wanting the best for patients
desire to protect patients

Importance of Competence
~~self as less able~~
responsibility of role
desire to be professional
concern for others perception on self
desire to better self
~~desire to restrain well~~
danger of untrained staff
awareness of limitations
importance of competence
worry about ability to restrain

Rebuilding Bridges
debriefs
reflection
seeking apologies
forgiveness
empathy
rebuilding bridges
breaking the ice
distraction

Things that Minimise Impact on Relationships
importance of person-centredness
importance of patients preferences
providing a choice

being open
power of trust
being human/ being relatable
being there for patients
trust
appreciation of trustworthiness
validation
being interested
treating patients like humans
making an effort

respect is earned
respect is gained
importance of minimising barriers to relationships
remaining impersonal

Positive Relationship is Protective
relationship as proactive
relationship as helpful
relationships and protective
relationship is protective
relationships facilitate treatment
relationships support recovery
relationships facilitate support

of Understanding/ Communication
understanding
for mutual understanding
patients
understand repercussions
understand patient
standing patient experiences
perspectives
ation
of explanation
of understanding
shape behaviour
understand repercussions

of opening up
of communication
to rebuild bridges
to communicate
of communication
consequences
alation

Worry about Relationship
concern of changes to patient opinion of self
concerns about changes to relationship
restraint hinders relationships
concern of ruptures
uncertainty of impact
concern for rebuilding bridges
unpredictability of magnititude of impact

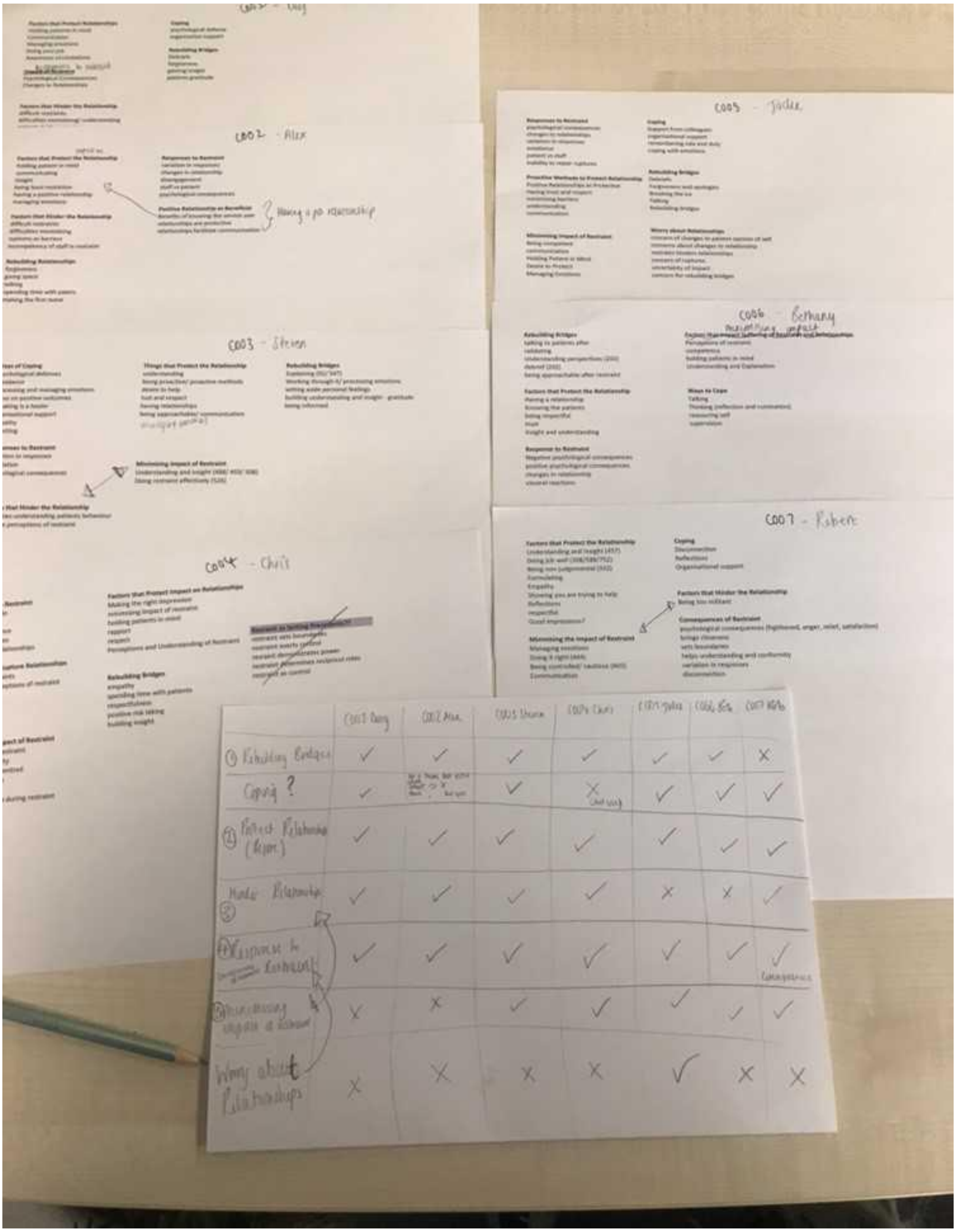
Consequences of Restraint
patients feel embarrassed
patients feel degraded
patients as angry
patients anger at emasculation
patients dislike staff
tension

differing responses
patient disengage
patients become isolated
aggression following restraint
~~patients disengage~~
patients want revenge
patients avoid staff
inability to repair ruptures
patients vs. staff

disappointment towards patients
dislike for patient
resentment of patient
feeling blamed
anger at patient
feeling misunderstood

sadness at setback
impact on interactions
changes to feelings towards patient
desire to avoid patients
~~taking things personally~~
~~retaliation from self~~
~~need to remind consequences of anger (217)~~
concern for safety
dependence on debriefing

Appendix O: Photo of stage 5 of the analysis; identifying master themes



	C001 [illegible]	C002 Alex	C003 Steven	C004 Chris	C005 Jodie	C006 Beth	C007 Rob
① Rebuilding Bridges	✓	✓	✓	✓	✓	✓	✗
Coping ?	✓	[illegible]	✓	✗ [illegible]	✓	✓	✓
② Protect Relationship ([illegible])	✓	✓	✓	✓	✓	✓	✓
Hinder Relationship ③	✓	✓	✓	✓	✗	✗	✓
④ Response to Restraint	✓	✓	✓	✓	✓	✓	✓ Consequences
⑤ Minimising impact of restraint	✗	✗	✓	✓	✓	✓	✓
Worry about Relationships	✗	✗	✗	✗	✓	✗	✗

Appendix P: Summary table of analysis

Superordinate Theme	**Subtheme**	**Description of Subordinate Theme**	**Participants Contribution**	**Example Quote**
3.1 Consequences of restraint	3.1.1 Psychological consequences for staff	The emotional impact of physical restraint on members of staff.	7	*"I'll give you the analogy of a swan, so we're all gliding about on the surface, it's all quite nice, calm, cool, collected, but underneath they're flapping. And for me, sometimes it's like that, like I might look cool on the outside, but on the inside, I'm thinking 'ah, am I gonna get hit?', erm, 'is someone gonna get hurt?', erm, 'am I gonna hurt the patient?', 'am I gonna hurt others?'" [Steven, page 8, 238]*
	3.1.2 Effects of relationships	The variety of effects that physical restraint can have on the staff-patient relationship.	7	*"It becomes distorted. Um, patients are not willing to engage anymore. They'll seclude themselves in their room. They kind of like isolate themselves and stuff like that and then don't really engage with staff or with the other peers and you don't really want that. Because they're not gonna contribute towards their recovery." [Jodie, page 17, 547]*

3.2 Factors that protect the relationship	3.2.1 Power of communication	How communication prior to or during the process of physical restraint can help to minimise or protect any negative effects from physical restraint on the therapeutic relationship.	7	*“We’ve avoided so many incidences of having to enforce depot using restraint, because the staff work so hard in talking and saying, and just laying it out really. Just talking about the pathway, talking about the reasons for it, you know, talking about history. Whatever is needed to motivate that person to get them where they need to go.” [Doug, page 14, 432]*
	3.2.2 The benefits of rapport	How rapport can help to prevent or minimise the negative effects of restraint on the therapeutic relationship.	6 (all apart from Robert)	*“You know, and if you do have that good relationship with someone prior to going into the restraint, you can be, like, ‘What’s going on here,’ kind of thing, talking to them. And having a bit of a laugh, and when they start to laugh, the body relaxes so much.” [Alex, page 36, 1157].*
	3.2.3 Holding the patients in mind	How empathising with service users, being mindful of service users, and knowing service users can help to protect the relationship from being	7	*“I think, show the patients more dignity, because that doesn’t happen sometimes, people don’t realise. Like I said before… you could be involved in a heavy restraint, the patients having medication and are being restrained, and all they can hear is staff walking down the corridor laughing and joking. Whether it is directed at them or not, they need to*

			affected negatively by physical restraint.		*show more professionalism and dignity. 'Cause you know I've heard that, it's not deliberate, but it can't be nice." [Chris, page, 19, 584]*
3.3	**Factors that threaten the relationship**	3.3.1 Difficult Restraints	How difficult restraints (violence, incompetency, recklessness) can increase the likelihood that the staff-patient relationship will be affected negatively by physical restraint.	6 (all apart from Doug)	*"If a staff member just comes up in the same manner and is reckless like the patient, and then you come up and you're reckless in the way you restrain someone, then the two don't really go well together. They're gonna be angry, and mad, and you're gonna be angry and mad because they're inflicting you with their emotions, and with their anger, and their physical aggression, and then just feel like doing the same back." [Robert, page 5, 148]*
		3.3.2 Negative experiences and perceptions of restraint	How the service users' perspectives of physical restraint, and their experiences of physical restraint can influence the effect of physical restraint on the relationship.	7	*"'Cause- 'cause, well, quite a lot of the time they don't feel it's necessary in the first place, they feel they've done nothing wrong. Maybe that was because they were mentally ill, their-their mental state wasn't, stable enough to realise. Or they are just so angry. Or, you know, they can't justify it." [Chris, page 14, 417]*

3.4 Importance of rebuilding bridges	3.4.1 Power of understanding	The benefits of the staff and service user having an understanding of each other's perspectives of the physical restraint process, and how this can support the rebuilding of relationships.	6 (all apart from Robert)	*"If you are upfront and straight and explain why you do what you do, the patients, kinda, not kinda, I think they do respect you a lot more. You've got to be very open, and very honest because you know, as I've explained before, physical restraint it's not a nice thing, but if you've explained why you've done it, then they are a bit more understanding to it. As well, I think it helps them as well and rebuilds rapport" [Steven, page 18, 547]*
	3.4.2 Making an effort	How making an effort with the service user post physical restraint can help to rebuild any ruptured staff-patient relationships.	6 (all apart from Robert)	*"Quite often you have to almost prove that you're working with that person. So like, 'Oh yeah, I will make this phone call to so and so for you. I will try and help you sort out your benefits. I will try my hardest to get you such and such a nice meal that you so request.' Like, just trying to give a little, kind of builds back that trust." [Bethany, page 19, 603]*