

Factors Influencing the Implementation of Coercion Reduction Interventions for Aggression Management in Inpatient Mental Health Care

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Abstract

Despite a general consensus against coercive practices in mental healthcare, the results and the sustainability of interventions designed to stop or reduce coercion are still variable. This thesis presents a study that aims to identify potential drivers and barriers to the implementation process of these interventions to better understand the dynamics of the observed variability.

The study applies Extended Normalisation Process Theory (ENPT) across two phases. Firstly, a theory-informed integrative review of primary research on the implementation of coercion reduction interventions in adult inpatient mental health facilities. The data from the included studies were extracted qualitatively and analysed using (ENPT).

The second study Semi-structured interviews informed by ENPT with experts involved in the implementation of coercion reduction intervention (experts by experience and academic and clinical implementation experts). Transcripts were analysed using qualitative content analysis.

Analysis of the 28 implementation studies showed staff resistance, a lack of trust and resources to be barriers and a sense of ownership, and reflexive monitoring acted as drivers to the process. The analysis of the transcript data from 23 participants showed commitment as a driver and adverse problematic embedded cultures as a cause of resistance. Experts by experience played a central role in establishing reflexive practice, which was shown to facilitate positive shifts in culture, and through continuous reflexive monitoring, help achieve sustainability.

The study demonstrates the dynamics of the implementation process and presents how specific factors impact that process. There is a need to consider the implementation process holistically; adequate attention must be given to all stages, in particular to understanding the existing context prior to implementation; and implementation must be supported at all organisational levels.

The adverse context created by problematic cultures and the potential of reflective practice to address these problematic cultures is potentially of general relevance to implementing health care interventions.

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List of Abbreviations

ATU	Assessment and Treatment Units
BART	Behavioral Emergency Response Team
BMC	Behaviour Management Committee
CAS	Complex Adaptive Systems
CFIR	Consolidated Framework for Implementation Research
CMO	Context-Mechanism-Outcome Hypotheses
COM-B	Capability, Opportunity, Motivation, Behaviour Model
CQC	Care and Quality Commission
CRPD	Convention on the Rights of Persons with Disabilities
CVO	Constant Visual Observations
D&I	Dissemination and Implementation
DOH	Department of Health
ECPR	European Charter of Patients' Rights
ENPT	Extended Normalisation Process Theory
IFDIT	Integrative Framework of Dissemination, Implementation, and Translation
I-PARIHS	Integrated Promoting Action on Research Implementation in Health Services
MHCP	Mental Health Care Practitioners
MMAT	Mixed Methods Appraisal Tool
MRC	Medical Research Council

NASMHPD	National Association of State Mental Health Program Directors
NHS	National Health Service
NHS REC	National Health Service Research Ethics Committee
NICE	National Institute for Health and Clinical Excellence
NIH	National Institute of Health
NPM	Normalisation Process Model
NPT	Normalisation Process Theory
PARIHS	Promoting Action on Research Implementation in Health Services
PIS	Participant Information Sheet
PMI	Psychiatric Monitoring and Interventions
PPI	Patient and Public Involvement
PRN	Pro Re Nata
R&S	Restraint and Seclusion
SHREC	Healthcare Research Ethics Committee
TDF	Theoretical Domains Framework
UN	United Nations
WHO	World Health Organisation
WPA	World Psychiatric Association

Chapter 1: Introduction

It is generally agreed that there should be a reduction or even an elimination of coercive practices in mental healthcare (Norvoll et al., 2017). Establishing best codes of practice is recommended in the UK National Institute for Health and Clinical Excellence (NICE) Guideline NG10 (NICE, 2015). However, despite many largely successful trials of interventions designed to stop or reduce coercion, results can vary between hospitals and wards (Baumgardt et al., 2019). The long-term sustainability of such programs outside the trial setting has also been questioned (Sashidharan et al., 2019). The World Psychiatric Association (WPA) has recently issued the "WPA Position Statement and Call to Action: Implementing Alternatives to Coercion: A Key Component of Improving Mental Health Care" (WPA, 2020) to support this change. Among the recommendations for further research (page 6) is the implementation in contexts that differ from those used in the original trial to understand better the factors influencing the successful implementation of coercion reduction interventions.

This chapter discusses coercion and aggression in mental health care and how they relate to each other, and then covers aggression management in inpatient mental health care. This chapter also covers the structure and outcome of some major coercion initiatives and the need for sustainability.

1.1. Coercion, aggression, and mental healthcare

1.1.1. Coercion in mental healthcare

Consensus as to what is considered coercive is lacking (Hoyer et al., 2002); however, "Forcing a person to do something they don't want to" would meet the simple dictionary definition (Collins Dictionary, 2018). Coercive interventions became prominent around the 1800s with the rise of asylums for the insane; they arose from good intentions and out of necessity. Soon after the widespread use of asylums, overcrowding became an issue, and behaviour control became the main focus of concern (Colaizzi, 2005).

Mechanical restraints, seclusion, and chemical restraints were viewed as the best methods to achieve control and restrict patients' behaviour. Using coercive interventions on inpatients has always been a constant fixture in mental health care and is still used to varying degrees (Möller-Leimkühler et al., 2016). Despite its apparent position as an integral part of mental health treatment, coercive practice presents serious ethical dilemmas (Owen et al., 2016); however, to date, there is no credible "coercion-free" alternative care system (Molodynski et al., 2016).

The principle of informed consent and the right to refuse treatment is a legal and ethical cornerstone of modern medical treatment (Grady 2015), and using coercion with a patient seems intuitively contrary to this principle. However, one of the basic tenets of informed consent is competency (Kleinman, 1991), and there is a fixed assumption that mental health patients lack competence (Hoyer et al., 2002). This assumed lack of competency is used to justify the continuation of the paternalistic approach, e.g., "in the patient's best interest," and when judged necessary, the use of coercive interventions (Fennell, 2008).

The paternalistic approach in general healthcare has been gradually replaced by a more patient-centred system, with the patient's autonomy being foremost (Emanuel and Emanuel, 1992). The patient's legal right to expect such care is enshrined in various documents, such as the European Charter of Patients' rights (ECPR, 2002) (Cohen and Ezer, 2013). In the wake of these changes, concerns have turned to the rights of mental health patients, resulting in worldwide legislation to provide mental health patients with a degree of legal protection, e.g., the UK mental health act of 1983. As part of that global movement, the United Nations (UN, 1991) included in their "Principles for the Protection of Persons with Mental Illness and for the Improvement of Mental Health Care" the following statement concerning the use of coercive practices:

"The patient must be treated in the least restrictive environment and with the least restrictive or intrusive treatment appropriate to the patient's health needs. "

(Page 190)

The UN article provided a degree of legislative protection under international law. Nevertheless, some criticised it for being too much of a compromise as it only limited the application of coercive methods and did not insist on their complete avoidance (Emanuel and Emanuel, 1992). However, the article was instrumental in establishing the principle of using coercive measures only as a last resort. It became widely accepted as the new norm in mental health care (European Union Agency for Fundamental Rights, 2012).

More rigorous legislation, which contained the recommendations to end all coercive practices, was passed by the UN in 2006 in their "Convention on the Rights of Persons with Disabilities" (CRPD)(UN, 2006). In this convention, mental illness was included in their definition of persons with disabilities:

"Persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments." (Page 4)

A later special UN report (Méndez, 2013) explicitly stated that guidance provided in the CRPD should replace the existing documented standards for mental health care:

"The Convention on the Rights of Persons with Disabilities also provides authoritative guidance on the rights of persons with disabilities and prohibits involuntary treatment and involuntary confinement on the grounds of disability, superseding earlier standards such as the 1991 Principles for the Protection of Persons with Mental Illness and for the Improvement of Mental Health Care."

(Page 14)

The primary goal of the CRPD is to promote all human rights for persons with disabilities, including the right to choose to accept treatment or to refuse it. This convention has received global support. As of 2017, 335 countries had formally accepted the CRPD, of which 160 had become signatories, and 146 of those signatories had completed national ratification (UN, 2018).

Gradually, concerns were voiced about the challenges of providing care within the terms of the convention for individuals with mental health problems who do not have decision-making capacity (Appelbaum, 2016). Several signatory countries (including Australia, Norway, and the Netherlands) added amendments to their acceptance of the CRPD to allow coercive treatment where it was in the patient's best interest; however, they were not competent to give consent (Wickremsinhe, 2018). Implementing the CRPD articles fully has been challenging globally among the signatories (Hoffman et al., 2016). In 2016, the CRPD committee assessed compliance in 19 countries, reviewing their feedback about mental health issues; the committee expressed "causes of concern" related to incomplete implementation for all of them (Hoffman et al., 2016).

Despite the widespread problems in implementing the CRPD, the discussions raised by it concerning mental health patients have resulted in an increased focus on the use of coercion in mental health care (Bartlett, 2012, Funk and Drew, 2017, McSherry and Waddington, 2017). Even where implementation has not been achieved, a change in attitude toward using coercive measures has been observed (Hoffman et al., 2016). The CRPD provided a framework against which to reassess current practices (McSherry, 2017). Concerted actions at national levels have been taken in a wide range of countries, aimed at replacing or reducing coercive practices, promoting non-coercive management in mental health, and improving the quality of care (Norvoll et al., 2017).

Before exploring the known factors influencing the implementation of coercion reduction interventions for aggression management in inpatient mental health care, the nature and problems associated with aggression must be described, particularly in the inpatient mental

health setting. We must also elaborate on coercive management and its converse, non-coercive management.

1.1.2. Aggression in mental healthcare

The criteria to describe a patient's "aggressive episode" lacks precision since it tends to be a blanket term to cover any challenging or non-compliant behaviour (Jones and Eayrs, 1993). Many factors influence what is classed as an "aggressive episode," including the capability of the staff and the management options available at the time of an incident (Jones and Eayrs, 1993). The staff's perception of how great a potential threat is presented by the challenging behaviour (physical or verbal) and the awareness of such a threat trigger active aggression management protocols (Paterson and Duxbury, 2007).

Research has included individual aspects of aggression and aggression management in mental health care and has yet to fully explore their links. Evidence for this can be seen in the wide range of observational studies that focus on single topics, as exemplified by the following:

- Patients: Studies on
 - o Risk factors associated with aggressive behaviour and the prevalence of patient aggression (Dack et al., 2013, Iozzino et al., 2015, Podubinski et al., 2017).
 - o Aggression experienced by inpatients and the perceived lack of safety (Lamanna et al., 2016, Santos Mesquita and Costa Maia, 2016, Stenhouse, 2013).
- Staff: Studies on
 - o How staff perceive and experience patient aggression (Jacobowitz, 2013, Jonker et al., 2008, Kerr et al., 2017, Lamanna et al., 2016).
 - o How well staff think they are coping with inpatient aggression (Verhaeghe et al., 2016).
- Aggression management: Studies on
 - o The prevalence of various aggression management techniques (McKenna et al., 2017, Noorthoorn et al., 2015, Oster et al., 2016, Shepherd et al., 2015).
 - o Which patients are most likely to be subjected to coercive management (Thomsen et al., 2017).
 - o Staff and patient perceptions of aggression management (Barnicot et al., 2017, Berring et al., 2016, Moran et al., 2009, Nytingnes et al., 2016, Soininen et al., 2013).

Furthermore, experimental studies have reported results from implementing coercion reduction strategies (Cummings et al., 2010, Lloyd et al., 2014). Most are pre-post studies documenting an intervention's before and after outcomes at a specified location (Bowers et al., 2015).

1.1.3. Links between aggression and coercion in mental healthcare

A few studies have attempted to examine the interactions linking aggression and aggression management with the broader issues involved in clinical practice. Studies examining the clinical implications of staff reactions to patient aggression have indicated that staff perception of a threat can trigger the implementation of coercive aggression management protocols (Paterson and Duxbury, 2007). Also, the emotional reaction from staff when faced with patient aggression may cause further escalation of the aggression (Haugvaldstad and Husum, 2016).

Other studies have considered the possible detrimental effect of coercive management on patient well-being (Bilanakis et al., 2008, Cusack et al., 2016, Georgieva, 2012, Grant and Booth, 2009). However, there is also the need to guarantee the safety of the patient, the staff, and the community, emphasising the need to balance the disadvantages with the perceived advantages before considering coercive techniques (Hem et al., 2014).

Little research has focused on non-coercive measures such as de-escalation (Price and Baker, 2012). However, the key factors associated with successful de-escalation have been investigated (Lavelle et al., 2016) alongside staff perceptions of factors determining success (Price et al., 2018). In a retrospective study of case notes, Lavelle et al. (2016) concluded that although de-escalation was effective in most cases (60%), it was less successful in patients with a history of aggression or who were aggressive immediately prior to the intervention. The study suggested that some staff feel they lack the confidence to use de-escalation when the perceived risk of violence is high, resulting in an over-cautious approach and potentially more restrictive methods. In a study using semi-structured interviews of clinical staff, Price et al. (2018) concluded that the key issue determining the use of more restrictive methods rather than de-escalation was not the perceived risk of violence but how the staff perceived the cause of the violence. De-escalation techniques were primarily used in cases where the violence was deemed to be a manifestation of the illness. In contrast, staff tended to use more restrictive methods when they considered the violence to be deliberate misbehaviour. These studies give insight into the complex relationship between patient behaviour and aggression management intervention.

1.2. Aggression management in acute inpatient mental health settings

1.2.1. Coercive aggression management

Coercive aggression management, which involves the compulsory restriction of movement, should only be used as a last resort (NICE, 2015). The desirability of using non-coercive management of aggression was emphasised in the National Institute for Health and Clinical Excellence (NICE) Guideline NG10 for "Violence and Aggression, Short-term management in mental health, health and community settings". In addition, the NG10 recommends that staff engage positively with patients, encouraging them to be actively involved in their own care as much as possible. These empowered patients are no longer passive recipients of care but active participators, which is associated with increased ward safety (Polacek et al., 2015). However, when situations of potential conflict arise, the NG10 guidelines recommend using verbal and non-verbal de-escalation, a non-coercive technique, to calm situations before aggressive episodes develop. Within the non-coercive management guidelines, it is acceptable to use pro-re-nata (PRN) medications when needed as part of the de-escalation process.

However, despite the desirability of non-coercive aggression management, coercive techniques to manage patient aggression are still used. Coercive aggression management includes observation, seclusion, and physical and chemical restraint. Observation is the least restrictive, involving continuous monitoring of the patient to facilitate rapid additional intervention if needed. More coercive is seclusion, where the patient is removed from the ward and isolated in a separate room under observation. Other coercive management techniques in current practice are chemical and physical restraint, both of which restrict the free movement of the patient's body. Chemical restraint is achieved by rapid tranquillisation with medications, which are usually forcibly administered. The term physical restraint includes mechanical restraint, which relies on equipment, for example, belts, to secure the patient and manual restraint, where the patient is held by health care staff. There is extra awareness of the risks associated with physical restraint (Hollins, 2017, Mohr et al., 2003), particularly manual restraint in the prone position, which has been implicated in several serious incidents (Barnett et al., 2016).

The same methods described for aggression management in the NG10 in the UK are used internationally in countries such as Australia (McKenna et al., 2017, Oster et al., 2016), Europe (Bak and Aggernæs, 2012, McLaughlin et al., 2016), Japan (Noda et al., 2013), South Africa (Mayers et al., 2010), and the USA (Springer, 2015). However, the extent to which they are used varies between counties, and there is even variation between the geographically close and economically similar European counties. Manual restraint is more frequently used in the

UK than mechanical restraint (Stewart et al., 2009), which NG10 recommends only in specific circumstances in high-security settings (NICE, 2015). Conversely, mechanical restraint is used more frequently than manual restraint in Denmark, Finland, Norway, and Sweden (Bak and Aggernæs, 2012, Steinert et al., 2010). European countries also vary in the use of chemical restraint and seclusion (Steinert et al., 2010). Steinert et al. (2010) conclude that marked variations in the rates and types of restraint in European countries result from differences in cultural opinions and a tendency to follow long-standing established protocols (i.e., what has always been done) rather than differences in clinical reasoning.

1.2.2. Coercion reduction initiatives

Several coercion reduction initiatives emerged to reduce and replace coercive management with non-coercive alternatives. Among them, the Six Core Strategies program and the SafeWards Model are the two most widely used and influential coercion reduction initiatives in inpatient mental health care (Goulet et al., 2017, NICE, 2015).

- The Six Core Strategies program was developed in the USA in 2004 (Huckshorn, 2004) and used widely across the United States (Wieman et al., 2014). It has been adapted for use in other countries such as Australia, Canada, Finland, and the UK (LeBel et al., 2014, Riahi et al., 2016a). See Table 1.
- The SafeWards Model was developed in the UK in 2014 (Bowers et al., 2014) and implemented in the UK (Bowers et al., 2015, James et al., 2017, Price et al., 2016), Australia (Fletcher et al., 2017), and Canada (Whitmore, 2017). See Table 1.

SafeWards Model	Six Core Strategies
Clear mutual expectations	Senior management commitment to change
Soft words	Using data to inform practice
Talk down	Workforce development.
Positive words	Use of restraint and seclusion reduction tools
Bad news mitigation	Consumer roles in inpatient settings
Know each other	Debriefing techniques
Mutual help meeting	
Calm down methods	
Reassurance	
Discharge messages	
http://www.safewards.net/	(Nice, 2015)

Table 1. Components of the SafeWards and Six Core Strategies.

The SafeWards model hinges on clinical staff implementing evidence-based interventions, which can reduce incidences of conflict and aggression. Six domains are described (patient community and patient characteristics, national and hospital policy, the physical environment, and stressors from outside the hospital), and these are linked with possible scenarios of

aggression on the ward. The model then presents ten evidence-based interventions (Table 1) identified in earlier studies as the most successful (Bowers et al., 2015). Bowers et al. (2015) implemented the SafeWards model using these interventions in the City Nurse Project. All ten interventions represent staff actions designed to defuse flashpoints originating from one of the six domains described.

The Six Core Strategies (Table 1) were devised following an extensive review of past initiatives and identified as critical for a successful seclusion and restriction reduction initiative. The Strategies also formed the basis of The National Association of State Mental Health Program Directors (NASMHPD) (Huckshorn, 2004). Huckshorn (2004) emphasised that the intended use of Six Core Strategies was to guide institutional and managerial change and to help facilitate evidence-based clinical interventions. Therefore, the Six Core Strategies aim to direct change at the managerial level and outline the categories of change to be addressed rather than prescribing clinical interventions.

The groups designated to initiate the intervention differ in the models: The Six Core Strategies are aimed at managerial or administrative intervention. In comparison, The SafeWards Model is a clinical intervention. Other reduction models and programs exist but tend to be either administrative-focused and related to the Six Core Strategies or clinically focused and resemble the SafeWards Model (Table 2).

Coercion Reduction Initiatives	Origin	Focus	Global Application
The SafeWards Model	UK	Clinical Intervention Model	Australia, Canada, and the UK
The Six Core Strategies Program	USA	Managerial Intervention Model	Australia, Canada, Finland, and the UK
No Force First	USA	Managerial Intervention Model	The UK
RESTRAIN YOURSELF	UK	Managerial Intervention Model	-----
The Engagement Model	USA	Managerial Intervention Model & Ward & Institution Culture	-----
The East London Foundation Trust Initiative	UK	Combination of Managerial & Clinical Intervention Model	-----
The Positive and Safe Plan	UK	Combination of Managerial & Clinical Intervention Model	-----
PROMISE	UK	Combination of Managerial & Clinical Intervention Model	-----

Table 2. Reduction Models and Programs.

RESTRAIN YOURSELF in the UK was a tailored implementation of the Six Core Strategies (LeBel et al., 2014). The Engagement Model initiated by Murphy and Bennington-davis (2005) in the USA is related to the managerial approach of the Six Core Strategies but with a specific emphasis on enhancing the ward and institutional culture (Blair and Moulton-Adelman, 2015,

Murphy and Bennington-davis, 2005). The "No force First" (Ashcraft and Anthony, 2008, Ashcraft et al., 2012) model originated in the USA. This model has a managerial approach and has also been used in the UK (CQC, 2017a).

Three recent programs have incorporated elements from the SafeWards and the Six Core Models, and these include the East London Foundation Trust Initiative (Taylor-Watt et al., 2017), the Positive and Safe Plan (Weddle, 2017), and PROMISE (Ray et al., 2015). None of these is widely used, although PROMISE promotes itself globally (PROMISE, 2016, Ray et al., 2015).

1.2.3. Sustainability

Girlanda et al. (2017) presented a systematic review of the transfer of evidence-based guidelines into routine practice within mental health and reported an evidence-practice gap. The transfer of successful evidence-based trials must be sustainable and in diverse contexts to make a long-term, lasting impact. Heterogeneity in the efficacy of implementation may occur between different institutions; an example of this is discussed in the World Health Organisation (WHO) report "Guidelines on mental health promotive and preventive interventions for adolescents" pages 48, 52 (WHO, 2020). There are also variations between wards, often depending on the patient population. For example, in a 15-year follow-up of implementations to reduce coercive practice in the German state of Baden-Wuerttemberg (Steinert et al., 2020), there was a 50% reduction of coercive practice incidents in old age psychiatry, and the mean duration of each coercive interaction decreased in length. However, there was no similar improvement in general psychiatry wards, where the proportion of patients subjected to coercive interventions remained relatively unchanged, and the mean duration of each coercive intervention increased. Many factors act as potential barriers to integrating successfully tested mental health interventions into routine practice (Qureshi et al., 2021); this area remains unclear and could benefit from further research.

Variations have been recorded in follow-up studies related to SafeWards and REsTRAIN Yourself:

SafeWards:

In a literature review, Mullen et al. (2022) (page 14) concluded that although the SafeWards intervention had been generally successful in reducing coercive interventions, some concerns were reported regarding the variability in how successfully SafeWards had been implemented. Concerns were raised regarding its fidelity of implementation, outcomes, and variation in the degree of staff engagement.

REsTRAIN Yourself:

Six months after the implementation of REsTRAIN Yourself, (Duxbury et al., 2019) compared pre-intervention to post-intervention and reported an overall 22% reduction. However, a high degree of heterogeneity was noted between wards, with some achieving a 65% reduction and others only 8%. Suggestions to explain the variation included fidelity of implementation and variation in the existing pre-implementation restraint rates (within and between wards).

1.3. Conclusion

Despite a general global consensus that there should be a reduction, or even elimination, of coercive practices in mental healthcare (Norvoll et al., 2017), attempts to promote non-coercive management have had limited success. For example, the UK requires that coercive interventions be avoided whenever possible, even in acute inpatient mental health settings, which are subject to stringent regulations (DoH, 2014a, NICE, 2015). However, a recent Care and Quality Commission report (CQC) (2017b) on the state of care in the UK mental health services listed concerns regarding variation in how often restriction was used as the means of control, even between wards containing clinically similar patient groups (DoH, 2014a, NICE, 2015). Another primary concern was that some institutions failed to record all incidences of restraint and seclusion. However, the report also highlighted those institutions demonstrating good practice, including accurate documentation of incidents of patient restriction and post-restriction debriefing; in these institutions, staff used non-coercive management wherever possible, and restraint was only used as a last resort.

In a descriptive survey of the management of violence in mental health services from 17 European countries, Cowman et al. (2017) noted a lack of clear consensus among the countries studied. The treatment protocols for managing aggression and best management practices differed between countries, and the survey found that overall physical restraints, seclusion, and medication accounted for 46% of interventions. In contrast, de-escalation was used in only 7% of interventions. In addition, the study expressed concern about the lack of sufficient training in de-escalation techniques expressed by some of the mental healthcare professionals surveyed: of the 2809 mental healthcare professionals surveyed, 19.5% said they had not received patient aggression management training. To help meet these challenges, Cowman et al. (2017) proposed the formation of a European forum to formulate an agreed statement on the best standards of practice to manage violence and reduce coercion and to establish a European Union directive to ensure appropriate training of all mental health care professionals.

1.4. Rationale for this Study

Despite the widespread governmental and individual agreement that coercion in mental health care should be avoided when at all possible (DoH, 2014a, NICE, 2015, Norvoll et al., 2017), there remain challenges in establishing non-coercive protocols and resistance to ending or reducing coercive management (CQC, 2017b). Studies have examined different aspects of the nature of aggression in the acute inpatient setting (Dack et al., 2013, Iozzino et al., 2015, Podubinski et al., 2017), perceptions of healthcare staff toward aggression (Jacobowitz, 2013, Jonker et al., 2008, Kerr et al., 2017, Lamanna et al., 2016), and the measures that are used to control it (McKenna et al., 2017, Noorthoorn et al., 2015, Oster et al., 2016, Shepherd et al., 2015). However, very few have examined why the implementation of non-coercive management has had limited success or even fails completely (Price et al., 2018). Further research on factors influencing the implementation of non-coercive management is essential. Investigating barriers to reducing routine coercive management and facilitators for adopting non-coercive management is critical to help determine the areas that warrant further research.

1.5. Research Question

1.5.1. Aim

Explore and identify the factors influencing the implementation of coercion reduction interventions for aggression management in inpatient mental health settings.

1.5.2. Objectives:

- Map the implementation process for coercion reduction interventions for aggression management in inpatient mental health settings.
- Identify the evidence gaps regarding the factors influencing the implementation of coercion reduction interventions for aggression management.
- Identify factors influencing the implementation of coercion reduction interventions for aggression management.

Chapter 2: Theoretical Background

The results of any interventions tested during health research should ideally result in healthcare benefits. Major initiatives and guidelines produced by the National Institutes of Health (NIH) in the USA and the Medical Research Council (MRC) in the UK facilitate translating research into clinical practice (MRC, 2000, Zerhouni, 2003). Major initiatives such as these are complex interventions because they are implemented within context-specific complex environment of a hospital or healthcare system and require specific frameworks for their development and evaluation (Skivington et al., 2021). The global movement to facilitate successful outcomes for such interventions is evidenced in Cooksey (2006), where from existing programmes in the USA, Canada, and Sweden were used to support the development of a health research funding strategy for the UK.

This chapter, firstly, presents an overview of the theoretical background of research in complex interventions. Secondly, it discusses the value of implementation science to the translational research continuum and the need for evidence to support the selection of an appropriate methodological approach to study the factors influencing the implementation of coercion reduction interventions for managing aggression in inpatient mental health settings. Thirdly, it outlines the methodological approach selected for this research.

2.1. Implementation of Complex Interventions

Both the NIH and the MRC initiatives stress the need to include cases of complex interventions. The MRC recently produced an updated framework specifically for developing and evaluating complex interventions, which pose a more significant challenge (Skivington et al., 2021).

2.1.1. Complex Interventions

Earlier definitions of what constitutes a complex intervention (as opposed to a simple intervention) have varied in the literature (Petticrew, 2011), according to which implementation aspects are considered complex (Petticrew et al., 2019). However, the most recent definition from the MRC of a complex intervention is more inclusive; it states that a complex intervention may relate to the complexity of the intervention itself and the complexity of the setting in which it is being implemented (Skivington et al., 2021).

Complexity of the intervention:

During interventions to reduce coercive practices, extra complexity may be introduced by the choices staff make on whether and how to deliver the intervention. This is associated with complex interactions between patient behaviour, clinical history, and the skills of the staff

(Price et al., 2018). The study identified that a key issue that determined the choice of intervention was not the perceived risk of violence but rather how the staff perceived the cause of the violence. For example, de-escalation techniques were more often used where the violence was deemed to be a manifestation of the illness, whereas staff tended to use more restrictive methods when they considered the violence to be a deliberate misbehaviour. However, the perceived risk of violence may also affect the decisions to use restrictive methods (Lavelle et al., 2016); less experienced staff, wary of the possible risk of violence, may tend to take an over-cautious approach and default to the use of more restrictive methods.

Complexity of the system where the implementation occurs:

Complexity can be is part of the system rather than the intervention; interactions between the intervention components, and the context into which it is introduced as part of a complex system (Shiell et al., 2008). Context is important for the successful implementation of an intervention, and mechanisms are needed to promote flexibility of the intervention to facilitate its application in different contexts (Waters et al., 2011, Wells et al., 2012).

Rickles et al. (2007) described systems existing in healthcare as follows:

"Complex systems are highly composite ones, built up from vast numbers of mutually interacting subunits (that are often composites themselves) whose repeated interactions result in rich, collective behaviour that feeds back into the behaviour of the individual parts."
Page 934.

This definition emphasises the dynamic nature of many complex systems. Ellis et al. (2017) proposed that the dynamic interactions within mental health services be viewed as complex adaptive systems (CAS). Their study examined the mental health system in Australia, focusing on the "Headspace" program as a case study. "Headspace", according to an official independent review (REPORT: Is headspace making a difference to young people's lives?), had a limited impact (page 42), with only 13.3% of clients showing clinically significant improvement (Hilferty et al., 2016). Ellis et al. (2017) analysed these problems from a CAS perspective and presented possible explanations and solutions. Within a CAS, their active agents (i.e., participant entities, including staff, patients, hospital services, government mental health departments etc.) interact, affecting each other's behaviour and responses to co-evolve. With changing contexts, additional drivers, and barriers, these active agents tend to adapt and self-organise rather than follow fixed top-down policies. Such adaptations are dynamic, not easy to predict, and can result in context-specific social and cultural norms of "the way things are done here", adding to the system's complexity (Ellis et al., 2017). The lack of success of the mental health initiatives within "Headspace" is partly attributable to

resistance to top-down policies in a CAS because of these dynamic self-organised context-specific adaptations (Ellis et al., 2017). Although Ellis et al. (2017) considered the mental health system as a whole (community, outpatients, and inpatients) and thus as complex in terms of the scope of services, there are simpler examples of a CAS perspective. Nathan et al. (2021) investigated factors influencing patient admission into acute mental health facilities in the Northwest of England. The admission procedure is part of the basic routine protocol and could be considered relatively simple. However, the paper demonstrates how it is part of a complex system and that other factors, besides clinical need, influence the decision. Some of the additional factors included personal dynamics (patient/clinician, professional/clinician), threat/fear factors (the "if I sent him home and something happened" scenario), and contextual factors (e.g., resource availability, type of illness). Nathan et al. (2021) concluded that a wide range of inter- and intrapersonal factors, in addition to context, affected routine clinical decision-making within a CAS. Their study emphasised that any programs or interventions introduced to improve mental health services would be subject to these same influences, which may ultimately influence the outcomes.

2.1.2. Challenges of Evaluating Complex Interventions

In 2000, the MRC published a framework for developing and evaluating complex interventions (MRC, 2000). Although the framework has been highly influential, it also has several limitations, with recommendations being made for its improvement (Campbell et al., 2007a, Campbell et al., 2007b, Hardeman et al., 2005, Oakley et al., 2006, Shiell et al., 2008).

One of the MRC 2000 framework's limitations was that developing, testing, evaluating, and implementing a complex intervention was conceptualised as a linear process. However, in practice, these implementation steps may not follow a linear or cyclical sequence (Campbell et al., 2007a). Another limitation was the idea that interventions should be standardised. However, in practice, complex interventions may need to be tailored to the local contexts for them to become effective (Campbell et al., 2007b).

An additional limitation was the focus on evaluating the outcomes without considering the evaluation of the implementation process (Oakley et al., 2006). The multifaceted nature of complex interventions and their dependence on social contexts poses a challenge when evaluating outcomes in isolation, as contextual factors can influence outcomes and cause variations (Gueron, 2002). Process evaluation explores how an intervention is implemented, which is valuable in providing insights into why an intervention fails, results in varying outcomes, or succeeds and how it can be improved. Process evaluation can help identify causal mechanisms and reveal the relationship between contextual factors and outcome

variation (Craig et al., 2008). The suggested updates to the MRC recommendations by Moore et al. (2015) include the importance of process evaluation. It emphasises the importance of context and its role in developing and implementing complex interventions, including the dynamic nature of the system where the implementation itself may influence the existing context.

The recently updated MRC guidance framework for developing and evaluating complex interventions (Skivington et al., 2021) identifies six core elements for any research into complex interventions, including research into implementation (Figure 1).

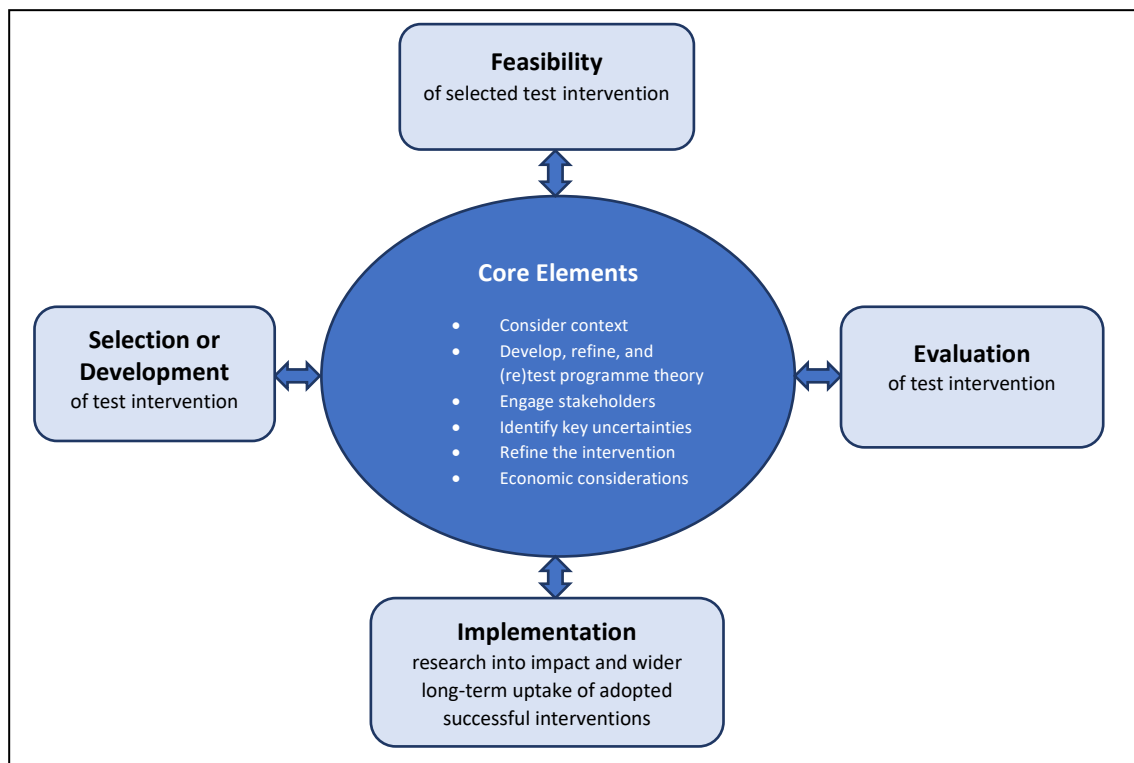


Figure 1. Outline of Updated MRC Guidance Framework for Research into Complex Interventions (Adapted from Skivington et al. 2021).

Including these core elements as essential research components in complex interventions helps meet some of the observed shortcomings of the MRC framework (2000). The core elements emphasise context (including economics) and dynamic factors within the framework (i.e., developing, refining, and stakeholder feedback).

2.2. Implementation and the Translational Research Continuum

2.2.1. The Translational Research Continuum

In 2003, the US NIH Roadmap initiative (Zerhouni, 2003) proposed a research development model (Figure 2). This roadmap divided the translational process into three phases: Bench,

Bedside, and Practice. Two translational step “gaps” were identified that bridged these phases, (T1) translation of basic (laboratory) research into clinical application and (T2) translation of the clinical application into practice. Additionally, two research focus areas were proposed to fill the gaps and facilitate the translation process between the phases; basic science research, which takes place at the “Bench”, and human clinical research, which takes place at the “Bedside”.

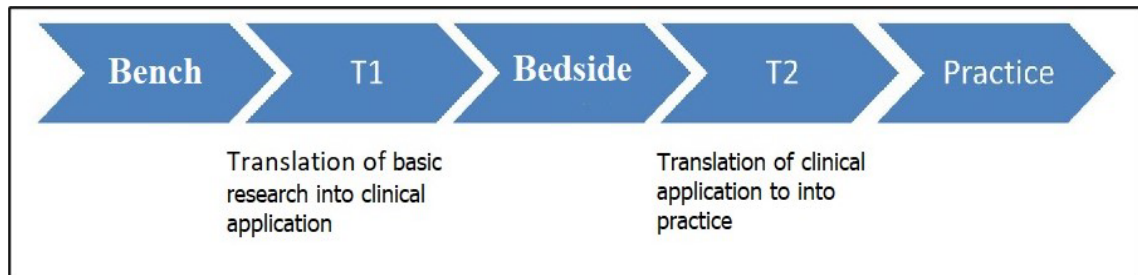


Figure 2. Basic Representation of the National Institutes of Health (NIH) Roadmap

The initial NIH roadmap did not address difficulties in integrating new discoveries into routine clinical practice or include a population-level evaluation. To address this, the model was extended by Westfall et al. (2007) and Khoury et al. (2007), as shown in Figure 3. The extended roadmap added a clinical practice phase and a third gap (T3) for dissemination and implementation, resulting in a third research focus area; practice-based research. Westfall et al. (2007) describe this extended roadmap as a "translational continuum" with overlap between the research sites and the translational gaps. To address the absence of a population-level evaluation of health outcomes, community-based participatory research, public health research, and health policy analysis Khoury et al. (2007), proposed a fifth phase; Population. This generated a fourth gap (T4: translating practice to population health impact) to extend the translational continuum further.

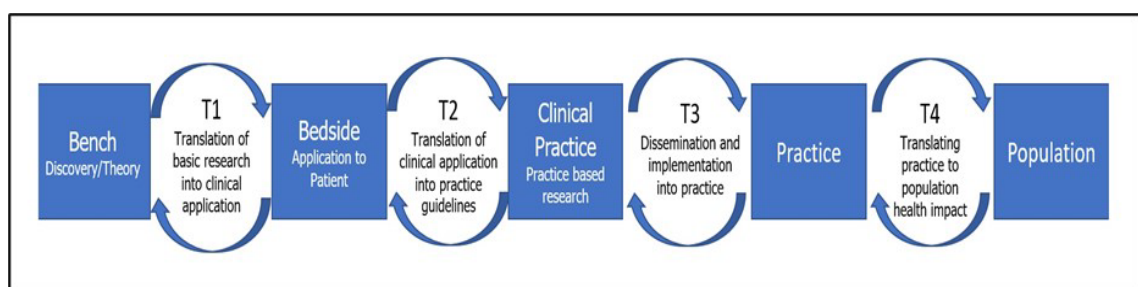


Figure 3. Extended Translational Continuum After Khoury et al. (2007).

Although the translational continuum is often visualised as sequential and linear, some argue that a rigid unidirectional model (Figure 2) does not adequately demonstrate the bi-directional nature of the research process. For example, where outcomes from clinical trials are utilised to inform changes required in the basic laboratory science phase (Cesario et al., 2003, Kaltman et al., 2010). Alternative linear, bi-directional or complex dynamic models, or those with multiple

feedback loops, would allow for back or reverse translation. Reverse translation would ensure that evidence related to routine clinical care (Fagnan et al., 2010, Grady, 2010, Lauer and Skarlatos, 2010, Rubio et al., 2010) and the experiences of service users and communities (Graham and Tetroe, 2008, Helmers et al., 2010, Jennings, 2004, Roman, 2009, Rosenblum and Alving, 2011, Zerhouni, 2007) in the later stages of the continuum are used to enhance the final outcome. Leppin et al. (2020) describe dissemination and implementation (D&I Sciences) as a "sub-science" which should be used to support translational science and drive progress through all stages of the translational research continuum.

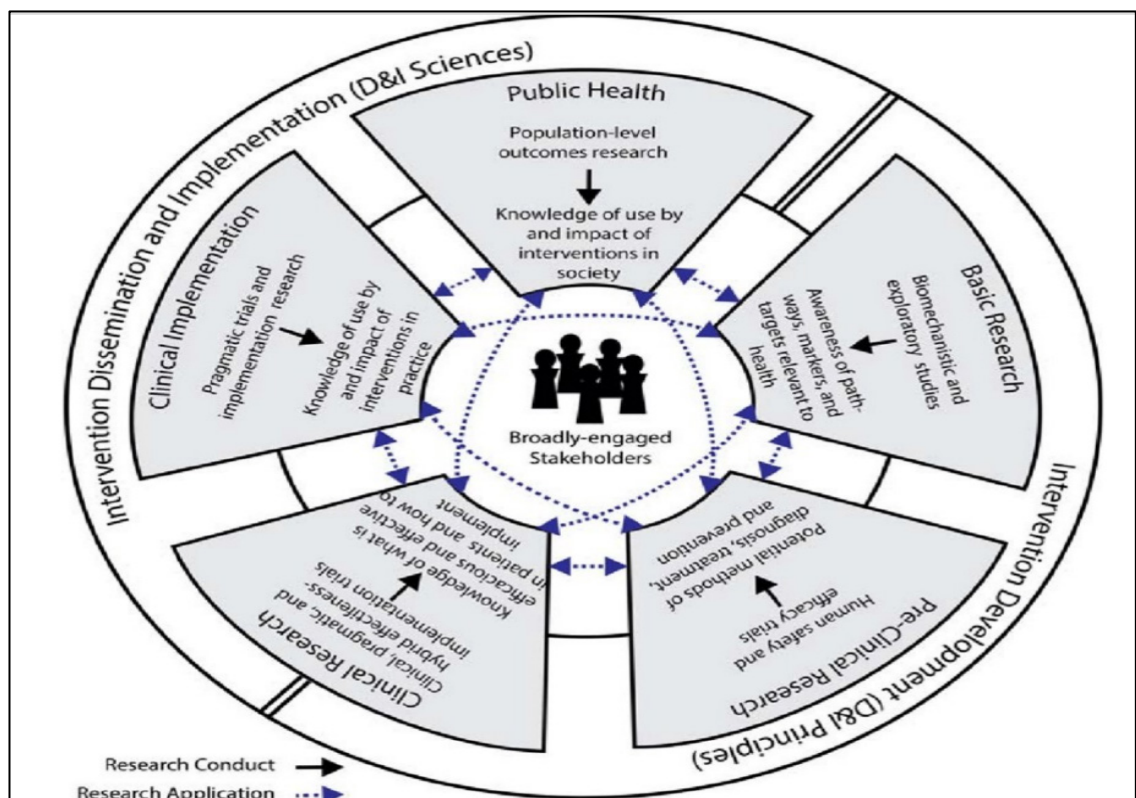


Figure 4. The Integrative Framework of Dissemination, Implementation, and Translation (IFDIT) (Leppin et al. 2020).

The IFDIT model (Figure 4) bears many similarities to the extended model shown in Figure 3, having five research phases with transitional steps (gaps) between them. However, IFDIT is presented in a circular format resulting in an additional gap between the population research phase and basic research. The model also maximises pathways for feedback between all research phases resulting in a complex dynamic model. Establishing clinical implementation is emphasised in the IFDIT and represents the fourth research phase.

Variable terminology in translational research

One challenge of translational research is that it means different things to different people, resulting in it being interpreted and applied in different ways (Milat and Li, 2017, Woolf, 2008). For some, the focus is the 'bench-to-bedside' process, which involves applying knowledge from laboratory sciences to clinical trials. This process enables the application of scientific

discoveries to develop and test new medicines, devices, and treatments for patients. In this interpretation, closing the gap between laboratory science and clinical medicine is particularly important, where the primary outcome is a new clinical treatment. In other studies, e.g., in public health and health services research, the focus is on healthcare integration and delivery of applications into practice and populations, where the primary outcome is translating research into the implementation of policy and practice and improving health at the population level (Khoury et al., 2007). These differences are reflected in the increasing complexity of the translational research continuum models (Figure 2, Figure 3, and 4).

These interpretations of translational research explain why implementation science may be referred to as dissemination/implementation (UK and Europe), knowledge/ distribution transfer (USA), and knowledge translation (Canada) (Khalil, 2016); reflecting different research perspectives focusing on different stages of the translational research continuum. The IFDIT model shows how input from D&I Science has relevance throughout the continuum. This thesis will use the UK terminology, although some references may use alternative terms.

2.3. Implementation Research

Implementation is the process by which a successful intervention is established into routine practice and represents an under-researched step in the translational research continuum.

Implementation research comprises three general approaches (Nilsen, 2015), shown in Figure 5. These are:

1. Describing and guiding the implementation of interventions into practice.
2. Aiding understanding and explaining the influences affecting implementation.
3. Evaluating the implementation process itself.

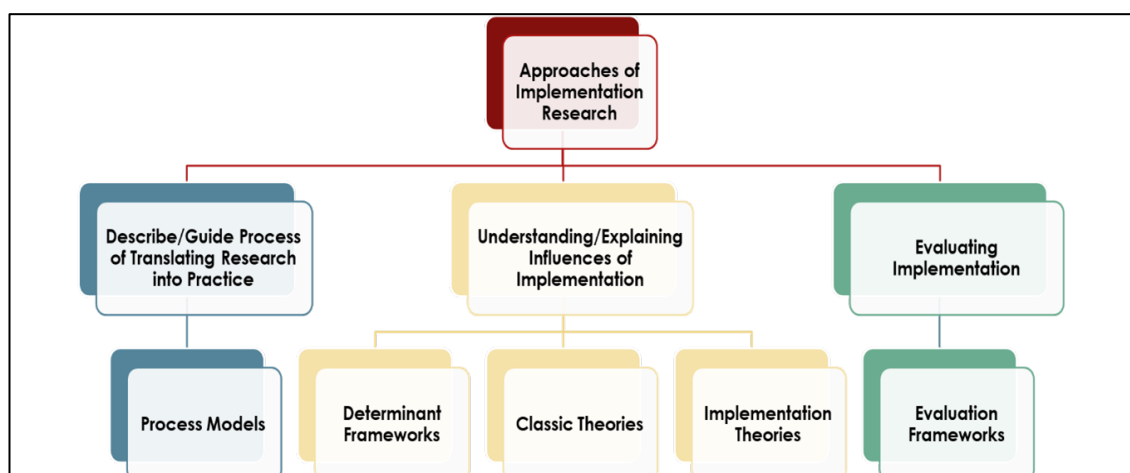


Figure 5. Approaches to Implementation Research (Nilsen, 2015).

This study explores the factors influencing the implementation of coercion reduction interventions for aggression management in inpatient mental healthcare. Therefore, this study

applies the approach that facilitates "understanding and explaining of the influences affecting implementation" (Nilsen, 2015); this corresponds to Gap T3 in the translational research continuum, which focuses on putting into practice the dissemination and implementation of practice guidelines or interventions. Unfortunately, not all successfully developed evidence-based interventions are implemented or reach levels of sustainability (Figure 6).

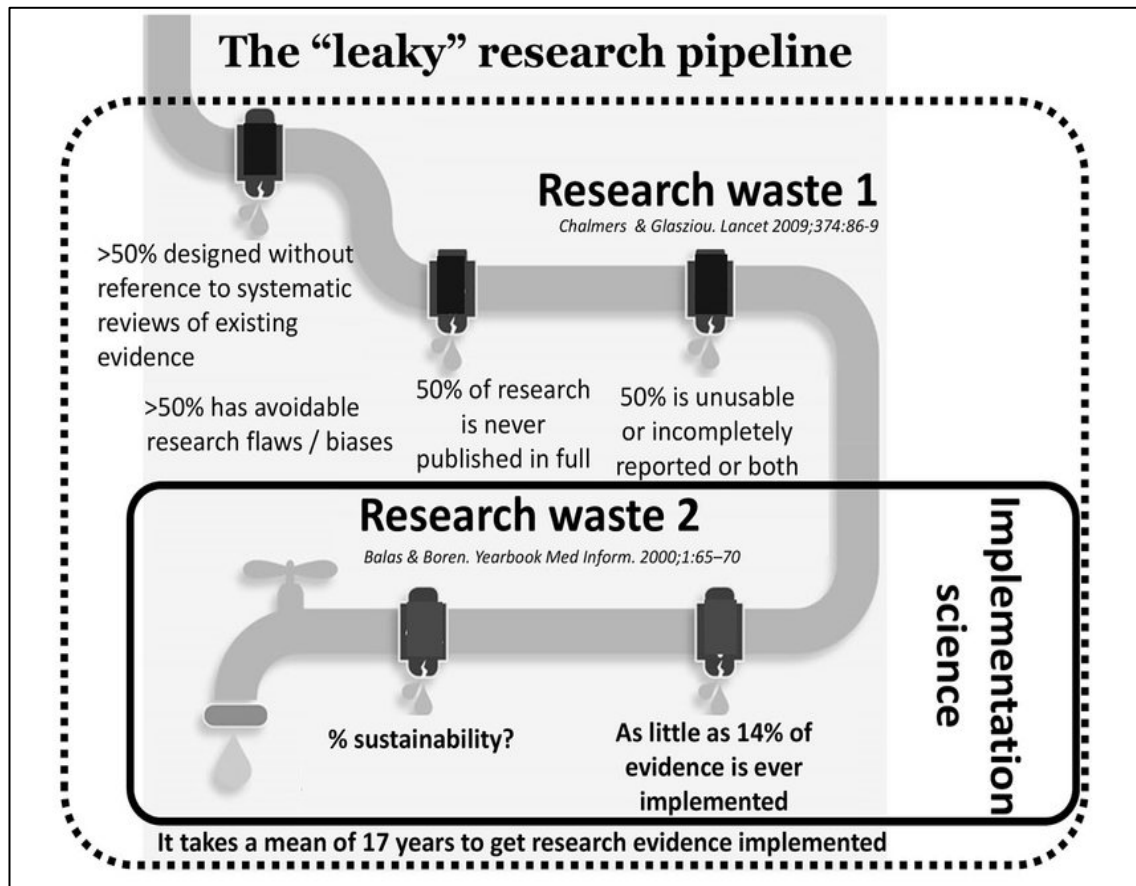


Figure 6. The leaky Research Pipeline (De Geest et al., 2020) CC BY-NC-ND 4.0.

This "leaky" research pipeline has led to a growing need to close the gap between the emergence of promising interventions and their implementation within the context in which they are proposed (Gibbons, 2000, Kessler and Glasgow, 2011, Perry and Bennett-Levy, 2014). Research of the third translational gap helps to improve understanding and facilitate the translation of these findings into areas that will enable them to be delivered, leading to improved quality of services and health outcomes (Hébert, 2003, Hoagwood and Olin, 2002). This type of research differs from research aiming to develop interventions and evaluate outcomes (Schoenwald and Hoagwood, 2001). However, it is important because interventions developed in the controlled context of clinical trials cannot be assumed to automatically transfer to practice due to the complex context involving service users, staff, and organisations (Hohmann, 1999, Hohmann and Shear, 2002).

There has been insufficient focus on translating complex interventions into established clinical practice (Graham et al., 2006, Green, 2014, Lenfant, 2003, Westfall et al., 2007). To help

support researchers undertaking this type of research, the Medical Research Council UK prepared a report focusing on the theoretical and applied aspects of the process evaluation of complex interventions (Moore et al., 2013, Moore et al., 2015).

2.3.1. Implementation research frameworks, models, and theories

The literature contains many theories, models and frameworks for implementation (Birken et al., 2017, Lynch et al., 2018, Nilsen, 2015, Tabak et al., 2012). The background literature is further complicated by the lack of agreement on the terminology used to describe and differentiate these concepts (Rycroft-Malone, 2010). Some authors have distinguished the differences between theories, models and frameworks, while others use these terms interchangeably (Nilsen, 2015).

When utilised in implementation research:

- Theories are usually used to facilitate prediction and aid in explaining the causal mechanisms of implementation.
- Models generally describe/guide the process of translating research into practice.
- Frameworks are usually used for descriptive purposes by pointing to factors believed or found to influence implementation outcomes.

Models and frameworks are more descriptive of factors relevant to aspects of implementation. In contrast, theories are more analytical and can help explain the change mechanism in the implementation process (Nilsen, 2015).

However, in general, implementation theories, models, and frameworks can collectively be considered tools to plan, predict, guide or evaluate the process of implementing evidence into practice (Lynch et al., 2018). For this study, the term 'theoretical approach' will be used as an umbrella term to refer to all three.

Implementation research theories fall under two categories, classical theories and implementation theories.

- Classical theories: Originated from fields external to implementation science, e.g., psychology (the theory of planned behaviour, social cognitive theory), sociology (theory of diffusion of innovation), and organisational theory (institutional theory, transaction cost economics, contingency theories, and resource dependency theory).
- Implementation theories: Specifically developed for use in implementation science and research. Some implementation theories are modifications of existing theories, e.g., 'Implementation Climate', 'Absorptive Capacity' and 'Organizational Readiness' (Klein and Sorra, 1996, Weiner, 2009, Zahra and George, 2002). Other implementation theories were

developed empirically, e.g. COM-B (Capability, Opportunity, Motivation and Behaviour) and NPT (Normalization Process Theory) (May and Finch, 2009, Michie et al., 2011).

2.3.2. Theoretical Approaches in Implementation

Selecting a suitable theory from the growing number of theoretical approaches available in the field can be challenging (Birken et al., 2017), and using a guide to aid the selection process is beneficial. This study used three guides, Tabak et al. (2012), Lynch et al. (2018), and Moullin et al. (2020), to determine which theoretical approach would best suit the study's aims.

In the review by Tabak et al. (2012), 61 theoretical approaches used in implementation and dissemination and Gap T3 (section 2.2.1) were analysed and tabulated according to the study focus, socio-ecological level, and flexibility.

- Study focus: Whether it addresses implementation, dissemination, or both.
- Socio-ecological level: The level at which it is operational, either individual, organisation, community, or system.
- Flexibility: Describing the extent the theory or framework can be adapted. This ranges from the degree of flexibility, e.g., very flexible (general open concepts) to rigid (written procedural instructions).

Of the 61 theoretical approaches, 50 addressed implementation with varying degrees. In contrast, the remaining 11 theoretical approaches dealt solely with dissemination (another aspect relevant to Gap T3).

The review by Lynch et al. (2018) analysed ten theoretical approaches used in implementation research and detailed their characteristics and how they were used. Of these ten, eight had previously been discussed by Tabak et al. (2012).

Lynch et al. (2018) recommend considering four criteria to select a theoretical approach. One is the general logistics and practicality of using a particular theoretical approach, which is achieved via the questions; Who? When? and How?. Second is the relevance or face validity of the approach. Third is the potential of the theoretical approach to reveal aspects of the implementation that might have been neglected. Fourth are theoretical approaches that have been used in similar studies.

A recent publication by Moullin et al. (2020) recommends four criteria which should be considered when selecting appropriate theoretical approaches for use in implementation research:

- The functional purpose of the theoretical approach, e.g., analysing outcomes, barriers and facilitators to implementation, dissemination etc.

- Levels of organisational structure within the system under study.
- Depth and type of analysis required.
- Specific intervention/context, e.g., details of the context of the original use of the theoretical approach, should approximate the intended use.

Details of specific characteristics of each theoretical approach (study focus, socio-ecological levels, and flexibility) as described in Tabak et al. (2012), as well as face validity, exploratory potential, and previous use of those theoretical approaches, as summarised by Lynch et al. (2018) provided sufficient information to meet the four criteria recommended by Moullin et al. (2020). These details proposed the implementation use of the framework, the sociological levels required, the nature of the analysis required, and the context of the original use of the approach.

Selecting a theoretical approach for this study

A suitable theoretical approach needs to focus on the implementation process to facilitate the present study and be operational on the socio-ecological levels of individuals, organisations, and systems. In addition, flexibility to deal with possible unanticipated context-specific variations during implementation is beneficial (section 2.1.1). Maintaining a flexible structure rather than having a rigidly structured format to elicit answers to prompted questions is one way to facilitate flexibility. Finally, evidence of prior use in studies involving barriers and facilitators of implementation in healthcare is also evidence of appropriateness.

Theoretical Approach	Primary Focus	Socio-ecological Level of Application	Use in Barrier & Facilitator Studies
Theoretical Domains Framework (TDF)	Implementation Behaviour/Beliefs	Individual	(Isenor et al., 2018) (Goddard et al., 2018) (Jabbour et al., 2018) (Kandel et al., 2021)
Consolidated Framework for Implementation Research (CFIR)	Implementation Outcomes	Organisation	(Garbutt et al., 2018) (Warner et al., 2018) (Montena et al., 2022) (Howell et al., 2022)
Promoting Action on Research Implementation in Health Services (PARIHS)	Evaluation of Implementation Outcome	Individual, Organization and Community	(Drainoni et al., 2016) (Stolee et al., 2010) (Warner et al., 2010)
Integrated-Promoting Action on Research Implementation in Health Services (I-PARIHS)	Evaluation of Implementation Outcome	Individual, Organization and Community	(Laycock et al., 2018) (Roberts et al., 2021) (Cao et al., 2022)
Normalisation Process Theory (NPT)	Implementation Process	Individual, Organization and System	(Currie et al., 2019) (Ibrahim et al., 2018) (Xanidis and Gumley, 2020)
Extended Normalisation Process Theory (ENPT)	Implementation Process	Individual, Organization and System	(Myers et al., 2020) (van Zelm et al., 2021) (Bacchus et al., 2021) (Porroche-Escudero et al., 2021)

Table 3. *Theoretical Approaches in Implementation.*

The four theoretical approaches (Table 3) initially selected to ascertain to best fulfil the characteristics required to meet the study's aims were CFIR, PARIHS, TDF, and NPT. Subsequently, two additional approaches (ENPT and I-PARIHS), which are later advanced iterations of NPT and PARIHS, were also added.

The following section discusses the suitability of these six theoretical approaches for the present study.

Theoretical Domains Framework (TDF)

Derived from a synthesis of 33 theories related to behavioural change (Cane et al., 2012, Michie et al., 2005), the structure is flexible and applicable for use at different sociological levels and investigates implementation problems. TDF has been used in many studies of potential barriers and facilitators in healthcare settings, e.g., (Bain et al., 2015, Craig et al., 2016, Goddard et al., 2018, Hall et al., 2019, Isenor et al., 2018, Jabbour et al., 2018, Kandel et al., 2021, Mirbaha et al., 2015, Mosavianpour et al., 2016).

However, the TDF was considered unsuitable for use in the present study because most of the constructs in TDF were directly related to beliefs and opinions impacting implementation rather than actions taken during the implementation process.

TDF is often used in combination with the related COM-B model. The 12 domains of TDF map to the three criteria of human behaviours described in COM-B (capability, opportunities, motivation, and behaviour), facilitating analysis (Alexander et al., 2014). Recent studies focused on barriers to implementation have used a combined COM-B plus TDF (Alexander et al., 2014, Biezen et al., 2017, Flannery et al., 2018, Voshaar et al., 2016). COM-B plus TDF was not considered a good fit here because although relevant publications exist, the primary focus is on individual behaviour and beliefs rather than actions performed.

Consolidated Framework for Implementation Research (CFIR)

CFIR has five major domains: intervention, inner setting, outer setting, individuals involved, and the implementation process, with constructs within each domain (Damschroder et al., 2009). The constructs within CFIR are designed to form a comprehensive framework at multiple sociological levels against which to examine barriers and facilitators to implementation (Garbutt et al., 2018, Warner et al., 2018). A systematic review on the use of CFIR (Kirk et al., 2015) identified that most (73%) of the papers selected understood the barriers and facilitators of implementation as a stated research objective, and most of these studies were in the healthcare field (20 out of 26 papers). Considering these factors, CFIR initially appears to be a suitable framework for the present study. However, although one of

the five domains is "the process of implementation" (Damschroder et al., 2009), the constructs within this domain focus on the stages of the process (planning, engaging, executing, and reflecting) rather than specifically the dynamics of change or process during implementation. In addition, the dynamics of change or process are not discussed in the original framework's description, and the emphasis is placed on implementation outcomes (Damschroder et al., 2009). Due to this lack of focus on the process, CFIR was not selected.

Promoting Action on Research Implementation in Health Services (PARIHS)

Kitson et al. (1998) originally developed PARIHS. It considers that successful implementation depends on three factors: context, evidence, and facilitation. Kitson et al. (1998, 2008) described three domains as acting dynamically to facilitate implementation, but the implementation process remains to be fully explored.

Some studies have used PARIHS to examine barriers and facilitators (Drainoni et al., 2016, Kristensen et al., 2012, Stolee et al., 2010, Warner et al., 2010); however, all used the PARIHS model as a framework upon which to collect and analyse data. None explored the possible dynamics, and PARIHS focused on the evaluation of the implementation outcomes rather than the process of implementation and was therefore not selected.

Integrated Promoting Action on Research Implementation in Health Services (I- PARIHS)

I-PARIHS is derived from the original PARIHS framework (Harvey and Kitson, 2015). The revised framework was designed for complex multi-disciplinary interventions (Hunter et al., 2020). The adaptations allow consideration of more divergent contexts and a greater emphasis on process. Facilitation was a core construct in PARIHS and had more emphasis within the I-PARIHS framework. However, facilitation considers the actions of a facilitator as part of the implementation process, not just a role. The facilitation pathway is part of a continuous spiral that links the other constructs (Harvey and Kitson, 2015). The spiral is an integral part of the design. I-PARIHS can also be used to assess the necessary expertise of facilitators required for each implementation stage. According to Harvey and Kitson (2015), one of I-PARIHS's aims is to provide practical guidance for implementing new interventions.

Although I-PARIHS is designed to facilitate flexibility and divergence of context, considerations of the process, and what can be done to facilitate along a defined pathway, there are no apparent means of considering interactions between the framework components outside those set by the spiral pathway. The main reason i-PARIHS was not selected for use in this study was the possible restraints imposed by the facilitation spiral model.

Normalisation Process Theory (NPT)

The Normalization Process Theory (NPT) fulfils all the anticipated requirements. It focuses on the implementation process and can be used at all the required sociological levels, enabling the research to be as inclusive as possible. There are also many published examples of NPT's used to understand barriers and facilitators of the implementation process (Currie et al., 2019, Ibrahim et al., 2018, Xanidis and Gumley, 2020), demonstrating its application in this area. NPT emphasises what is done or occurs rather than individual beliefs or attitudes. As such, NPT can be described as an action theory (Lynch et al., 2018), and the principle of the process is explicit in the name, the process by which an intervention becomes part of established "normal" routine protocols, the sustainability of an intervention. Initially, NPT was considered a suitable theoretical approach. However, after considering the complexity (section 2.1.1) and the importance of context (section 2.1.2) to the success of implementations, a later iteration of NPT, extended NPT, was considered preferable. The components of NPT and ENPT are described in detail in section 2.4.

Extended Normalisation Process Theory (ENPT)

ENPT contains the same basic components as NPT but is further expanded by adding Capacity and Potential to the organisational context. The resulting ENPT is proposed as a flexible theory that links Capability, Contribution, and Context (Finch et al., 2013, May, 2013). In addition, all the original characteristics of NPT (focus on the process and applicability to multiple sociological levels if required) remain applicable to ENPT. For these reasons, despite fewer publications specifically using ENPT to understand barriers and facilitators of the implementation process than for NPT, ENPT was considered the most suitable theoretical approach for this study. The components of NPT and ENPT are described and compared in detail in section 2.4.

2.4. Normalisation Process Theory (NPT) and Extended Normalisation Process Theory (ENPT)

This section describes and compares NPT and ENPT, including a description of each construct used within the theory. Emphasis has been placed on the flexibility of the theory, and users were encouraged to adapt constructs to their individual needs. To demonstrate this, some examples of the variation in applying ENPT constructs are discussed alongside the use of NPT and ENPT in healthcare research.

2.4.1. Normalisation process theory

NPT is empirically grounded and was developed to understand the implementation of complex interventions and identify the factors that promote and inhibit these from being embedded and integrated into practice. NPT started as a model known as NPM (the Normalisation Process Model), developed empirically by May and colleagues (May et al., 2009), based on studies of the implementation of new technologies (May et al., 2007), later developed into a more comprehensive theory (Finch et al., 2013, May, 2013).

The original NPM model focused on the interaction between the users and the intervention (Capability), encompassing how the user's skills and the organisational resources linked with the intervention and influenced its implementation (May, 2006, May et al., 2007). NPM was later expanded to NPT, encompassing what users do (Contribution), the links between users' understanding of the significance of the intervention (Coherence), getting users engaged and staying committed (Cognitive Participation), how users enact it (Collective Action), and how its value and progress is appraised and assessed (Reflexive Monitoring) (May and Finch, 2009, May et al., 2009). NPT was further expanded by adding the Capacity and Potential of the organisational context, the resulting Extended Normalisation Process Theory (ENPT) being proposed as a flexible theory that links Capability, Contribution, and Context (Finch et al., 2013, May, 2013).

NPT considers implementing interventions to be a collective process of change mechanisms and interrelations between the various constructs and the relationships between them. It involves interactions of the users within the workforce and the broader organisation and with the intervention process itself (Murray et al., 2010).

At the core of NPT are four interacting constructs essential to implementing a practice (Figure 7). These constructs are:

- Coherence: what is understood about the practice by the users.
- Collective action: How the users enact the practice.
- Cognitive participation: How users started using the practice and remained committed.
- Reflexive monitoring: How users evaluate and assess the practice. (Finch et al., 2013)

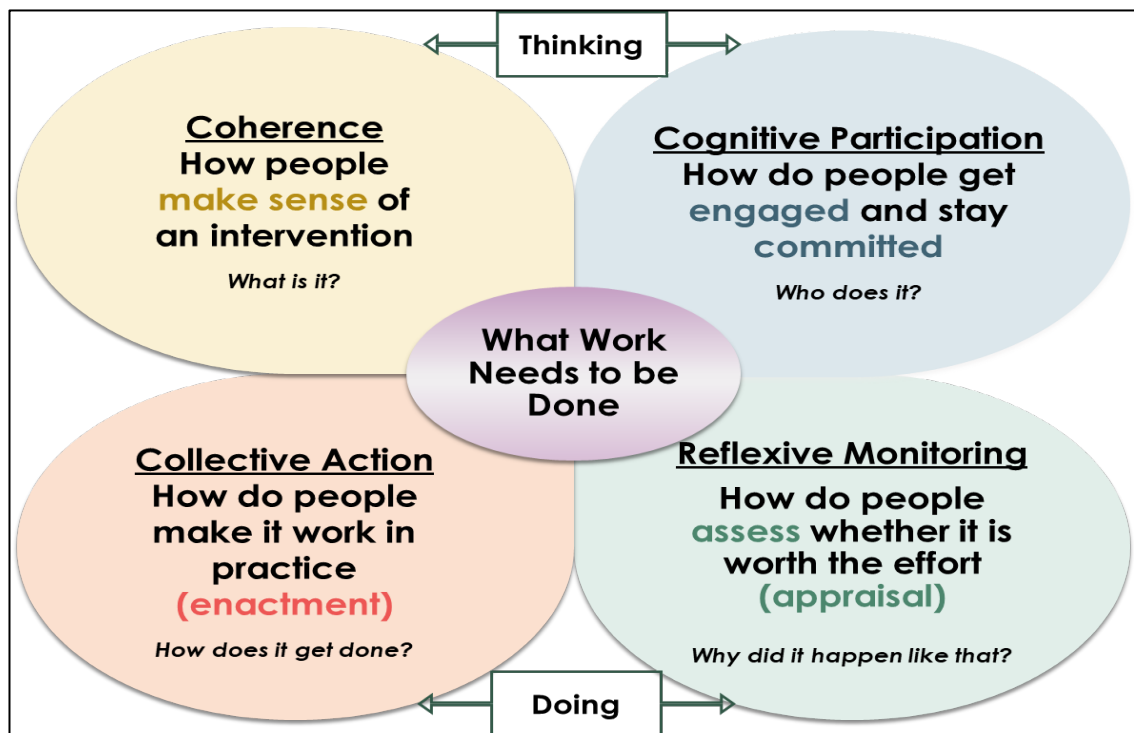


Figure 7. NPT Core Constructs. Derived from (May and Finch, 2009).

Studies that have explored the barriers to implementation have focused on the attitudes and perceptions of individuals (Grol et al., 2007). However, NPT considers the implementation of interventions to be a collective process involving interactions of groups within the workforce and the wider organisation and with the intervention process itself (Murray et al., 2010). NPT is a valuable flexible framework to study and analyse the implementation process and can be utilised in different areas within implementation research (McEvoy et al., 2014). The combination of flexibility and its descriptive exploratory nature makes it suitable for integration into qualitative methodologies. It is particularly useful when the implementation process is focused on an intervention that is poorly understood.

2.4.2. Extended normalisation process theory (ENPT)

ENPT developed from previous iterations of the NPT and links the four constructs of NPT with sociological and psychological elements with the stated aim "to provide a more comprehensive explanation of the constituents of implementation processes" (May, 2013) Page 1.

ENPT describes implementation as a continuous interaction between the qualities of a new intervention (Capability), the social system in which implementation occurs (Capacity and Potential), and the practitioners' manifested agency through their interactions with each other and the other constructs of context within that social system (Contribution) (Segrott et al., 2017). Therefore, ENPT considers the emergent agency of (practitioners) and the intervention as well as the dynamic elements of context in which they operate and the dynamic interaction

between them, thus creating a flexible, comprehensive theory independent of context (Finch et al., 2013, May, 2013).

ENPT has four constructs that provide a conceptual framework to explain the implementation process. These four constructs are Potential, Capacity, Capability, and Contribution, each with two or four subconstructs or dimensions (Figure 8).

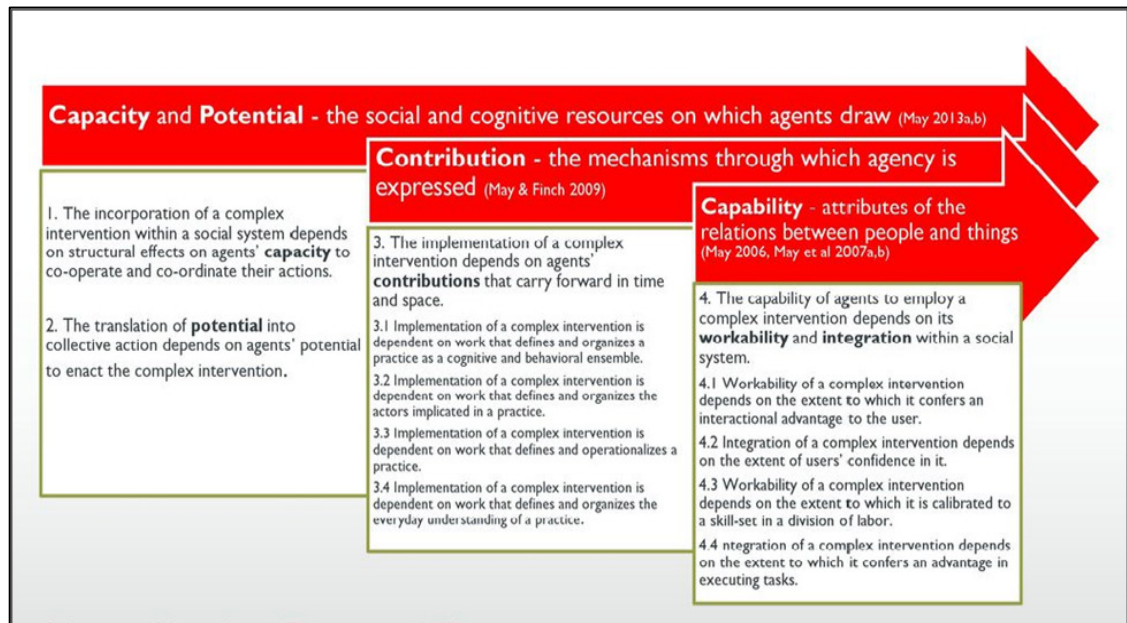


Figure 8. Concepts, Constructs and Dimensions of ENPT. Derived from (May, 2013).

A) Potential

Potential is the commitment of agents (individuals or groups) to implement and embed the intervention into the normal working routine (May, 2013). The level of commitment is a reflection of the value attributed by the agents to the changes introduced by the intervention (change valence) and how feasible they consider these changes in their context (change efficacy) (Weiner, 2009).

B) Capability

Capability is the capability of agents to implement the intervention and is composed of two dimensions:

- **Workability:** how agents adapt to “make it work” when trying to implement the intervention, for example, cooperation between agents, changes of role, and re-allocation of tasks.
- **Integration:** how agents link the implementation to their previous practice within the social system.

C) Capacity

Capacity is the capacity of the social system to implement the intervention. It depends on the appropriate material and cognitive resources available to the agents and their ability and willingness to adapt to any changes resulting from the intervention that affect the social roles or norms.

D) Contribution

Contribution is the implementation of the intervention by the agents, how they understand, support, and implement it, and the value they attach to the outcomes.

Variation in the application of ENPT constructs during research

An essential feature of ENPT and earlier iterations (NPM and NPT) is their flexibility, allowing researchers to readily adapt the constructs according to their study's aims and objectives. May et al. (2018) presented four ways researchers have used the constructs: in a linear manner (either sequentially, convergently or divergently) or in a nonlinear manner. May et al. (2018) provide examples of the flexibility of utilising NPT constructs, but it also applies to NPM and ENPT.

Based on NPT examples presented by May et al. (2018), the constructs of ENPT could be represented as:

1) *Linear presentation, sequential unidirectional*

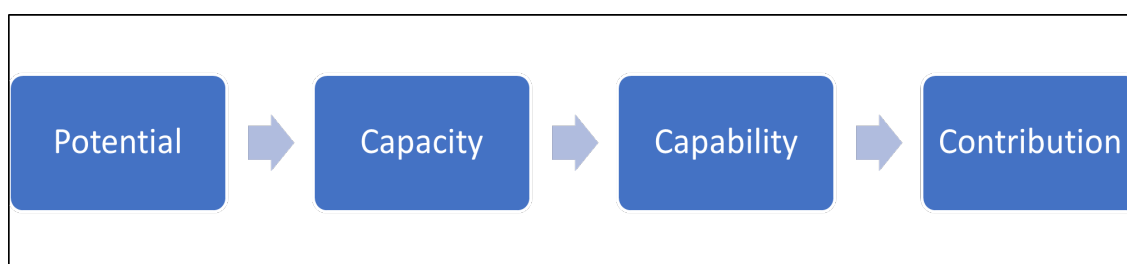


Figure 9. Relationships between the Constructs are Unidirectional and Sequential.

The relationship between the constructs is unidirectional and sequential, and the order may vary according to the aims and objectives of the research. The arrangement of the constructs in the above example (Figure 9) follows the assumption that for agents to contribute (Contribution) to the implementation of the intervention, they must want to implement (Potential). If Potential is present, agents should also have all the materials and facilities to implement the intervention (Capacity). Finally (if the previous criteria are met), the agents can implement the intervention (Capability).

2) Construct Convergence and Construct Divergence are Unidirectional

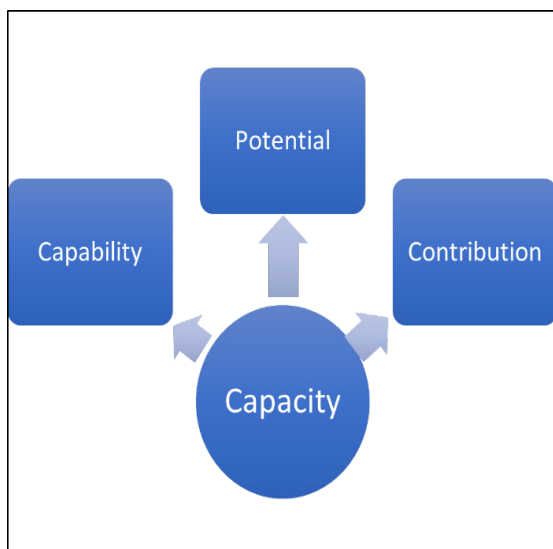


Figure 11. (A) Unidirectional Construct Divergence.

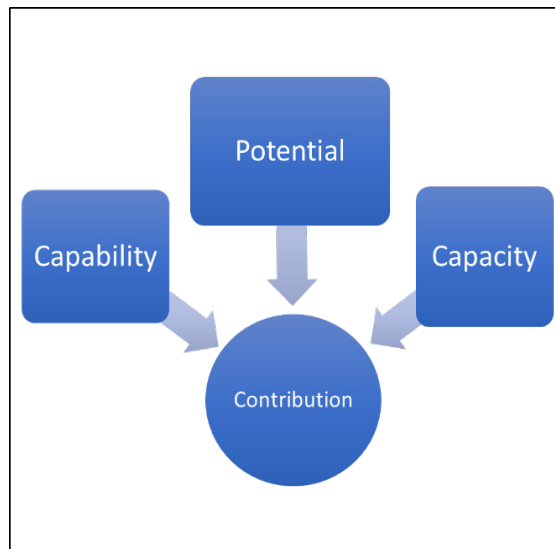


Figure 10. (B) Unidirectional Construct Convergence.

In these examples, just one of the constructs is selected as a focus and the unidirectional relationships between the selected construct, i.e., example (A) Contribution (Figure 10) and example (B) Capacity (Figure 11), with the remaining constructs.

- A) Convergent: This example of construct convergence was presented by May (2013) as a simple format of how agents' contribution to the intervention's implementation is influenced by the extent of the agents' socio-cognitive support (Potential) and their ability to implement the intervention (Capability), alongside the effect of socio-structural resources (Capacity).
- B) Divergent: How Capacity (socio-structural resources) impacts the implementation of the intervention by the agents (Contribution), and the agents' ability to implement the intervention (Capability) and consequently the extent of socio-cognitive support they will give to the intervention (Potential).

A divergent construct arrangement facilitates studying how available facilities and materials impact the other constructs. We did not identify an example of this being used for ENPT; instead, we mimicked the example used for NPT (Finch, 2008) described in May et al. (2018).

A theoretical model of the guidelines in the implementation process was proposed by May et al. (2014), which demonstrated possible interactions between the four constructs shown in Figure 12 (adapted to generalise context). The extent to which agents can contribute to the implementation and successful embedding of the intervention is related to the agents' Capacity, Capability, and Potential.

3) Network of potential construct interactions (multidirectional)

The four constructs are linked within a network (Figure 13). Nodes are shown through which dynamic changes/restructuring may occur between the constructs.

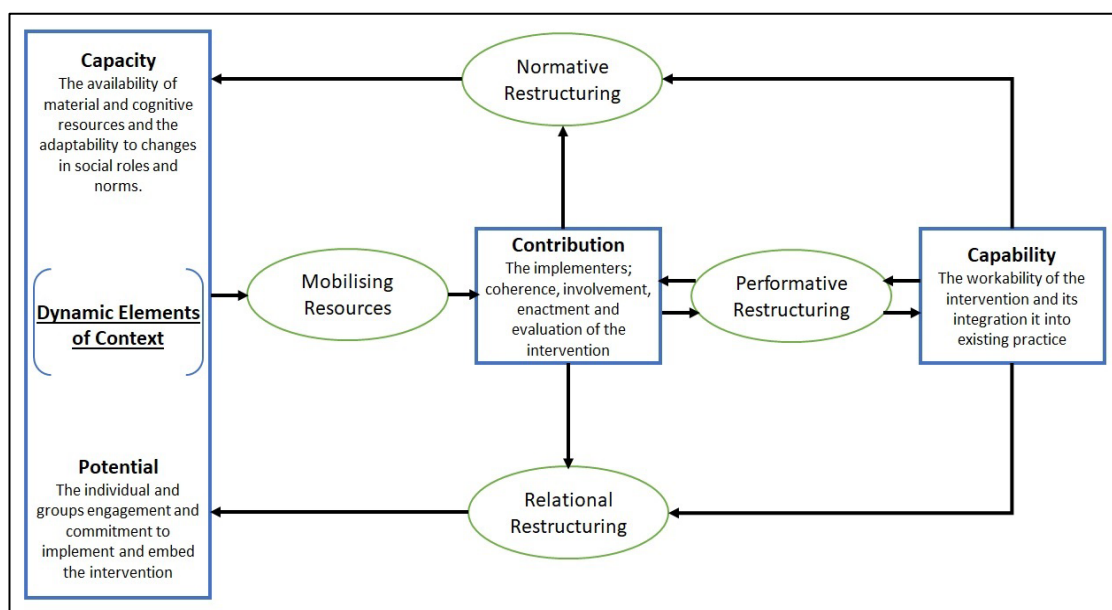


Figure 12. Proposed Interactions between the Four Constructs in ENPT in Generalised Context. Adapted from (May et al., 2014).

This application represents a more complex and dynamic system, presenting the relationship between the constructs and possible dynamic changes between them. This system of dynamic interactions between the four ENPT constructs is used by (May et al., 2014) as a model in a systematic review of the implementation of clinical guidelines by hospital nurses.

ENPT as a Complex Dynamic System

May et al. (2016) discussed dynamic interactions that can occur when complex adaptive systems (CAS) react to a change in context. The ability to be flexible and adapt to the context and possible changes in context within a CAS depends on balancing negotiations between available input factors and acceptable outputs/results. Following successful negotiations, two types of restructuring within the system can result when challenged with an intervention:

- Normative restructuring: The changes within a CAS affecting previously established conventions, behaviours, and resource allocations, resulting in new norms. If these are successful, they will facilitate the smooth running of the intervention. In addition to affecting agent behaviour and system dynamics, normative restructuring can interact with and sometimes modify the intervention. The characteristic of an intervention to withstand such modification is known as “plasticity”. Plasticity facilitates its adaptability to specific contexts by enabling users to tailor the intervention to their immediate needs.

- Relational restructuring: The changes within a CAS affecting previously established interpersonal and inter-group relations. To achieve the new intervention's goals, these relationships may need to change; the degree to which stretching and change are possible is termed "elasticity". Rigid interpersonal and inter-group relationships with institutionalised group behaviours and roles within a long-established, unchanging organisational structure can lead to an inelastic environment.

Normative and relational restructuring occur due to contextual changes at the start of implementation and possibly as it proceeds. The process of restructuring is essential to ensure an implementation is embedded (becomes the new norm), and an intervention can fail to become embedded if the agents are unable to achieve the restructuring necessary to achieve the goals of the intervention to an acceptable level.

2.5. Applications of NPT and ENPT across healthcare contexts

NPT has a range of applications across healthcare contexts (Atkins et al., 2011, Bamford et al., 2014, Kennedy et al., 2014a, Kennedy et al., 2014b, McEvoy et al., 2014, Spangaro et al., 2011). It can be applied as a framework to develop, evaluate, and implement complex interventions (Murray et al., 2010). However, it can also guide a literature review, as May et al. (2014) demonstrated in a review to evaluate clinical guideline implementation among nurses. May et al. (2014) used NPT to guide data extraction, coding, synthesis, and interpretation to achieve a theory-driven explanation. A dynamic implementation model was developed from this theory-driven explanation. NPT has also been used to analyse interview data, data derived from observing the implementation process, and written records made during the implementation (Bee et al., 2016).

NPT has been used as a standalone tool (Atkins et al., 2011, Bamford et al., 2014, Kennedy et al., 2014a, Kennedy et al., 2014b, McEvoy et al., 2014, Spangaro et al., 2011) and in conjunction with other investigative frameworks and tools. Knowles et al. (2019) nested NPT within the RE-Aim tool, which was designed for the assessment of referral of patients to diabetes prevention programs, and Tarzia et al. (2016) combined the use of NPT with a tool to assess the burden of treatment to assess healthy relationships and safety decisions online.

ENPT, which extends NPT by integrating sociological and psychological components, has also been employed in different healthcare settings as a theoretical framework to understand the implementation of interventions (May et al., 2018). In a qualitative study, Drew et al. (2015) examined the implementation of secondary fracture prevention services after a hip fracture, in which ENPT informed the study design and analysis. Segrott et al. (2017) used ENPT nested within a randomised controlled trial of a complex social intervention as a theoretical

framework to analyse a process evaluation study (Strengthening Families Programme). In a mixed-methods study of a healthy lifestyle promotion initiative, Thomas et al. (2015) utilised ENPT as a conceptual tool in the analysis to integrate qualitative and quantitative data.

Differentiation between which of the three iterations is being used can be difficult. For example, Wikström et al. (2019) referred to the use of NPT as an analytical framework but utilised the four constructs specific to ENPT; therefore, we have reviewed this as an example of ENPT in this study. In addition, there is a degree of inconsistency about whether ENTP should instead be called “general theory of implementation”, as used by Grealish et al. (2019) and Trautner et al. (2018). This uncertainty stems from the publication where ENPT was outlined by May (2013) in an article entitled “Towards a general theory of implementation”. In this article, May (2013) proposed ENTP to comprise core elements required for the possible general theory of implementation but did not claim that ENPT was a “General Theory of Implementation”, and May continued to use the term ENPT in subsequent publications (Drew et al., 2015, May et al., 2018). Therefore, in this study, the term ENPT will be used rather than “General Theory of Implementation”, although studies using this term will be included in the discussion.

ENPT enables exploration of the interventions and agents involved and relates to the context and dynamic interactions between them (Finch et al., 2013, May, 2013). Since this study is exploratory, ENPT is considered the most appropriate conceptual tool to identify the factors influencing the implementation of coercion reduction interventions for aggression management.

2.6. Methods used in ENPT-informed studies

The use of ENPT within a study (e.g., for planning, data collection, or analysis) and the interrelationships between the four constructs within ENPT can vary according to the study objectives. Table 4 summarises some healthcare projects that have used ENPT and lists how it was utilised.

Research Area	Utilisation of ENPT	Prospective (P) Retrospective (R)	Observations	Semi Structured Interviews	Group Interviews	Document Review	Surveys/ Questionnaires	Reference
Evaluation study (mainstreaming health equity focus)	Analysis	R		✓	✓			(Porroche-Escudero et al., 2021)
Evaluation study of a care pathway for colorectal cancer surgery	Analysis	R		✓		✓		(van Zelm et al., 2021)
Evaluation study of primary healthcare response to domestic violence in occupied Palestinian territory	Analysis	R		✓		✓		(Bacchus et al., 2021)
Safe hands: aseptic techniques in operating theatres	Explore process drivers	P	✓	✓				(Wikström et al., 2019)
Planning a delirium prevention program in hospital	Develop an implementation plan (Contribution)	P	✓	✓		✓		(Grealish et al., 2019)
Implementation of guidelines about the inappropriate treatment of asymptomatic bacteriuria	Program outcome assessment	P				✓	✓	(Trautner et al., 2018)
Evaluation study (Strengthening Families Programme)	Analysis	P	✓	✓		✓		(Segrott et al., 2017)
Integrating collaborative place-based health promotion coalitions into existing health system structures	Analysis (Capacity only)	R?		✓	✓			(Ehrlich and Kendall, 2015)
Implementing coordinated healthy lifestyle promotion in primary care	Analysis	R		✓		✓	✓	(Thomas et al., 2015)
Implementation of secondary fracture prevention services after hip fracture	Study design and analysis	R		✓				(Drew et al., 2015)

Table 4. ENPT Informed Studies.

Trautner et al. (2018) presented a unidirectional, linear progression of the ENPT constructs with intervention sustainability as the outcome. The study designs of Ehrlich and Kendall (2015) and Grealish et al. (2019) present one construct as the focus of the study, followed by other constructs, which are represented as converging with it (e.g., Figure 11). Another four studies (Drew et al., 2015, Segrott et al., 2017, Thomas et al., 2015, Wikström et al., 2019) considered all constructs equally rather than the focus of the study being upon a single construct. For example, Drew et al. (2015), Thomas et al. (2015), and van Zelm et al. (2021)

describe in-depth key findings related to each of the four constructs, and each of the concepts is discussed separately. Finally, Bacchus et al. (2021), Porroche-Escudero et al. (2021), Segrott et al. (2017), and Wikström et al. (2019) were all primarily concerned with the process. These studies considered the constructs individually and as part of a network enabling insight into the dynamic implementation process.

The present study is primarily concerned with the process, and the holistic network approach like that taken by Bacchus et al. (2021), Porroche-Escudero et al. (2021), Segrott et al. (2017), and Wikström et al. (2019), is considered the most appropriate.

Chapter 3: Research Methodology

The use of NPT and ENPT in qualitative research has been demonstrated successfully in previous studies (Borketey, 2017, Connell et al., 2016, Lund et al., 2015, Mair et al., 2012, May et al., 2014, Thomas et al., 2015). This section discusses the most appropriate methodological approach and data collection and analysis methods.

3.1. Methodological Approach

3.1.1. Realist vs Theory-Based Qualitative Approach

As discussed in section 2.1, implementations in healthcare environments are often complex and dynamic; context is essential in understanding the implementation of such interventions. A report prepared for the MRC (MRC, 2015) discussed the realist and theory-based methodologies as being appropriate for studying the process evaluation of complex interventions.

Realist Approach

A key aspect is the importance of context, which, together with mechanisms and outcomes, form the three main components of the realist approach. The Context-Mechanism-Outcome (CMO) hypothesis is focused on understanding how different contexts are likely to activate which mechanisms and with what outcome. The activated mechanisms depend on the context, resulting in the observed alternative outcome. It is important to note that context, within a realist approach, includes how the attitudes and beliefs of the individuals involved interact with the intervention. Fletcher et al. (2016) emphasise the suitability of a realist pathway to study where, when, and why complex interventions may vary in their outcomes after scaling up following successful trials.

Theory Based Approach

In a theory-based approach, the steps in the intervention pathway between input and program result/output are studied. This facilitates the identification of mechanisms at any of the stages where a potential breakdown in the program pathway may occur and factors impacting on this pathway (Weiss, 1997). The context, in this case, which may vary between implementation sites, are any pre-existing conditions that may act as barriers or drivers to the implementation.

Selecting a Methodological Approach for this Study

One methodological approach is to use either a realist or a theory-based approach together with a theoretical framework, such as those discussed earlier in section 2.3.2; for example,

Hooker et al. (2015) use a theory-based approach and NPT, while Hurst et al. (2019) used a realist approach and NPT.

MRC (2015) presents both realist and theory-based approaches as legitimate approaches to investigating implementation in complex systems. Grant et al. (2013) specifically propose the realist approach and normalisation process theory as viable approaches to understanding implementation response.

This study used a theory-based approach using ENPT. Focussing on changes in processes and mechanisms and how these might be context-sensitive will add to our understanding of barriers and drivers of process normalisation and sustainability. In contrast, a realist approach would focus on the expected changes of mechanisms given variable contexts and how these might affect the outcome.

3.2. Data Collection

Data collection can be prospective or retrospective. Collecting data about the implementation processes within a complex adaptive system presents challenges because of its multi-factorial dynamic nature.

A prospective approach would include a long-term multi-centre observational study, which might provide answers but would be less practical within the available timeframe. In addition, the presence of an observer might impact the implementation process, effectively creating an experimental clinical environment rather than one of routine sustainable practice. Audrey et al. (2006) discussed the possible observer impact (the Hawthorne effect) in implementation studies where the observer could cause contextual change and affect the outcome.

A retrospective approach uses routine electronic or written patient records, which are good data sources for qualitative analyses (Sarkar and Seshadri, 2014). However, this approach is most suitable for surveilling outcomes or studying the clinician's input into the dataset (e.g., case notes). This option was not available for the present study, which is concerned with how an intervention is implemented, and not the outcomes. No relevant evidence was available within the routine medical record. However, a theory-informed literature review was undertaken, with the papers being used as a dataset for analysis, and evidence was extracted using an ENPT-informed extraction process. Because ENPT focuses on the process and context of implementation, this analysis resulted in results about the barriers or facilitators to the implementation process.

Another retrospective approach is to use qualitative interviews to explore the participant's experience of the implementation process. Three types of interviews are identified in the

literature; structured, semi-structured, and unstructured (Fox, 2009, Ritchie et al., 2013). Structured interviews are characterised by having fixed questions presented to each interviewee in the same order. Although these types of interviews facilitate comparison between groups, it limits the interviewees' chances to share what is important to them. In contrast, in unstructured interviews, the interviewee is given complete control of the interview, where their responses usually direct the interview flow. In semi-structured interviews, the interviewer prepares a framework of topics and questions to explore. However, it is flexible as it allows new questions to be added in reaction to the interviewees' responses (Grbich, 1998). This allows the interviewer to fully explore the different viewpoints and experiences of the interviewees while remaining focused on the research's aims.

This study used semi-structured interviews. As the interviewees come from different professional roles and backgrounds, the flexibility of this method allows the interviewees' varying views to be explored, and their different experiences can be described (Barriball and While, 1993). Semi-structured interviews are also more interactive, encouraging interviewees to express their thoughts freely (Corbin and Strauss, 2014). Semi-structured interviews were used; guided by Extended Normalization Process Theory; this interviewing approach was chosen due to its flexibility. It utilise open-ended questions, allowing the participants to explain and expand the conversation throughout the interview and providing space for them to express what they feel is relevant and important. It also allows the researcher to follow a framework of predetermined questions to ensure that relevant topics are covered. The open-ended questions were guided by ENPT and were followed up by probes to further explore and enhance the depth and complexity.

3.3. Qualitative Data Analysis

Thematic vs Qualitative content analysis

The literature describes various methods for qualitative data analysis and synthesis, including thematic analysis and qualitative content analysis.

Thematic analysis is defined as "a method for identifying, analysing and reporting patterns (themes) within data" (Braun and Clarke, 2006) page 79. In comparison, qualitative content analysis is "a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns" (Hsieh and Shannon, 2005) page 1278. Thematic analysis and qualitative content analysis are flexible research tools. While thematic analysis provides a rich, detailed, and complex account of the data (Braun and Clarke, 2006), qualitative content analysis enables exploration and

analysis of multifaceted phenomena, e.g., research into health research and nursing (Elo and Kyngäs, 2008, Vaismoradi et al., 2013).

Thematic analysis and qualitative content analysis are used for the qualitative data analysis through a systematic process of coding and examination of meanings, leading to descriptive themes of the social context (Berg and Latin, 2008, Zhang, 2009). However, content analysis can be used qualitatively and quantitatively simultaneously (Grbich, 2012), whereas thematic analysis provides a purely qualitative account of the data (Braun and Clarke, 2006).

Both analysis methods can be applied inductively and deductively (Vaismoradi et al., 2013). However, they differ in the analysis of manifest and latent content. In qualitative content analysis, a clear decision must be made from the start to concentrate on manifest or latent content. Manifest and latent content require interpretation, but the interpretation can vary in depth and the level of abstraction (Graneheim and Lundman, 2004, Powers and Knapp, 2010). In thematic analysis, manifest and latent content are inseparable and included when following a manifest analysis approach (Braun and Clarke, 2006).

This study used qualitative content analysis, a widely used, flexible method to analyse text data (Cho and Lee, 2014). The method is frequently used in health and nursing research (Elo and Kyngäs, 2008, Graneheim and Lundman, 2004, Vaismoradi et al., 2013) as it is well suited to analyse the multifaceted and complex nature of healthcare and nursing research. In addition, it can accommodate different textual sources and process them to produce evidence (Elo and Kyngäs, 2008). Additionally, qualitative content analysis offers a degree of flexibility, as it allows deductive and inductive approaches to be combined in the data analysis (Elo and Kyngäs, 2008). Notably, the use of NPT and ENPT with qualitative content analysis has been demonstrated successfully in many previous studies (Borketey, 2017, Connell et al., 2016, Lund et al., 2015, Mair et al., 2012, May et al., 2014, Thomas et al., 2015).

Inductive and Deductive Qualitative Content Analysis

Hsieh and Shannon (2005) identified three types of qualitative content analysis:

- Summative, which explores the usage of words in an inductive manner by starting with word counting, and then continuing by inductively analysing the latent meanings.
- Conventional, which follows an inductive approach in generating codes.
- Directed, which follows a deductive approach.

Summative content analysis combines a quantitative word count with a deeper exploration for latent meaning (Hsieh and Shannon, 2005), whereas the other approaches do not use word counts.

A directed analysis approach, called a deductive approach, utilises theories and relevant existing research to inform and formulate the initial coding of themes used in the analysis. This approach tends to be less descriptive and more analytical (Braun and Clarke, 2006). The conventional approach, called an inductive approach, is when the coded categories are derived directly from the data (Hsieh and Shannon, 2005).

While the advantages of using an inductive approach in qualitative research are well recognised, using directed qualitative content analysis has benefits. Using a rigorous qualitative research design informed by social theory aids in sensitising and directing the researchers' attention towards concepts and processes that might be missed or overlooked if conducting a purely inductive approach (MacFarlane and O'Reilly-de Brún, 2012). Additionally, directed qualitative content analysis helps to focus the research question and formulate predictions about the variables of interest and the relationships between them.

This structured content analysis process starts by using an existing theory or prior research to identify key concepts or variables as initial coding categories (Hsieh and Shannon, 2005). Next, operational definitions for each category are determined using the theory, and coding can begin immediately with the predetermined codes. In this study, ENPT served as an initial framework to identify factors affecting the implementation of non-coercive management. ENPT with directed content analysis has been demonstrated successfully in previous studies (Bacchus et al., 2021, Porroche-Escudero et al., 2021, van Zelm et al., 2021), as has NPT (Borketey, 2017, Bracher et al., 2019, Connell et al., 2016, Mair et al., 2012, May et al., 2014), while using a theory directed approach has an integral limitation. There is a danger that the researcher may overemphasise the theory, limiting their frame of vision and blinding them to aspects that fall outside the theory (Hsieh and Shannon, 2005).

This limitation can be counteracted by the flexibility offered by directed qualitative content analysis, as it can either be purely deductive or a combination of deductive and inductive data analysis approaches. The choice of approaches is guided by the purpose of the study (Elo and Kyngäs, 2008). Therefore, following the formation of the initial coding frame, the researchers can immerse themselves in the data during the analysis phase. This immersion might allow additional themes to be identified from the data. At this stage, it is possible to choose either the facets from the data that fit the thematic frame (making it purely deductive) or select the emerging facets that do not fit the thematic frame to create their own themes and incorporate an inductive analysis approach (Wildemuth, 2016). This study uses two data sets, one derived from the text from the literature review papers and the other from the interview transcripts. Both data sets were analysed using this combined deductive and inductive qualitative content analysis approach informed by ENPT to identify factors influencing the implementation process

of the intervention (including potential barriers and drivers), as detailed in Table 5. Detailed steps are discussed in the methods section for the literature review (section 4.3.6) and interviews (section 5.3).









Literature Review	Interviews Transcript Data
Compiled an ENPT-derived thematic coding frame (Table 7, section 4.3.6).	ENPT-derived thematic coding frame (Table 8, section 5.3) guided the sequence and range of questions posed during interviews. NB. A matrix was used as a guide for topics that needed to be covered. Questions were open-ended, and subjects were encouraged to reflect on their own observations and experiences.
	
Data related to the implementation processes and barriers or facilitators to implementation were extracted from each paper's results and discussion sections.	The transcript was coded inductively through open coding within Nvivo.
	
Data were coded inductively through open coding. The codes were then extracted and placed in a predetermined thematic coding frame.	Codes were compared and grouped based on the similarities and differences between them. The codes were then extracted and placed in a predetermined thematic coding frame.
	
Categories were created based on the predetermined thematic coding frame.	Categories and themes were created by abstracting codes dealing with the same issues.
	
Categories were discussed in relation to the implementation process.	The relationship between the identified categories and themes and their significance to the implementation process was explored.
Findings were compared between the two data sets. The potential of these findings to achieve the successful implementation of an intervention was also discussed.	

Table 5. Analytical Process used in the Literature Review and Interviews.

Analysing different data sets with the same theoretical understanding to identify factors allows comparison and triangulation between the results (Brookes, 2007, Hales, 2010).

Triangulation can be defined as a process where the results from different sources can be combined and compared to investigate a particular problem. Supporting results from two or more sources can help increase the findings' validity and reliability (Hales 2010).

This study used methodological triangulation (Thurmond 2001), using two different methods (from published literature and interviews) to collect data related to the implementation process for qualitative analysis (Table 5).

Chapter 4: Literature Review

4.1. Aims and Objectives

This review examines examples of interventions introduced to inpatient mental healthcare settings to reduce coercive aggression management. The first aim is to analyse evidence in the published literature about factors influencing the implementation process and, secondly, to identify gaps in this evidence.

4.2. Literature Review

This study's literature review process was started using a scoping review methodology. This method was chosen because it allows the inclusion of a wide range of qualitative and quantitative papers and differing study designs. It also permits the mapping of current research activity on a specific topic. A scoping review methodology can identify research gaps in the existing literature while adhering to a systematic and replicable process (Arksey and O'Malley, 2005). This feature which is shared with systematic reviews, allows it to be used as a decision aid for conducting a full systematic review. Therefore, a scoping review was chosen as a starting point rather than a narrative literature review, as the latter explicitly attempts to maximise the scope of the papers screened and analyse the data, and may suffer from intentional or unintentional selection bias (Grant and Booth, 2009).

However, a scoping review has several identified weaknesses. First, it lacks rigour (Cameron et al., 2008, Levac et al., 2009) due to the lack of clarity or transparency when appraising the methodology of the studies included (Pham et al., 2014). Second, it attempts to find everything meeting the set search criteria regardless of the intrinsic quality of the papers (Grant and Booth, 2009). Although the initial scoping review conducted here helped identify initial background reading and was beneficial in determining the feasibility of a systematic review, it did not allow the detailed analysis required for this study due to its loose structure.

After scoping the literature, a systematic review was considered to provide the rigorous and focused process needed to answer specific research questions. Systematic reviews are utilised to review rigorously applied, quantitative experimental designs, yielding critical empirical data on the outcomes and effectiveness of interventions (Arksey and O'Malley, 2005). This study aims to explore and examine the factors that may affect the implementation process of interventions rather than their outcomes. For this reason, a systematic review was not appropriate to meet the study's aims.

Another review type considered was a systematic qualitative review, also known as qualitative evidence synthesis or meta-synthesis. It has a degree of structural rigour akin to that in

systematic reviews. It is also particularly suited to exploring, examining, and integrating qualitative data by looking for 'themes' or 'constructs' in or across different studies (Grant and Booth, 2009). This makes it useful in identifying and exploring barriers and facilitators to dissemination and implementation, and this has been successfully demonstrated in several healthcare studies (Egerton et al., 2016, Overbeck et al., 2016, Rushforth et al., 2016, Stokes et al., 2016).

Despite systematic qualitative synthesis providing a suitable methodology to meet the study aims, the initial scoping review also identified that the existing literature covered a range of methodologies, including qualitative, quantitative, and mixed methods. Systematic qualitative reviews are best suited for the synthesis of qualitative studies. It could have been possible to overcome the issue by treating the studies themselves as a source of qualitative data (qualitative, quantitative or mixed methods), as demonstrated in reviews by Lund et al. (2015) and May et al. (2014). The integrative literature review has the main qualities of the systematic qualitative review, and its design aims to synthesise data from various methodologies. The integrative review, also known as the mixed method review, has a degree of structural rigour akin to that in systematic reviews. It is also particularly suited to exploring, examining, and integrating diverse research designs, methods, and analysis modes. This allows it to unify studies and generate new knowledge by looking for 'themes' or 'constructs' lying in, or across different studies (Grant and Booth, 2009, Souza et al., 2010, Torraco, 2016). The use of integrative reviews has been successfully demonstrated in several healthcare and nursing studies (Briere et al., 2014, Kanhadilok and McGrath, 2015, Li et al., 2018, Lin et al., 2017, O'Reilly et al., 2017, Pfaff et al., 2014, Riahi et al., 2016b, Sangster-Gormley et al., 2011).

Therefore, to meet the study's aims and include all the relevant literature regardless of the method, an integrative review was chosen to form a rigorous and all-encompassing literature review.

Riahi et al. (2016b) used an integrative review to explore decision-making factors affecting nurses' use of restraint. However, they did not utilise a theoretically informed analysis. The integrative review by Lin et al. (2017) and O'Reilly et al. (2017) utilised an analysis theoretically informed by the Normalisation Process Theory (NPT), an earlier version of the extended Normalisation Process Theory (ENPT). However, to the best of my knowledge, this integrative review is the first theoretically informed analysis of the factors that may influence the implementation of coercion reduction interventions for aggression management in inpatient mental healthcare using the ENPT.

4.3. Method

4.3.1. Search Strategy

To identify all the relevant literature related to the implementation of coercion reduction interventions for aggression management in mental healthcare, a comprehensive search was conducted through Ovid and EBSCO in June 2017, using the following online databases: Medline, PsycINFO, and CINAHL. These databases were chosen to ensure coverage of available papers and their relevancy to the setting and speciality of the question; clinical (Medline), psychological (PsycINFO), and nursing (CINAHL). Three facets of the research question were identified: mental health, aggression management interventions, and practice change. A list of associated terms was generated and used in the search. The terms within each facet were combined with the Boolean operator “OR”, and then combined with “AND”. Truncations (*,?, #) were used when appropriate to retrieve all possible related words to the word stem, as well as adjacency (n3, n2, adj3, adj2) (Appendix 1).

4.3.2. Eligibility criteria

Criteria	Inclusion Criteria	Exclusion criteria
Study Population	Adults (18–65)	Children and adolescents (< 18)
		Elderly (> 65)
		Addiction as a primary diagnosis
		Organic condition
		Neurological condition
		Learning disabilities
Study Setting	Acute mental health units and mental health intensive care units (ICU).	Forensic
Study Design	All primary qualitative, quantitative, and mixed method implementation studies.	Non-primary implementation studies and primary studies not reporting a detailed implementation process of interventions.
Study Location	International	None
Study languages	English	Non-English
Published	From 1991 to June 2017.	Published before 1991

Table 6. Literature Review Eligibility Criteria.

The search included articles published in English between January 1991 and June 2017. Studies included primary research that contained some details about the implementation process of coercion reduction interventions. They were limited to adult patients aged 18–65 to reduce the variables that might be present if other age groups were included in policies or legal

procedures that need to be followed, allowing for a more homogenous population sample. The same reasoning also applied to limiting the study setting to acute mental health inpatients and excluding forensic and addiction settings (Table 6).

In 1991, the United Nations released their Principles for the Protection of Persons with Mental Illness and the Improvement of Mental Health Care article (UN, 1991), which was instrumental in establishing the principle of using coercive measures only as a last resort. For that reason, 1991 was the lower inclusion limit. The decision to include all study designs was to allow coverage and inclusion of all the relevant literature on this topic and pay attention to essential data that may be found in other study designs.

4.3.3. Study Selection

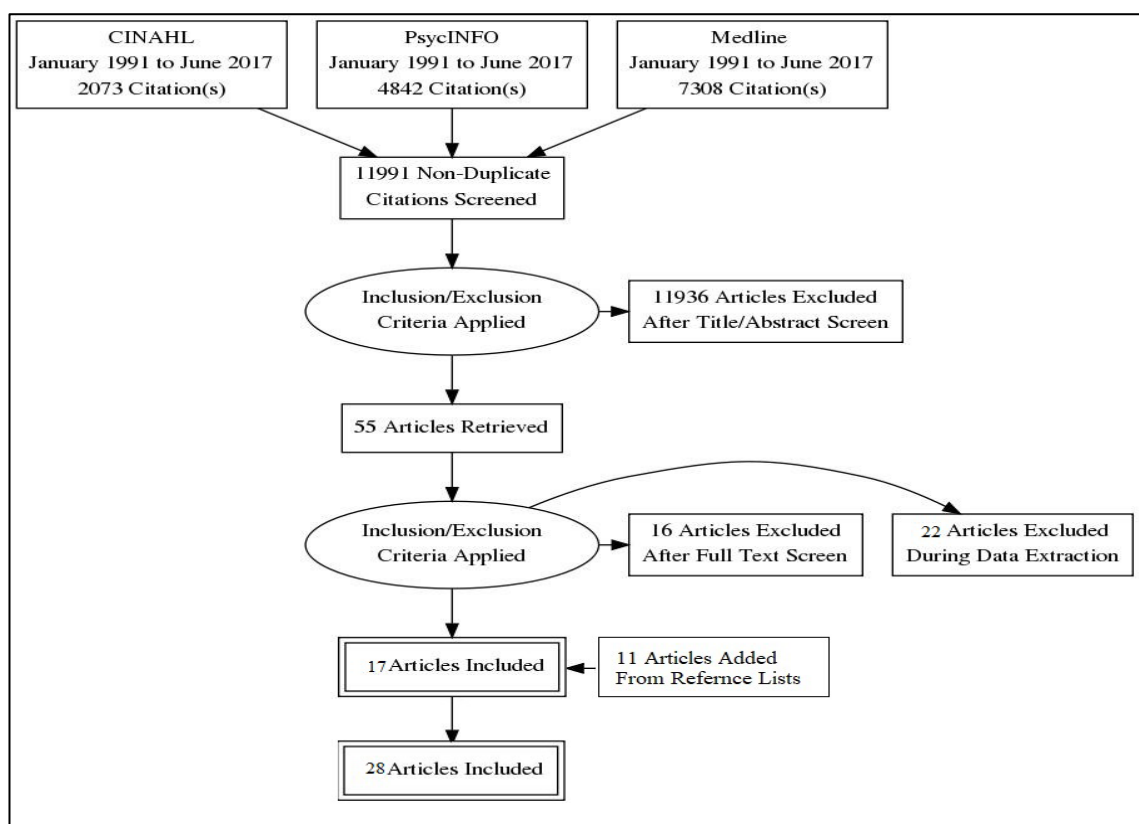


Figure 13. Prisma Diagram.

In June 2017, three databases were searched: Medline, PsycINFO, and CINAHL. The search resulted in 14,223 papers, of which 2,232 were duplicates. Eleven thousand nine hundred ninety-one were screened independently by two reviewers (S.F. and K.B.) by title and abstract against the inclusion and exclusion criteria. Meetings were held between the reviewers to resolve and manage decision disagreements, resulting in 11,936 papers being excluded. The remaining 55 papers were retained for full-text screening, resulting in the exclusion of 16 papers. A further 22 papers were excluded during the data extraction, resulting in 17 papers remaining from the database searches. A search of the reference lists of these 17 papers added a further 11 studies to the review, resulting in a total of 28 papers (Figure 13).

4.3.4. Data Extraction

Data were extracted from the included papers in three stages.

Stage one; the study characteristics were extracted using an *a priori* template. That included bibliographical information, country of origin, targeted coercive intervention (e.g., restraint), reduction intervention type and goal, study design, and study setting characteristics.

Stage two; the characteristics of the reduction interventions were extracted using another extraction template. That included detailed intervention descriptions and components; administrative/managerial, policy, staffing, resources, clinical, training, data gathering, communication, feedback, and patient involvement.

Stage three; by treating the papers as qualitative data, data were extracted from each paper's results and discussion sections. ENPT informed this extraction process. This data extraction stage focused on accounts of the implementation processes and barriers or facilitators to implementation.

4.3.5. Quality Appraisal

The Mixed Methods Appraisal Tool (MMAT)

Due to the diverse research design methods used in the included papers, the Mixed Methods Appraisal Tool (MMAT) was selected for the quality appraisal of the papers (Pluye and Hong, 2014).

There are two current versions of the MMAT, MMAT-2011 (Pluye et al., 2011) and, more recently, MMAT-2018 (Hong et al., 2018a). Both versions have a similar general format. A comparison of the two MMAT versions revealed two items in version 2011 but not mentioned explicitly in version 2018, including qualitative studies relating the results to context and non-randomised quantitative studies requiring consideration of possible selection bias in recruitment. These two factors, related to context and recruitment bias, are considered more relevant to the present study than the additional methodological detail added by the extra items present in MMAT 2018. Therefore, MMAT 2011 was selected for the quality appraisal rather than MMAT 2018. However, MMAT 2018 includes a useful algorithm to help identify the diverse types of experimental design that is equally valid for use with version MMAT 2011 and was used in this review (Appendix 3).

MMAT scoring system

Each MMAT category contains four items, and each item is scored 'yes', 'no' or 'uncertain' (for insufficient information). The category is then scored from zero (if no item is marked 'yes') to 100 (if all items are marked 'yes'). This process applies to the qualitative, quantitative

randomised controlled trials, non-randomised quantitative studies, and quantitative descriptive studies; however, scoring differs for the mixed methods. For the mixed methods, the items in the qualitative category are scored together with the appropriate quantitative category. In addition, a mixed methods category is scored, and the overall score for the paper is the lowest of these three.

Despite detailed instructions on the scoring method in the MMAT 2011 user guide, the guide recommends that the numerical quality score may not be as informative as a descriptive summary. Numerical scores were therefore taken as a guide and supported with appropriate observations (Pluye et al., 2011).

4.3.6. Data analysis and synthesis

	Construct	Dimensions	Definition
	Main Categories	Subcategories	
Emergent expressions of agency	Contribution	Coherence	How is the non-coercion intervention understood by the mental health care practitioner (MHCP)? Is there a clear understanding of how it differs from current practice? Are the aims and objectives of the intervention clear to the MHCP? Are the roles, tasks, and responsibilities in implementation clear? How is the need for non-coercive intervention expressed by the MHCP?
		Cognitive participation	How does the MHCP promote the use of non-coercive intervention? How does the MHCP resist the use of non-coercive intervention? Does the MHCP see the intervention as part of their work? Do MHCPs support the intervention's use over time (sustain it).
		Collective action	What does the MHCP do to make the intervention work? How does the MHCP acquire increased proficiency in non-coercive interventions? Is there organisational support (financial, policy, staffing)? Does the MHCP have trust and confidence in the intervention's implementation?
		Reflexive monitoring	How does the MHCP evaluate the effects of using non-coercive intervention? Do all MHCPs consider non-coercive intervention a viable alternative to older, more coercive measures? Does the MHCP see the usefulness and purpose of the new intervention?
	Capability	Workability	How and when does the MHCP implement the non-coercive intervention in practice?
		Integration	How does it fit in with the current MHCP role?
	Dynamic elements of context	Capacity	Material Resources
Informational Resources			How does the intervention change what the MHCP need to know to do their role?
Social Norms			How does the intervention change the rules that govern (Policy) what MHCPs do?
Social Roles			How does the intervention change the MHCP's current role?
Potential		Individual Intentions	To what extent does the intervention depend on individual engagement? Is there potential for individual engagement? Value? Feasibility?
		Collective Commitment	To what extent does the intervention depend on joint commitment? Is there potential for a joint commitment? Value? Feasibility?

Table 7. ENPT Derived Analysis Matrix, Constructs and question probes.

This study used a combined deductive and inductive qualitative content analysis approach (Hsieh and Shannon, 2005), utilising the ENPT as an initial framework to identify factors affecting the implementation of coercion reduction interventions (Table 5).

This structured process initially compiled an ENPT-derived thematic coding frame using the theory to identify key concepts or variables as initial coding categories. Next, operational definitions for each category were determined using the theory (Table 7). The data related to the implementation processes and barriers or facilitators to implementation were extracted from each paper's results and discussion sections, and the data were coded inductively through open coding.

The codes were then extracted onto the predetermined thematic coding frame. Any facets that did not fit the thematic coding frame were analysed to determine if they represented a new theme. This open coding step allows the incorporation of both deductive and inductive analysis approaches and additional themes to be identified in the data (Wildemuth, 2016). Finally, categories were created based on the ENPT predetermined thematic coding frame and were discussed concerning the implementation process.

4.4. Results

4.4.1. Study Characteristics

Demographic description

Twenty-eight papers were included in the review. Over half of the studies were conducted in the USA (n = 18), while the remaining studies took place in the UK (n = 5), Australia (n = 4), and Spain (n = 1). Three of the UK studies were part of one project, the City Nurse Project (Bowers et al., 2006, Brennan et al., 2006, Flood et al., 2006). Similarly, six of the USA studies were part of a multi-stage study, where each study built on the previous one. These studies involved implementing a clinical-administrative review procedure employing behavioural consultation for difficult-to-manage cases (Donat, 1998, Donat, 2002, Donat, 2003a, Donat, 2003b, Donat, 2005, Donat, 2006) (Appendix 2).

The most common coercive interventions discussed in the literature were Restraint and Seclusion (R&S), with studies focusing on either one (Restraint (n = 5), Seclusion (n = 3)), a combination of both (n = 8), or with other interventions (R&S with PRN (n = 3), R&S with PRN & special observation (n = 5)). Only three studies targeted PRN alone and one study targeted special observation.

Most of the studies followed a quantitative design (n = 18), varying from randomised control (n = 1) and non-randomised (n = 14), to descriptive (n = 3). The rest were mixed method (n = 6),

except for three follow-up studies and one qualitative study. Most mixed method papers had a dominant quantitative component, while the qualitative part was relatively minor.

Intervention description

The included studies varied in their approach to reducing coercive interventions. Interventions can be divided into managerially initiated, clinically initiated, or jointly initiated (managerial and clinical).

Four studies exemplified managerial initiation, or the top-down approach (Fisher, 2003, Forster et al., 1999, Friedman et al., 2012, McCue et al., 2004). Fisher (2003), Forster et al. (1999), and McCue et al. (2004) all described the formation of specialised workgroups by the administration to evaluate hospital policies on restraint and instigated mandatory staff training to facilitate avoiding coercive practice and closely monitor restraint use. In addition, McCue et al. (2004) implemented courses for patients in anger and stress management. Friedman et al. (2012) reported reduced use of chemical restraints following the introduction of an administratively sanctioned rigorous monitoring system.

Significant managerial input was also required to instigate the policy changes or a review of existing policies, which played a major role in initiating several other studies (Donat, 1998, Donat, 2002, Fisher, 2003, Forster et al., 1999, Friedman et al., 2012, Godfrey et al., 2014, Hellerstein et al., 2007, Jonikas et al., 2004, Ray et al., 2011). Like Friedman et al. (2012) who described the application of an improved monitoring system, Donat (1998) described an administration that instigated a new monitoring system and documentation for cases of seclusion and/or restraint. Under this new policy, detailed multi-professional consultations and investigations were triggered for cases where patients had been subjected to seclusion and/or restraint more than six times out in any 72-hr period during any one month. The remaining studies utilised policy changes to modify current clinical practice. The most striking policy changes were reported by Godfrey et al. (2014) and Jonikas et al. (2004), which showed the introduction of novel policies. In Godfrey et al. (2014), during the second phase of the coercion reduction intervention, routine use of restraint was prohibited, and permission for its use had to be obtained from the chief medical officer if it was considered essential. The policy changes described in Jonikas et al. (2004) resulted in a protocol of advanced crisis management; patients were helped to identify possible triggers for their aggressive behaviour and to agree with clinical staff on anger and aggression management strategies. Other studies introduced policies to modify current restraint protocols, e.g., with modified and less intrusive intensive observation (Ray et al., 2011), and a reduction from 4 to 2 hours for a patient to be held in restraint without a new order from the physician (Hellerstein et al., 2007).

Clinically initiated interventions started at the ward level. This type of intervention focused on the patients or the staff or used a multilevel approach that focused on both. Sullivan et al. (2004) described an example of a patient-centred approach with the implementation of patient-focused care, mainly involving tailoring individual care plans based on patients' specific needs. Studies led by Len Bowers (Bowers et al., 2006, Bowers et al., 2008, Brennan et al., 2006, Flood et al., 2006), described the City Nurse Project and all focused initially on the staff. The implementation aimed to reduce violence and decrease coercive measures by improving staff performance, reinforcing good practice and strengthening nursing leadership.

In a later clinically-driven initiative, Bowers et al. (2015) implemented the Safewards model, consisting of ten evidence-based interventions. The Safewards model has been widely adopted and forms the core of the National Health Service (NHS) National Institute for Health and Care Excellence (NICE) recommendations for aggression management in mental health settings. Three studies utilised a multilevel approach focusing on patients and staff (Jonikas et al., 2004, Ray et al., 2011, Sullivan et al., 2005). Two applied individual crisis management plans for patients and developed a violence assessment tool and crisis intervention courses for staff (Jonikas et al., 2004, Sullivan et al., 2005). The other developed psychiatric monitoring and interventions (PMI) combined with the individualised care plan to reduce close observations (Ray et al., 2011).

Ten studies followed a multimodal approach to reduce coercive intervention by incorporating several elements to achieve the change. The combined Managerial-Clinical approach described interventions with components that were top-down (admin to ward) and bottom-up (ward to admin), e.g., administrative committees, policy change, change in clinical practice, training, monitoring, and communication of feedback. Six of these papers are part of one study (Donat, 1998, Donat, 2002, Donat, 2003a, Donat, 2003b, Donat, 2005, Donat, 2006), while the other four are separate studies (Godfrey et al., 2014, Guzman-Parra et al., 2016, Hellerstein et al., 2007, Taxis, 2002).

Apart from the purely managerial/administrative-based studies, most (n = 20) included a clinical component (Bowers et al., 2008, Bowers et al., 2015, Cummings et al., 2010, Donat, 1998, Fisher, 2003, Flood et al., 2006, Friedman et al., 2012, Godfrey et al., 2014, Guzman-Parra et al., 2016, Hellerstein et al., 2007, Jonikas et al., 2004, Lee et al., 2010, Lloyd et al., 2014, McCue et al., 2004, Ray et al., 2011, Sivak, 2012, Sullivan et al., 2005, Sullivan et al., 2004, Taxis, 2002, Thomas et al., 2006). Over half (n = 15) included a training programme component (Bowers et al., 2008, Donat, 2002, Fisher, 2003, Flood et al., 2006, Forster et al., 1999, Godfrey et al., 2014, Guzman-Parra et al., 2016, Hellerstein et al., 2007, Jonikas et al.,

2004, Lee et al., 2010, Lloyd et al., 2014, McCue et al., 2004, Sullivan et al., 2005, Sullivan et al., 2004, Taxis, 2002).

In a few instances, the study introduced novel clinical interventions. One study (Thomas et al., 2006) implemented a nurse-led patient activity programme. Another four studies implemented sensory rooms (Cummings et al., 2010, Lee et al., 2010, Lloyd et al., 2014) or comfort rooms (Sivak, 2012). These interventions required financial or material resources in addition to available space. Increased staffing was another resource to be considered, with six studies describing some form of staff restructuring, either by increasing staff-patient ratios, assigning buddy nurses, focusing on staff rostering, or strengthening nursing leadership (Bowers et al., 2008, Donat, 2002, Flood et al., 2006, Hellerstein et al., 2007, Sullivan et al., 2004, Thomas et al., 2006).

Regardless of the implementational approach or focus, effective and efficient monitoring and communication were essential to keep the project's implementation on track. The importance of communication and feedback was noted in nineteen of the studies. Eleven contained a data monitoring, review, and feedback components (Bowers et al., 2008, Donat, 2002, Fisher, 2003, Flood et al., 2006, Forster et al., 1999, Friedman et al., 2012, Godfrey et al., 2014, McCue et al., 2004, Sivak, 2012, Sullivan et al., 2005, Taxis, 2002). Nine described patients having an active role in the intervention. Thomas et al. (2006) described an intervention comprising a series of nurse-led activities (e.g., movement to music, relaxation sessions, and games) for patients. Two studies described interventions introducing sensory/comfort rooms (Cummings et al., 2010, Sivak, 2012) where the patients helped to select the contents of the comfort rooms and feedback was sought after they had used them. In the remaining six interventions, patient input was sought for the development of their individual plans for treatment and anger/aggression management (Cummings et al., 2010, Fisher, 2003, Guzman-Parra et al., 2016, Hellerstein et al., 2007, Jonikas et al., 2004, Sivak, 2012, Sullivan et al., 2005, Taxis, 2002, Thomas et al., 2006).

4.4.2. MMAT Quality Appraisal

Three of the 28 papers in the review were excluded from the quality appraisal because they represented follow-up discussions from an earlier paper rather than a standalone study. The three papers not appraised for quality were Donat (2003b) and Donat (2005), both of which are a follow-up to Donat (2002), and Flood et al. (2006), which is a follow-up to Bowers et al. (2006) and Brennan et al. (2006). However, all three papers will be considered in the data synthesis.

Fourteen of the remaining 25 papers were quantitative non-randomised studies. Twelve of which achieved the maximum score (Donat, 1998, Donat, 2006, Forster et al., 1999, Godfrey et al., 2014, Guzman-Parra et al., 2016, Hellerstein et al., 2007, Jonikas et al., 2004, McCue et al., 2004, Sullivan et al., 2005, Taxis, 2002, Thomas et al., 2006, Sullivan et al., 2004). The “perfect” score was achieved as follows:

All 12 papers used convenience sampling, recruited all available participants, and resulted in no need for selection, thereby removing any possibility of selection bias.

The research design can be represented as the collection of seclusion/restraint data from hospital records before the intervention, performing the intervention (which may comprise one or more components), examining the hospital seclusion/restraint data post-intervention, and note any changes. This research design achieved a full score for using measurements appropriate to the study (changes in seclusion/restraint), the groups were comparable (same institution, same wards), and the seclusion/restraint data came from the hospital records. This research design is seen in many papers, and although technically valid, it is a simplified form that needs more dimensions to represent the complex, real-life situation.

Donat (2002) and Bowers et al. (2008) scored 75 and 50, respectively. In Donat (2002), although changes in clinical data were used to assess the intervention's effect, it was unclear whether these were derived directly from the hospital records. Therefore, it was not possible to judge whether the results were complete. The issue with Bowers et al. (2008) was recruitment and completion. Initially, three wards were selected from the four that volunteered to participate in the study, representing potential bias. Following that, one of the three wards withdrew and was replaced by the fourth original applicant. These problems resulted in incomplete data and not all wards experiencing the same exposure to the intervention. These extenuating circumstances limited the study's findings.

Three studies used descriptive quantitative designs (Donat, 2003a, Fisher, 2003, Friedman et al., 2012). Bowers et al. (2015) was the only quantitative randomised control study included. Donat (2003a), Fisher (2003), and Friedman et al. (2012) examined the effect of interventions to reduce seclusion and restraint. However, unlike the quantitative non-randomised “before and after” studies, where the “before” acts as a control with which to compare the “after”, these papers described the observed changes in coercive practice while the intervention was being practised. Donat (2003a) discussed the advantage of this approach since the implementations occurred over several months, and there may be different variables present at different times. Additionally, Donat (2003a) considers it *“somewhat simplistic to represent them as categorical “before-and-after” variables,”* page 1122.

A randomised controlled study limits bias, excludes, as far as possible, any potential confounding factors, and is a rigorous method for establishing cause and effect. Bowers et al. (2015) was the first randomised controlled study examining interventions to reduce containment (both Seclusion and Restraint are discussed earlier), and no other randomised controlled studies were identified during this review. Although the criteria for randomisation and blinding (concealment) were successfully met, and all of the wards remained in the trial, there were high rates of missing data. The missing data concerned the return of a patient-staff conflict checklist, which was completed by nursing staff to record conflicts, aggression, and seclusion or restraint employed. The advantage of this form is that when completed, it gives an immediate representation of the previous shift and is not completed retrospectively, as in official incident reports. However, completion failure was high, unlike official incident reports, which are always assumed to be complete. Bowers et al. (2015) recognised and discussed this limitation.

One qualitative paper (Brennan et al. (2006) was a follow on from the other papers relating to the “City Nurse” project (Bowers et al., 2006, Flood et al., 2006). Fieldwork diaries kept by the two “City Nurses” during the project were analysed qualitatively. This paper scored 100, as all four MMAT criteria for qualitative studies were successfully met, including the relevance of the findings to the context in which they were collected.

The final study design type is mixed methods. The definition of a mixed methods study has been subject to a long-standing debate (Anguera et al., 2018, Johnson et al., 2007). Opinions varied from a broad definition, such as that provided by Burke Johnson and Anthony Onwuegbuzie:

“Mixed methods research is the class of research where the researcher mixes or combines quantitative and qualitative” (Johnson et al., 2007), page 120, to definitions that consider that evidence of data integration is essential, as provided by Pat Bazeley:

“Mixed methods research involves the use of more than one approach to or method of design, data collection or data analysis within a single program of study, with integration of the different approaches or methods occurring during the program of study, and not just at its concluding point.” (Johnson et al., 2007), page 119.

Anguera et al. (2018) describe mixed methods and multi-methods as having an “identity crisis”, emphasising the need for clarification, but also concluded that a study using qualitative and quantitative techniques should be classed as multi-method. Moreover, the data and results must be integrated for the study to also be classed mixed method. However, multi-method

research papers must be appraised and Busetto et al. (2017) propose that this can be achieved by using mixed-method appraisal methods.

Six of the papers contained qualitative and quantitative elements, though none presented evidence of integration (Bowers et al., 2006, Cummings et al., 2010, Lee et al., 2010, Lloyd et al., 2014, Ray et al., 2011, Sivak, 2012). However, Hong et al. (2018a) specifically excluded these types of qualitative and quantitative studies from being classed as a mixed method. All seven papers were subjected to the MMAT appraisal process for mixed methods but their failure to meet all the criteria was considered when discussing the results (Hong et al., 2018b).

For the mixed methods MMAT, the items in the qualitative, appropriate quantitative, and the mixed methods categories were assessed and scored separately. Of the three categories, quality scored the lowest. Since all seven papers presented no evidence of integration, the lowest scoring category was for the mixed methods criteria; all six papers only scored 25. However, the papers were reappraised considering only the quantitative and qualitative criteria (again, the lowest score representing the overall appraisal). This resulted in a diversity of scores ranging from a low of 25 for Sivak (2012) to 100 for Lloyd et al. (2014). As discussed previously, the overall assessment scores only consider quality; a deeper understanding can be reached by considering the evidence within each criterion. Most of the papers (4/6) (Cummings et al., 2010, Lee et al., 2010, Ray et al., 2011, Sivak, 2012) scored better in the quantitative category than the qualitative category. The problem areas in the qualitative section of these papers were related to considerations of context and possible elements of bias. Lloyd et al. (2014) successfully met all the qualitative and quantitative components criteria and achieved 100. Bowers et al. (2006) was the only paper to score lower in the quantitative section due to project completion problems.

4.5. Findings

4.5.1. Directed content analysis using Extended Normalisation Process Theory

Research questions used for the directed content analysis were formulated within the conceptual structure of ENPT (Table 7).

Although 28 publications were included in the review, six Donat papers (Donat, 1998, Donat, 2002, Donat, 2003a, Donat, 2003b, Donat, 2005, Donat, 2006) were analysed as a single study, as were the four publications related to the City Nurse Project (Bowers et al., 2006, Bowers et al., 2008, Brennan et al., 2006, Flood et al., 2006), bringing the total of studies analysed to 20.

1) Contribution

The sub-constructs of contribution are coherence, cognitive participation, collective action, and reflexive monitoring (Table 7).

a. Coherence

Most of the selected studies (17 out of 20), contained information related to coherence. However, Sullivan et al. (2004) did not include any information relevant to coherence. Friedman et al. (2012) and Thomas et al. (2006) only provided information on the aims and objectives, changes in practice, and changes in roles but no evidence that these were understood by the MHCPs. The amount of detail provided about coherence varied greatly. In most studies, the evidence provided from the study question *“How do MHCPs understand the non-coercive intervention?”* was either vague, or tended to address the understanding of the MHCP’s administrative level members or the ward level members, but not both. Notable exceptions to this were Godfrey et al. (2014) and Sivak (2012), who had invested effort in reaching out to all members of the MHCP. All 18 studies confirmed that the aims and objectives of the intervention and the roles, tasks, and implementation responsibilities were clear, except for Bowers et al. (2015), who provided no details about the roles, tasks, and responsibilities. Only eight of the 18 studies provided information on the question, *“How is the need for non-coercive intervention expressed by MHCP?”* Again there were differences as to which members of the MHCP were included in the response. Most only mentioned the ward staff (Bowers et al., 2006, Cummings et al., 2010, Fisher, 2003, Ray et al., 2011, Taxis, 2002).

In contrast, Donat (2002) and Sivak (2012) referred to administrative MHCPs, and only Godfrey et al. (2014) included both categories. It should also be noted that in addition to ward staff, Fisher (2003) also included patient feedback. Flood et al. (2006) also described an example of poor understanding of the MHCP’s intervention in the City Nurse Project, where during the early stages, staff directly challenged the project, questioning the benefits for them and patients and asked what potential risks were involved.

b. Cognitive participation

Six of the 20 studies describe the MHCPs’ involvement in promoting the use of the intervention. In five studies (Cummings et al., 2010, Fisher, 2003, Godfrey et al., 2014, Ray et al., 2011, Sivak, 2012), promotion is encouraged by creating a sense of ownership. In Cummings et al. (2010), Ray et al. (2011), and Sivak (2012), ownership among the clinical staff is present since the intervention is created and implemented at the ward level. Sivak (2012) also added to the sense of ownership by involving patients in designing and naming the comfort rooms used. In a similar manner to Fisher (2003), although initiated by the

multidisciplinary performance improvement workgroup, the staff and patients were asked for input in the design of the intervention, again creating ownership.

Although the administratively-initiated project was a top-down promotion, care was taken to reach out to all staff, promote the message, and acknowledge achievements, thus helping encourage a sense of community ownership (Godfrey et al. (2014). The methods described in Godfrey et al. (2014) included celebrating the number of days without using restraint, open communication and feedback with staff, promoting the hospital's philosophy and policies about coercive interventions, and emphasising the reduction effort through e-mails, meeting announcements, and posters. In addition, team mottos were established, such as "de-escalation never stops" and "the best restraint is no restraint at all". Fisher (2003) describe a different administrative initiation where the multidisciplinary performance improvement workgroup promoted the intervention. The workgroup surveyed staff and patients about what could be done to improve current practice and ward culture. The intervention was built upon these surveys and feedback was provided. Restraint and seclusion rates were posted monthly, providing evidence of reductions and reinforcing the motivation of staff and patients.

There was strong promotion and support for the intervention observed by Donat (2002). These came from the senior administration and the Behaviour Management Committee, who were instrumental in initiating the intervention. The intervention described in Donat (2002) involves behavioural analysis and subsequent organisational changes to modify staff behaviour while implementing hospital restraint policies.

Ray et al. (2011) was the only study with evidence that staff fully accepted the intervention as part of their role. In addition, only three studies, Godfrey et al. (2014), Cummings et al. (2010), and Ray et al. (2011), demonstrated MHCP support for the interventions used over time.

Almost half of the studies (9 out of 20) reported some form of resistance. Over half of these (5 out of 9) stated that concerns about risk and safety to staff were the drivers behind the MHCP's resistance (Donat, 2005, Friedman et al., 2012, McCue et al., 2004, Sullivan et al., 2005, Taxis, 2002).

Concerns about reduced levels of safety related to the intervention are discussed in depth in Donat (2002) and Taxis (2002). Both studies explored how MHCPs viewed maintaining a safe and therapeutic environment and minimising problems as their responsibility and part of their job. They also believed that anything that threatened the safety of the therapeutic environment should be dealt with effectively and swiftly.

"Clearly, things were getting out of hand and becoming potentially dangerous. Someone had to do something. I understand that the nurse needs to respect a patient's right to make

autonomous choices, but what am I to do? Do I respect autonomy and allow this chaos in the milieu? Do I wait until someone gets hurt?" (Taxis, 2002).

An alternative focus of resistance is role-related, where some MHCPs viewed the tasks associated with the interventions as additional work and responsibilities that they were either not ready for, did not have the time for, or were not willing to take on (Donat, 2002, Flood et al., 2006, Sullivan et al., 2005). The persons involved in the intervention, individually or as groups, are collectively referred to as the agents (agents/agency, as used by May (2013)). Resistance might be expected if agents perceived that they were being asked to do something they considered not part of their role. However, only two studies addressed whether the MHCPs saw the intervention as part of their work. In the study by Ray et al. (2011), the intervention was designed to meet staff observations and concerns related to PMI and how to combine this with the individualised care plan to reduce close observation. In this case, staff concerns were a prominent initiating factor. Therefore, it was not surprising that staff took "ownership" of the project and considered the intervention part of their work. However, Brennan et al. (2006) described how temporary staff may consider the interventions as something extra and not part of their job. Despite reporting initial resistance, Cummings et al. (2010) and Ray et al. (2011) indicated that implementation was ultimately successful. In Cummings et al. (2010), the intervention was still being used and copied to other units, and in Ray et al. (2011) staff similarly supported the intervention's roll-out. Godfrey et al. (2014) demonstrated commitment over time, which has enacted a continuous quality improvement plan involving input from all levels of the MHCP at all stages of the intervention. Since its initial implementation, expert training and ward staff involvement has increased further. Situations exist where implementation requires physicians to relinquish control over the patient and entrust nurses with greater autonomy regarding the patient's care, and some may find this difficult (Ray et al., 2011). However, according to Ray et al. (2011), this issue is rare and is usually resolved with discussions between the nurses and the physician about the use of the available less coercive alternatives.

Several studies found staff resistance due to scepticism and doubt about the intervention's value or necessity (Cummings et al., 2010, Flood et al., 2006, Friedman et al., 2012, McCue et al., 2004). MHCPs mainly expressed their feelings of scepticism and doubt surrounding the achievability of the intervention or how they would manage aggression without coercive practices. Donat (2003b) and Brennan et al. (2006) reported that MHCPs viewed the interventions as unrealistic or impossible to implement in their current clinical practice. These feelings of scepticism and doubt could be due to a lack of resources, e.g., low salaries, staff shortages (Donat, 2003b), or a lack of space and equipment (Brennan et al., 2006).

“.....applications found in the clinical literature, often derived from well-controlled academic studies, do not translate to real-life clinical practice.” (Donat, 2003b).

“The use of the (patients) ‘quiet’ room for ward rounds and handovers means that, in effect, it is shared between clients and staff.” (observation recorded in City Nurse Reflective Diary) (Brennan et al., 2006).

In top-down initiatives there were also incidents of resistance by the MHCP, often directed towards the senior administration. For example, in an intervention described by Friedman et al. (2012), the medical director and the section administrator collaborated to introduce a PRN Tracker to closely monitor patterns of PRN medication within the section, which was met with some resistance. Some MHCPs perceived that the interventions caused changes in the social roles. The administration’s autonomy and social norms were limited, as some considered the intervention as sanctioned surveillance by the administration. Donat (1998) reports on a monitoring intervention instigated by the hospital administration (Western State Hospital, Staunton) in response to pressure from external human rights organisations concerned about high levels of restraint. In Donat (2002) and Donat (2003b), most of the MHCPs thought the administration was being “naïve” and resented the idea of the administration giving them directions on how to deliver clinical care. The MHCPs viewed the administration’s decision to impose the intervention as an *“out of touch administration, adding more responsibilities to an already overburdened direct care staff”*. Flood et al. (2006) reported that MHCPs sometimes viewed the administration's demands as *“intrusive and excessive”*.

Brennan et al. (2006) and Flood et al. (2006) reported that the recurrent and varying demands requested by unclear administration resulted in MHCPs adopting either an *“avoidant behaviour”* by delaying tasks or sometimes a *“destructive behaviour”* by not following through on tasks, and directly defying the new intervention.

Of all the studies, only the sensory room-based interventions described by Lloyd et al. (2014) and Cummings et al. (2010) , recounted resistance from the patient’s perspective. Cummings et al. (2010) reported patients' approval and support for the intervention. In contrast, Lloyd et al. (2014) reported that although most found it beneficial, some patients were unwilling even to use the room.

c. Collective action

Except for Forster et al. (1999), all the other studies included a detailed account of how and when the MHCP implemented the intervention in practice. Most of these interventions included details about staff training (15 out of 20 studies). Only one administratively-initiated project, Friedman et al. (2012), did not include training. The study involved more detailed

documentation and analysis of PRN usage data as the intervention but did not specify or consider what alternative non-coercive therapeutic skills should be used. Approximately half of the clinically initiated interventions did not describe the inclusion of any training; three of these were interventions initiated by the ward for the ward (Cummings et al., 2010, Ray et al., 2011, Sivak, 2012, Thomas et al., 2006).

All the studies describe a degree of organisational support, although the nature and extent of the support, based on the accounts provided, varied considerably. Some studies (Donat, 1998, Forster et al., 1999, Guzman-Parra et al., 2016, Lee et al., 2010, Sullivan et al., 2004) only briefly mentioned that the intervention had administrative support, while others (Brennan et al., 2006, Cummings et al., 2010, Godfrey et al., 2014) discussed the extent and nature of the support in great detail. All the interventions must have the support or, at the very least, the approval of the administration.

Less than half of the selected studies (8 out of 20) contained information about the MHCPs' trust and confidence in the intervention. Jonikas et al. (2004), McCue et al. (2004), and Ray et al. (2011) reported that the MHCPs trusted and were confident in the intervention as they expressed satisfaction and felt safe. One of the MHCPs in Ray et al. (2011) mentioned, *"PMI is quite useful in that it allows for more options when monitoring an aggressive patient—I much prefer it"*, clearly verbalising their preference for the new intervention. Friedman et al. (2012), Lee et al. (2010), Cummings et al. (2010), Donat (1998), and Brennan et al. (2006) reported that MHCPs had expressed some form of lack of trust and confidence. Lee et al. (2010) associated the MHCPs' lack of confidence with the insufficiency of the training program. Friedman et al. (2012) and Cummings et al. (2010) reported that the MHCPs were sceptical about the intervention, Friedman et al. (2012) elaborated that their scepticism was focused on the achievability of coercion reduction and their concern that reduction would result in compromised safety. These concerns and scepticisms were allayed by better communication and promoting the aims and goals of the intervention to all stakeholders.

Friedman et al. (2012) and Brennan et al. (2006) suggested that one reason for this lack of trust in the intervention was due to a lack of trust in the administration. In Friedman et al. (2012), MHCPs were concerned that the intervention (PRN Tracker) was an administrative surveillance that would result in sanctions and perceived it to undermine their autonomy as a clinical team. However, in Brennan et al. (2006), MHCPs related the lack of trust to the fear of blame. The MHCPs perceived changes in practice as risky and would rather play safe and adhere strictly to policy, even if it interfered with the therapeutic outcomes.

“As one ward manager articulated, the workforce is very good at all the risk elements, but no longer knows how to be therapeutic. It was evident in the work of City Nurses that clinical workers are very adverse at taking risks, no matter how therapeutic.” (Brennan et al., 2006), page 479.

Brennan et al. (2006) describe this as protective defensiveness, as they felt they were in an unforgiving environment, so they developed the need to look out for each other.

“If a complaint is made against one of us no matter who makes it, we will not be believed.” (Brennan et al., 2006), page 480.

d. Reflexive monitoring

All the studies, except for Lee et al. (2010), presented details about how the MHCPs could evaluate the intervention; however, the suggested criteria varied greatly. Cummings et al. (2010) stated that the MHCPs could judge the intervention’s evaluation for each patient as being successful if the patient reported a decrease in distress after using the comfort room, and the use of seclusion or restraint was averted. McCue et al. (2004), Taxis (2002), and Forster et al. (1999) described a routine of debriefing and analysis associated with each restraint event followed by the publication of the results and progress throughout the institution. The remaining 16 studies all used changes in the recorded clinical data to evaluate the intervention.

Staff considered the practice introduced by the intervention as a viable alternative to their previous practice (Fisher, 2003, Ray et al., 2011, Sullivan et al., 2005, Taxis, 2002). Additionally, in positive reflections, staff expressed the usefulness of the new intervention, finding it supportive for improving patient care and increasing their therapeutic options (Fisher, 2003, Ray et al., 2011). Taxis (2002) also reflected on the cultural and philosophical shift towards collaboration with the patients about their treatment choices and shared decision-making following the intervention. Staff in this project expressed surprise at how they gained greater flexibility to provide individualised care after giving the patients greater autonomy and involvement in treatment choices.

2) Capability

The sub-constructs of capability are workability and integration (Table 7).

Of the selected studies, only two of the 20 mentioned workability. These were a clinically-orientated intervention by Flood et al. (2006) and a behavioural intervention by Donat (2002). However, both gave limited details concerning interactional and skill-set workability.

In the City Nurse study titled, “Reflections on the process of change on acute mental health wards during the City Nurse Project,” Flood et al. (2006) briefly consider some issues related to workability and staff interactions in the role of the City Nurse, for example:

“one nurse early on in the project who asked, ‘Where are you in the hierarchy?’ and ‘Are you in charge of the manager or does he manage you?’” (Flood et al., 2006), page 262.

By requesting to know the position of the City Nurse within the hierarchy, this study provides evidence that the perceived role of the City Nurse was no longer just that of a university researcher, trouble-shooter, or external senior nurse. The role of City Nurse had, at least for some staff, evolved to being a role model to implement the ideal “working model”.

Regarding integration, the second sub-construct of capability, only two of the 20 studies (Ray et al. (2011) and Lee et al. (2010) included information about how the staff and role changes required by the intervention were integrated into the existing roles and social hierarchy system within the hospital.

Ray et al. (2011) describe a successful integration of PMI as an alternative to constant visual observations (CVO). Integrating the intervention into routine practice allowed staff to maintain contact with other patients. At the same time, they were involved in PMI, resulting in less pressure on staffing despite no changes in the staff-patient ratio. PMI also positively impacted the patient-staff relationship; PMI was much less intrusive than CVO, and staff reported feeling much safer.

However, in an intervention introducing sensory resources, Lee et al. (2010) reported integration problems into everyday practice. The use of sensory resources added extra paperwork, which took time away from other activities, and there needed to be more time to engage optimally with the patient during their use of the sensory resources.

3) Capacity

Capacity is context-dependent, and the implementation process requires action from the agents to ensure the appropriate availability of resources and acceptance of any change in practice affecting social norms and roles (May, 2013). The sub-constructs of Capacity are material resources, informational resources, social norms, and social roles (Table 6).

a. Material resources

Less than half of the selected studies (8/20) contained information about material resources. Most of the material resources mentioned were either recreational or sensory materials. These materials were used in the development of comfort/quiet/sensory) rooms (Cummings et al., 2010, Lloyd et al., 2014, Sivak, 2012, Taxis, 2002) or, instead of creating a room, they chose

to store the materials on a mobile sensory cart (Lee et al. (2010). Thomas et al. (2006) also needed recreational materials to develop a nurse-led activity program that centred around movement to music, games/activities, and relaxation sessions. McCue et al. (2004) and Brennan et al. (2006) had different views on the need for material resources. While McCue et al. (2004) reported that they required little cost and no additional staff, Brennan et al. (2006) reported how the need for material resources, or more importantly, their lack, created problems for the intervention's implementation. One of the main issues mentioned by Brennan et al. (2006) was the lack of consideration of the resources' accessibility. Even though resources were available, their inaccessibility negated their use. Another material resources issue raised by Brennan et al. (2006) was the pressure from administrative organisations, e.g., the NHS, to use the beds efficiently by ensuring a high flow of patients through the system. However, not all available beds could be used for logistical reasons, e.g., gender segregation of wards (a male patient could not be placed on a female ward) and the need for some beds always to be available for admissions.

b. Informational resources

Most studies (16 out of 20) mentioned the need for informational resources, although the details of what was needed were superficial. The information resources reported in most of these studies were some form of training or educational program (Donat, 2002, Fisher, 2003, Forster et al., 1999, Friedman et al., 2012, Guzman-Parra et al., 2016, Hellerstein et al., 2007, Jonikas et al., 2004, Lee et al., 2010, Lloyd et al., 2014, McCue et al., 2004, Sullivan et al., 2005, Sullivan et al., 2004, Taxis, 2002). These programs focused on de-escalation training, crisis management training, sensory modulation workshops, interpersonal skills training, and behavioural knowledge and skills. Cummings et al. (2010) also emphasised the importance of recognising and understanding changes in patient behaviour, although they did not elaborate on how the MHCP would acquire that knowledge. The other forms of informational resources included open communication and information sharing (Friedman et al., 2012, Godfrey et al., 2014), and formal data management and official reports (Flood et al., 2006, Friedman et al., 2012).

c. Social norms

These rules govern social interaction, and the changes in norms that can be instigated through different means. Changes can happen through policy changes, changes in clinical work, and changes in administrative work. The 20 studies all reported some form of change in the social norms but varied in the amount of details provided.

Almost half of the papers (9 out of 20) reported changes in the social norms through policy. The policy changes took two directions: focusing on curbing and controlling coercive interventions or policies promoting non-coercive interventions. Some of the studies (Donat, 1998, Godfrey et al., 2014, Hellerstein et al., 2007) discussed policy changes centred around rule changes governing the use of coercive interventions. However, others (Fisher, 2003, Ray et al., 2011, Sivak, 2012) introduced a new policy to govern the use of the new non-coercive interventions. A few studies, including Guzman-Parra et al. (2016), Jonikas et al. (2004), and Forster et al. (1999) reported policy change but provided no details about what was changed.

All of the papers except Forster et al. (1999) and Friedman et al. (2012) described interventions which resulted in a changes in the social norms due to changes in the clinical work. These changes were in the form of added assessment tools and individual care plans (Guzman-Parra et al., 2016, Hellerstein et al., 2007, McCue et al., 2004, Ray et al., 2011, Sullivan et al., 2005, Sullivan et al., 2004), or by establishing a crisis response team (Godfrey et al., 2014, Jonikas et al., 2004, McCue et al., 2004). Some changed the clinical work by introducing alternative interventions, such as comfort and sensory rooms (Cummings et al., 2010, Lloyd et al., 2014, Sivak, 2012), sensory resources (Lee et al., 2010), a psychiatric monitoring intervention (Ray et al., 2011), an activity program (Thomas et al., 2006), or the Safewards interventions (Bowers et al., 2015). Others, like Fisher (2003), Taxis (2002), and Donat (2003a) added new patient treatment programs. Flood et al. (2006) appointed two city nurses to work with the ward staff to act as role models and support them in establishing changes in their practice. Another type of change to the clinical work was by adding post-event analysis and debriefing sessions between staff, or staff and patients, whenever a coercive intervention occurred (Fisher, 2003, Guzman-Parra et al., 2016, Jonikas et al., 2004, Taxis, 2002).

Changes in the social norms also occurred through changes in the administrative work, which was reported in three of the 20 papers. Donat (1998) established a behaviour management committee with administrative authority to enhance behavioural assessment standards and plans. In comparison, Taxis (2002) moved the responsibility of completing the audit tool directly to the nurse who released the patient from the restraint or seclusion to enable direct and immediate feedback. McCue et al. (2004) prompted a daily review of all restraint incidents during the daily Departmental Morning Rounds, which included all the departmental leadership and a representative from the inpatient services medical and nursing staff.

d. Social Roles

Most papers (17 out of 20) reported a change in the social roles. Social roles are the identities assumed by the agents. Changes in social roles can manifest in many forms; they can result

from shifting authority, increasing autonomy, or changing reporting hierarchy. They can also occur due to introducing new activities specific to the intervention or a change in practice. The fourth form of social role change was directed at the patient by increasing the patient engagement and actively involving them in their own treatment.

Eight papers reported shifting authority and increasing autonomy (Cummings et al., 2010, Godfrey et al., 2014, Hellerstein et al., 2007, Lloyd et al., 2014, Ray et al., 2011, Sivak, 2012, Taxis, 2002, Thomas et al., 2006). Thomas et al. (2006) reported the implementation of a nurse-led activity program. Similarly, Ray et al. (2011) augmented the nurses' autonomous role by giving them the authority of when and how to apply the new intervention. In contrast, Godfrey et al. (2014) removed the authority over implementing restraint from ward staff and gave it to the chief medical officer, resulting in staff needing permission before implementing restraint. This shift in authority was aimed at discouraging staff from relying on restraint. Taxis (2002) shifted the responsibility of milieu management to the professional nurse, who then coached non-licensed personnel in new ways to create a therapeutic milieu. This shift aided in building a more cohesive nursing team. Alternatively, Lloyd et al. (2014), Cummings et al. (2010), and Sivak (2012) gave the patients authority over the use of their sensory and comfort rooms. In comparison, Hellerstein et al. (2007) released some of their strict control policy by allowing patients off-unit privileges soon after admission.

Another change in social roles was to change the reporting hierarchy by forming a specialised team to assist and support clinical staff. In Donat (2002), an administratively-appointed multidisciplinary committee was set up to support the attending psychologist to develop an individualised behaviour management plan. In Godfrey et al. (2014) and McCue et al. (2004), a specialised crisis response team was created to support staff if needed.

An alternative change in roles can appear due to added activities dictated by the new intervention or the change in practice without any apparent authority or hierarchical structure changes. This change in role develops from the involvement in new activities, leading to new interactions between agents that did not previously exist and resulting in possible changes in the social roles. These tasks varied according to the intervention or change in practice implemented. Some papers reported that ward staff needed to use new assessment and tracking tools to identify and support potentially aggressive patients (Friedman et al., 2012, Guzman-Parra et al., 2016, Hellerstein et al., 2007, Lee et al., 2010, Lloyd et al., 2014, McCue et al., 2004, Sullivan et al., 2005, Sullivan et al., 2004, Taxis, 2002). These new tools resulted in clinical staff needing time to engage therapeutically with patients and complete the data for the tools. Other studies used staff to prepare individualised care plans as part of the intervention (Donat, 1998, Guzman-Parra et al., 2016, Jonikas et al., 2004, McCue et al., 2004,

Ray et al., 2011, Sullivan et al., 2005, Sullivan et al., 2004, Taxis, 2002). Other studies added meetings or debriefings and post-event analyses; these meetings sometimes included patients (Fisher, 2003, Guzman-Parra et al., 2016, Jonikas et al., 2004, Taxis, 2002), or senior management such as hospital directors (Hellerstein et al., 2007), or departmental leaders from all disciplines (McCue et al., 2004). These meetings reinforced the importance of critically examining the use of coercive interventions. Some reported the addition of sensory and comfort rooms (Cummings et al., 2010, Lloyd et al., 2014, Sivak, 2012) or sensory resources (Lee et al., 2010). At the same time, others introduced new treatment programs (Donat, 2003a, McCue et al., 2004, Taxis, 2002).

From the patient's perspective, another form of change in the social role was aimed at increasing patient engagement and autonomy through active participation in their treatment. The methods used to achieve this varied; in some studies, staff developed individualised care plans with patients (Guzman-Parra et al., 2016, Jonikas et al., 2004, Sullivan et al., 2005) or personalised treatment programs (Donat, 2003a, Taxis, 2002). In other studies, staff worked jointly with patients on care assessment tools (Hellerstein et al., 2007, Lloyd et al., 2014). A few studies included the patients in post-restraint meetings or debriefings and post-event analyses to discuss alternatives and modify the treatment plan (Fisher, 2003, Guzman-Parra et al., 2016, Jonikas et al., 2004, Taxis, 2002). In contrast, others gave patients authority over the use of the sensory or comfort rooms (Cummings et al., 2010, Lloyd et al., 2014, Sivak, 2012).

4) Potential

May (2013) proposed that the level of an agent's potential determines the effectiveness of translating capacity into collective action. The two sub-constructs of potential are Individual Intentions and Collective Commitment. Intentions and Commitment are measures of the readiness to change and to implement the intervention. Weiner (2009) described the readiness to change in terms of change valence and efficacy. This can be paraphrased as how much agents value the changes to be implemented and how feasible they consider them to be. Only ten studies (10 out of 20) showed evidence of agents (individuals or groups) directly expressing any opinions on commitment or related to the value or feasibility of the implementation data, and these were limited in terms of their content.

Four studies on clinically-initiated interventions (Cummings et al., 2010, Fisher, 2003, Lee et al., 2010, Ray et al., 2011) included information only about the agents active in the clinical setting; value was expressed by individual staff in that they felt safer and were less of a target for aggression compared to when the previous protocol was followed. The nursing staff and physicians as a whole agreed with this view. The intervention reported by Cummings et al.

(2010) was valuable for the patients, although a proportion of the staff was sceptical about its value. At an individual level, some had problems coping with the sensory room. Possible problems were also flagged by Lee et al. (2010), but this related to feasibility at a group level. Doubt was raised by the nursing team about the feasibility of the intervention if the problems were not solved regarding access to sensory equipment from the allied health staff, suggesting that new policies needed to be put in place. At an individual level, Lee et al. (2010) surveyed staff about the value of the intervention, “most staff found the intervention somewhat – moderately helpful,” and 76% of the staff indicated that the intervention should be kept as part of routine practice. Fisher (2003) used survey data (in the form of a multiple-choice tick box questionnaire) to assess the value for individuals, where staff and patients strongly endorsed multiple aspects of the intervention.

The value of the intervention from the perspectives of the clinical and administrative levels was considered in three of the selected studies (Godfrey et al., 2014, Sivak, 2012, Sullivan et al., 2005). At a clinical level, staff credited the intervention with introducing sufficient non-coercive management techniques to the extent that the use of restraints or seclusion was now considered a therapeutic failure. The unit manager and the nursing care coordinator echoed this perspective. They considered the value of the intervention to have been changing the unit's culture to one where *“a restraint-free environment was possible”* (Sullivan et al., 2005). In Sivak (2012), the intervention's value was expressed at an individual level by 13 of the 14 patients who had submitted a voluntary questionnaire and said the room had helped them. Given the absence of seclusion events since the room's introduction, it was considered a viable intervention to help patients deal with their anger and also help avert the need for seclusion.

The final two examples come from behavioural intervention studies (Donat, 1998, Donat, 2002, Donat, 2003a, Donat, 2003b, Donat, 2005, Donat, 2006) and the City Nurse group (Bowers et al., 2006, Bowers et al., 2008, Brennan et al., 2006, Flood et al., 2006). These studies are different since the intervention is not a new policy or therapeutic tool but the added input of clinical expertise. In Donat's studies, a team led by behavioural psychologists formed a Behaviour Management Committee (BMC). The BMC committee meets to review treatment plans for patients with high seclusion/restraint rates presented to them by the attending psychologists. Besides behavioural consultation for the 'difficult-to-manage' cases, progress in reducing seclusion/restraint was monitored, and behavioural analyses were conducted of the staff during their implementation of hospital restraint policies. Based on the results, policies were modified, and staff training was introduced to achieve the desired behaviour to achieve the required reduction in seclusion and restraint. In the City Nurse studies, the intervention is a highly qualified nurse who acts as a mentor, role model, and

facilitator to improve care in the selected wards. In both these cases, the value and feasibility refer to the intervention of the added input of the clinical expertise. Donat (1998) indicated support for the intervention,

“clinical staff did not anticipate the degree of reduction in seclusion and restraint utilization which was realized through the implementation of this procedure and would not have independently sought such a consultation” (Donat, 1998), page 17.

Data relevant to potential was extracted from two of the City Nurse study papers; Brennan et al. (2006) and Bowers et al. (2008), the latter being a replication of the original project. Bowers et al. (2008) reported a high value attributed at the group level for the intervention by the Trust and at the individual level by managers, ward staff, and patients. At the individual level, issues were raised about the uncertainty of roles, especially that of the “City Nurse”, and who was responsible for the increased paperwork required by the administration. Staffing was also raised at a group level, and it was queried that bank staff may not be committed to performing the additional duties required by the intervention. Shortage of beds was another key issue; the inability to keep patients in the same ward under the care of the same nurse (to optimise the patient-nurse relationship) as outlined in the intervention also made the sustainability of the intervention less feasible.

4.6. Discussion

The review examined examples of interventions introduced to inpatient mental healthcare settings to reduce coercive aggression management for evidence related to factors influencing the implementation process and areas where further research might be needed. The ENPT was used to help guide this analysis.

Although ENPT is represented as a simple matrix to describe the constructs and question probes for the analysis matrix and the research questions for the directed content analysis (Table 7), it is a multidirectional dynamic model (Figure 14), and all four constructs (Capability, Contribution, Capacity, and Potential) are all interrelated.

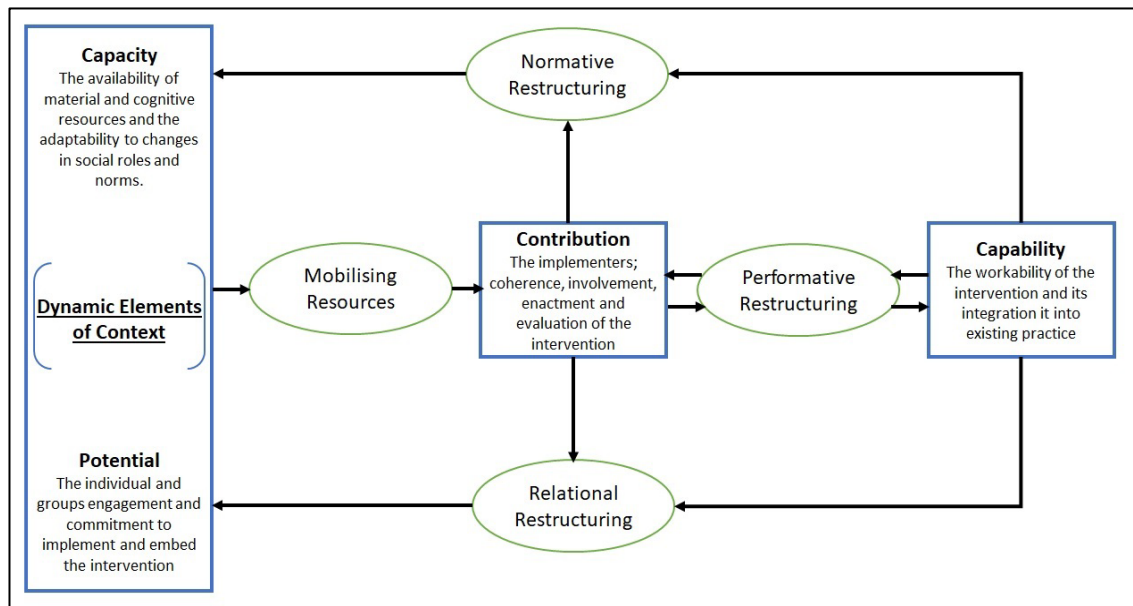


Figure 14. Proposed Interactions between the four Constructs in the ENPT in the Generalised Context, adapted from May et al., (2014).

The selected papers report results and observations during the implementation of coercion reduction interventions for aggression management in inpatient mental healthcare. None of the included studies explicitly aimed to study the intervention's implementation process or the factors influencing implementation. All included papers were treated as qualitative data, providing insights into the implementation process. This approach to studying the process of implementation has been reported previously, including two studies which utilised NPT as a framework for the analysis (Bradshaw et al., 2021, Huddleston et al., 2020). However, to the best of my knowledge, none have used ENPT or have dealt with coercion reduction interventions for aggression management in inpatient mental healthcare.

None of the selected studies in this review provided a spectrum of perspectives about the implementation process from different MHCP roles (e.g., clinical administrator, psychiatrist, ward nurse etc.), reflecting the overall picture within the team. Even Godfrey et al. (2014), who discussed different healthcare team members, were vague about their understanding of the intervention's aims and objectives. The inclusion of service users was lacking in any of the studies. The role of service users in the co-production is becoming increasingly important when developing or assessing policies, and the inclusion of this group of individuals should be prioritised to give a more comprehensive perspective of an intervention.

Throughout this discussion, persons involved in the intervention, individually or as groups, are collectively referred to as the agents (agents/agency, as used by May (2013)). The contribution of agents and the extent to which they can successfully embed the intervention can be related to their capacity, capability, and potential (Figure 14). The first part of the discussion considers each of the subconstructs of contribution (coherence, cognitive participation, collective action,

and reflexive monitoring) and then how each may be impacted by aspects of the agents' capacity, capability, and potential.

Contribution: Coherence

Most papers (17 out of 20), excluding (Friedman et al., 2012, Sullivan et al., 2004, Thomas et al., 2006), contained information relevant to coherence (i.e., how well the intervention and implementation process are understood and valued by the agents), but the amount of detail varied greatly. While all 17 studies confirmed that the aims and objectives of the intervention, the roles, tasks, and implementation responsibilities, were provided to all participants, information about how the non-coercive intervention was understood was often vague, and failed to discuss understanding by individual participating agents. Access to appropriate information is essential for a thorough understanding of an intervention; there must be sufficient capacity to ensure adequate and timely availability of appropriate information resources. Failure of the agents involved to fully understand all the relevant aspects of an intervention can be anticipated to have a negative effect on the implementation process. Therefore, agent understanding is an area requiring further investigation.

More evidence is also required on how MHCPs perceive the need for non-coercive intervention, mentioned in only 8 of the 20 studies, and this issue was poorly addressed in the publications studied. It is important because an intervention considered unnecessary is unlikely to have the same success as one that is felt to be needed. The decision that an intervention is needed is related to the value placed on the intervention's goals, the feasibility of reaching these goals, and having the desired outcome (i.e., a reduction of coercive practice). Value and feasibility are indicators of the construct potential (Table 7 and Figure 14), linking it with coherence and the subconstruct cognitive participation.

Contribution: Cognitive participation

This dimension is related to the extent to which agents, as individuals or groups, value the intervention's goals and consider its implementation feasible. In the studies analysed, cognitive participation was poorly reported, with less than half presenting relevant information. However, within the limited issues raised in this dimension, three were prominent:

First, the extent of acceptance of perceived or actual role changes of agents resulting from the intervention; Ray et al. (2011) was the only study that showed evidence of staff fully accepting the intervention as part of their role.

Second, continued support by the MHCP for the intervention over time; only three studies (Godfrey et al. (2014); Cummings et al. (2010); Ray et al. (2011) demonstrated this.

Third, the extent of the MHCPs involvement in the promotion of non-coercive interventions. Involvement in the promotion is essential since it creates and indicates a sense of ownership in the ongoing intervention. The findings from the publications studied suggest that establishing a sense of ownership is significant in establishing long-term support and role integration, and this area requires further study.

Active promotion of an intervention helps to drive the implementation. However, resistance can have a negative effect. If the root causes of the resistance to an intervention are not addressed, it can potentially impact how successfully it is embedded into the normal routine. Suppose individuals and groups, cognitively, do not consider the goals of the intervention to be of value and or to have low feasibility for implementation. In that case, the potential, which comprises individual intentions, together with collective commitment (Table 7), will be low, and resistance to the intervention may occur.

There were three specific foci of resistance to the interventions presented that encompassed safety concerns and resistance to change involving either the social role or social norm.

The first focal point relates to concerns about reduced levels of safety, discussed in depth in Donat (2002) and Taxis (2002). Some MHCPs, particularly direct care staff, viewed seclusion and restraint as a means to protect the therapeutic environment and the patients within it.

The second and third focal points of resistance relate specifically to actual or perceived changes in the social norms and roles. Applying restraint and seclusion was perceived by some MHCPs as demonstrating care for the well-being of the other patients (Donat, 1998). This can result in MHCPs relying on coercive interventions and possibly further consolidating their custodial approach to care. The new intervention may require a change in patient management, challenging this status quo, and adopting protocols that may appear to be contrary to the established primarily custodial care role.

In addition to changes in procedural methods, some interventions may require adopting new roles not considered as part of the MHCPs' job. Therefore, changes in the social norm may become a source of resistance (Donat, 2002, Flood et al., 2006, Sullivan et al., 2005). For example, MHCPs may resent the administration directing them on how to provide clinical care (Donat, 2002, Donat, 2003b). In some instances, where the MHCP considered these demands unclear and excessive (Brennan et al., 2006, Flood et al., 2006), they directly resisted the new intervention through avoidant *behaviour* by delaying tasks, or sometimes, *destructive*

behaviour. There were instances of resistance from some physicians instigated by the change in the social role, where there were “power” shifts from the doctor to the nurse (Ray et al., 2011). These needed resolving via interprofessional discussions.

More investigation is required to determine whether these three foci, safety concerns, and changes in perceived or actual social roles and the social norms and their impacts on the implementation process are common elsewhere or are context specific. In addition, more study is needed to identify other causes of resistance and how this is expressed.

Contribution: Collective Action

Details in the publications related to collective action tended to be context-specific and varied according to the intervention’s requirements. However, organisational support is the one factor that is a standard requirement. Since adequate support and funding can help drive the implementation, it is probable that without policy approval and sufficient funding, no intervention would be allowed to start.

Collective actions are the outcomes achieved by agents using the available capacity; there needs to be sufficient resources and funding to complete the job, as shown in Figure 14, and the Capacity construct directly impacts collective action.

However, Capacity is not just a simple issue of acquiring the necessary resources. Accessibility to those resources where and when needed is vital for those implementing the intervention. For example, Brennan et al. (2006) noted that even when resources were available, the fact that they were inaccessible negated their use. Naturally, resources are not just limited to physical pieces of equipment and consumables; staffing and available space also impact on capacity.

Staffing issues can limit capacity because the introduction of an intervention puts new demands on staff, and yet at the same time, other routine practices still need to maintain normal staffing levels. Without paying attention to staffing, problems can arise in the workability and the intervention’s integration and impact the overall capability, possibly limiting the contributions the agents can make in the implementation process (Figure 14). Lee et al. (2010) discussed time restraints as a problem that can arise when attempting the integration of a new therapeutic resource into their existing practice, putting an added burden on staffing. When an intervention is an additional therapeutic activity; as reported by (Cummings et al., 2010; Lloyd et al., 2014; Thomas et al., 2006) or an additional role; as reported by (Friedman et al., 2012; Godfrey et al., 2014), which needs to be integrated into the existing system, there will be time restraints related to the integration of the new intervention. However, none of these papers provided information about this.

Trust and confidence by agents in the intervention are also included within the dimension of collective action (Figure 14), which is important to the successful implementation. How can an intervention be successful if it lacks the trust of the agents who implement it? Trust and confidence are also linked to the potential to change; if an intervention is considered valuable and feasible to implement, it is more probable to have the trust of the agents involved than one which is not. Analysis of the selected publications revealed that less than half (8 out of 20) contained information about the trust and confidence that MHCPs have in the intervention's implementation. Importantly five of these (Brennan et al., 2006, Cummings et al., 2010, Donat, 1998, Friedman et al., 2012, Lee et al., 2010) expressed a degree of lack of trust or confidence. Three areas of concern emerged related to trust and confidence. First, the capability of the intervention to deliver reduced coercion and, if it did, would safety be compromised, which would express doubts about the feasibility of the intervention being successfully implemented and achieving its goals (Cummings et al., 2010, Donat, 1998, Friedman et al., 2012). Second, Lee et al. (2010) attributed the MHCP's lack of confidence to insufficiencies in the training program. Third is the lack of trust and confidence in the administration (Brennan et al., 2006, Friedman et al., 2012); an example of this lack of MHCPs trust is described in The City Nurse Project (Brennan et al., 2006). Brennan et al. (2006) discuss that given the lack of trust, a culture tends to develop where any actions that might risk an incident occurring are avoided, even if they are therapeutically beneficial. Given this culture, there might be resistance to following reduced coercive protocols if they were then held responsible for a negative outcome.

Trust and confidence, therefore, appear to be key issues which are poorly considered and therefore represent an important knowledge gap.

Contribution: Reflexive monitoring

MHCPs evaluating an intervention by solely relying on changes in the recorded clinical data, at best, give a crude indication of change within the system. The usefulness of recorded data depends on which data is recorded and may not give a complete picture. Conclusions as to the success of an intervention which resulted in a 90% reduction of physical restraint might be different if additional data were collected showing that there was also a 90% increase in the use of sedation. For a protocol where positive and negative outcomes are well understood, a crude indication of change within the system is sufficient to flag any changes that may occur and require attention. However, such quantitative clinical data must be more open-ended for a new intervention to evaluate what is happening. The process of non-judgemental debriefing, analysis, and discussion, as practised in McCue et al. (2004), Taxis (2002), and Forster et al. (1999), gives an almost unlimited opportunity for reflecting on what, how, and why a

restrictive incident happened, and what can be done to avoid a repeat incident. Reflective analysis was credited by Taxis (2002) as the cause of greater team cohesion; all changes were made as a team from within and were based on a case-to-case experience rather than imposed as a numerical goal from without. A fuller understanding of how the internal and external dynamics are affected by such active, reflective analysis and the potential impact this may have on the implementation and embedding of interventions is an area requiring further investigation.

Dynamic adjustments to the process of change

In addition to the constructs of Contribution, Capability, Capacity, and Potential, another gap in the evidence is how the system accommodates change to facilitate successful implementation. These processes, normative restructuring, relational restructuring, performative restructuring, and mobilisation of resources (represented by the ovals in Figure 14), are all poorly covered in the extracted data and represent a major gap in the evidence. Implementation of an intervention is a dynamic process, and the ability of the system to accommodate change is essential to normalisation.

4.7. Implications for future research

This review demonstrated the use of ENPT to analyse studies describing the implementation of coercion reduction interventions for aggression management in inpatient mental healthcare and to provide insights into the factors that influence the implementation process. Additionally, apparent gaps in the evidence were revealed, alongside areas requiring more research to ascertain the generalisability of the observations.

In particular, these gaps were related to how Capability, Capacity, and Potential influence the overall contribution and each of the sub-constructs of contribution (coherence, cognitive participation, collective action, reflexive monitoring). Another gap requiring additional research is the organisation's adaptation processes to accommodate change to facilitate implementation.

The information provided to the agents about the intervention and how well it is understood appears to vary greatly between different interventions and is sometimes vague. Studies are needed to help determine the factors affecting the effectiveness of the informational resources to provide the agents with the information required and the effect that successful informational resources can have on how agents perceive and value the intervention.

The need for a sense of ownership emerges from this review as a significant issue. More research is needed into how important the sense of ownership is to the implementation process and how it is achieved. It is already evident that if agents consider the goals of the

intervention to be of little value and have low feasibility for implementation, resistance to the intervention may occur if the concerns are not addressed. All three foci of resistance to the interventions identified in the analysis, concerns about safety, and resistance to change in the social role or social norms require further investigation to determine the extent to which the three foci identified are context-specific. In addition, more study is needed to identify other causes of resistance and how these are expressed. Very little information was obtained from the selected publications about factors affecting collective action. However, the analysis revealed concerns about the agents' trust and confidence in the intervention. The implications of how the levels of trust and confidence the agents in the intervention affect implementation, particularly capability, potential, and ownership, should be explored further.

Having sufficient resources to complete any project is important to its success. However, as Brennan et al. (2006) emphasised, the sufficiency of resources is not enough. Consideration must also be given to the accessibility of resources and problems balancing the intervention's requirements with the normal running requirements of the institution. More research is required to determine how resource availability and logistics impact the implementation process.

Examples of the dynamic interactions between the model components related to the implementation process (shown by arrows in Figure 14) were revealed during the analysis. These dynamic aspects of the process should be studied further.

For example, Taxis (2002) credited monitoring by reflective analysis of clinical cases as the cause of the observed team cohesion and ownership of the implementation. More research is required to understand how reflexive monitoring affects the internal and external dynamics between agents and how this impacts the implementation process.

More research is also needed into the dynamic adjustments to the change process (represented by ovals in Figure 14). These processes (normative restructuring, relational restructuring, performative restructuring, and mobilisation of resources) are all poorly covered in the extracted data and represent a major gap in the evidence. Processes such as normative restructuring, inputs from contribution, capability linked to the capacity required to optimise the resources released during resource mobilisation, and normative restructuring provide feedback related to changes in the social roles and norms. Mobilisation of resources is also linked to potential; a higher potential might result in a more enhanced mobilisation process than a system with low potential. Relational restructuring, like normative restructuring, has inputs from contribution and capability linked to potential, enhancing individual engagement and shared commitment in the organisation. The final process, performative restructuring, links contribution with capability and allows coordination of changes to facilitate the

implementation. All of these processes represent apparent gaps and would benefit from further study.

4.8. Conclusion

The ENPT provided a useful framework for studying the implementation process of coercion reduction interventions and identifying apparent gaps suitable for future study. Key factors influencing the implementation of coercion reduction interventions were; resistance to the intervention, a need for trust and confidence, a sense of ownership, accessibility of resources, and the impact of reflexive monitoring. Future studies should investigate the extent to which the factors identified in this review can be generalised to a wider context. The gaps in the evidence included the lack of multiple viewpoints representing all agents involved; there was also little attention given to feedback from the patient. Also lacking was information on how the agent's individual engagement and shared commitment are affected by how well the intervention and process of implementation are understood and valued (Coherence) and by the availability of resources and the extent and nature of any changes in the social rules and norms resulting from the intervention (Capacity).

In summary, the implementation of any intervention introduces changes. There still appears to be a major gap in understanding how organisations adapt to accommodate the necessary changes to facilitate successful and sustainable implementation.

Chapter 5: Interviews Research Method

This is a qualitative study with 20–30 interview participants. The study protocol is described below.

5.1. Sampling and Recruitment

Sampling Characteristics and Inclusion Criteria

Participants eligible for inclusion were English-speaking implementation experts who designed or implemented a coercion reduction intervention in inpatient mental health services. A total sample size of 20–30 participants was required, who were categorised into three groups (approximately 10 participants per group).

- Group 1: Academic implementation experts comprised individuals from academic, consultatory, or advisory bodies actively involved in any coercion reduction interventions.
- Group 2: Clinical implementation experts who were individuals with a clinical role and actively involved during one or more coercion reduction interventions.
- Group 3: Implementation experts by experience who were individuals with an advisory role as experts by experience during one or more of the coercion reduction interventions.

Sampling Strategy

Sampling was conducted in two stages using two approaches; purposive sampling and snowball sampling.

- Stage One:

Participants from Group 1 (academic implementation experts) were identified purposefully, utilising convenience and variation sampling. Implementation experts were identified through three routes; one was through a literature review of implementation studies, where implementation experts were identified and approached for recruitment; another approach was through established networks for members of the supervisory team; and the final route was through the supervisor's personal knowledge. Variation sampling was used to guide the purposive sampling to ensure that the recruited implementers brought different perspectives and had distinct roles in implementing the intervention.

- Stage two:

Groups 2 and 3 were identified through snowball sampling through referrals and established networks from group 1 that were identified and recruited in the first stage.

However, there was a minimum initial analysis sample (e.g., ten in each of the three groups) and a minimum criterion number (e.g., three in each group). This technique ensured that progress towards data saturation was monitored by reviewing new themes after every

interview beyond the first ten and stopping data collection after three consecutive interviews generated no new themes.

Ethical Approval

Trusts were not involved in the recruitment. Therefore, National Health Service Research Ethics Committee (NHS REC) approval was unnecessary, and confirmation was gained through the NHS REC tool.

Ethical approval was granted by the School of Healthcare Research Ethics Committee (SHREC), reference number (HREC17-047), on 10/09/2018.

Recruitment

The researcher sent an invitation email containing a participant information sheet (PIS) and consent form to the purposively selected implementation experts. Experts willing to participate were invited to contact the researcher by email or telephone to allow for questions and arrange a convenient time for the interview. At the end of the interview, interviewees were asked to forward (snowball sampling) the recruitment email containing the PIS and consent form to other potential participants within their personal and professional networks. New implementers willing to participate contacted the researcher through email, after which the researcher arranged a convenient interview time and date.

5.2. Data Collection

This study used semi-structured interviews guided by the Extended Normalization Process Theory (ENPT).

Development of the Interview Schedule

The interview topic guide consisted of open-ended questions informed by the four general ENPT constructs (Contribution, Capability, Capacity, and Potential). The development of the interview topic guide was an iterative process, where questions were continuously developed and refined, and their focus shifted according to the interview flow. After a pilot interview, the interview topic guide was restructured to allow a smoother flow of topics; this was achieved by dividing the questions into preparation (pre-implementation), implementation, and post-implementation phases while ensuring that all four ENPT constructs were present (Appendix 6).

Data Collection Process and Procedures

The interviews lasted 45–80 minutes. A total of 23 participants were interviewed from all three sample groups. Interviewees were asked for verbal confirmation of their consent to participate before each interview, and the interviews were conducted over the telephone and digitally recorded. The researcher transcribed the first six interviews, after which the remaining were professionally transcribed. Random sections of the transcribed interviews were checked for

accuracy. Transcribed interviews were assigned a unique study number, and all identifying information was removed. Once the transcriptions of the digital recordings were completed, the recordings were erased.

Data Protection and Storage

All the interviews were digitally recorded using an encrypted audio recorder, with the interviewee's consent, and transcribed verbatim by a transcription company with a confidentiality agreement with the University. After the interview, the audio files were immediately uploaded onto a university password-protected server to ensure the safe transfer of the data. The audio files were then deleted from the digital recorder. Next, the audio files were transferred to the transcription company via a secure and encrypted file transfer system (FTP). The interview transcripts were pseudo-anonymised and stored on a university password-protected server, accessible off-site via Citrix. Only the primary researcher had access to the password-protected folders.

No personally identifiable paper records were generated during this process. All electronic records were pseudo-anonymised using a reference number for each participant, and these were linked in one data key document. The data key was held in a separate and equally secure folder and will be deleted at the end of the study. All participant contact information will also be destroyed securely and immediately at the end of the study. The anonymised interview transcripts are of long-term value. They will be retained, as the data may be reanalysed in the future to inform the development of research projects, with the participants' consent. They will be available after the final publication of the study. To ensure the data can be shared, reused, and cited beyond the end of the project, it will be housed at the University of Leeds Research Data Repository (Research Data Leeds), where it will be associated with digital object identifiers (DOIs) and held for ten years.

If, in any case, an interviewee does not consent to this, their anonymised transcript will be stored in a restricted access folder on the School of Healthcare server for five years after the end of the study and then deleted.

5.3. Data Analysis and Interpretation

Analytical Process

This study used qualitative content analysis informed by ENPT, with support from Nvivo. Codes and themes were developed by adopting a combined deductive and inductive qualitative content analysis approach (Elo and Kyngäs, 2008), utilising the Extended Normalization Process Theory (ENPT) as an initial framework to identify factors affecting the implementation of coercion reduction interventions as well as determining the potential for future research. Qualitative content analysis offers flexibility, as it allows combining both deductive and

inductive approaches in the data analysis (Elo and Kyngäs, 2008). NPT and ENPT with qualitative content analysis have been demonstrated successfully in many previous studies (Borketey, 2017, Connell et al., 2016, Lund et al., 2015, Mair et al., 2012, May et al., 2014, Thomas et al., 2015).

This process started by immersing in the data (interview transcripts) (Table 5). To achieve this, the transcripts were read and reviewed several times to familiarise the researcher with the data and make sense of it, enabling the extraction of related meanings and codes. The second step was to develop an unconstrained analysis matrix informed by a theory. The unconstrained matrix is flexible as it allows adding new main categories that might be identified inductively in the following step, thus incorporating an inductive analysis approach, through which a combination of the inductive and deductive approaches is achieved. To achieve this, the unconstrained matrix was deductively derived from the ENPT and contained the main categories, related subcategories, and operational definitions for each area determined using the theory (Table 8).

	Construct	Dimensions	Definition
	Main Categories	Subcategories	
Emergent expressions of agency	Contribution	Coherence	How is the non-coercion intervention understood by the MHCPs? Is there a clear understanding of how it differs from current practice? Are the aims and objectives of the intervention clear to the MHCPs? Are the implementation roles, tasks, and responsibilities clear? How is the need for non-coercive intervention expressed by the MHCPs?
		Cognitive participation	How do MHCPs promote the use of non-coercive interventions? How do MHCPs resist the use of non-coercive interventions? Do MHCPs see the intervention as part of their work? Do MHCPs support the interventions' use over time (sustain it).
		Collective action	How do MHCPs make the intervention work? How do MHCPs acquire increased proficiency in non-coercive interventions? Is there organisational support (financial, policy, staffing)? Do MHCPs have trust and confidence in the intervention's implementation?
		Reflexive monitoring	How do MHCPs evaluate the effects of using non-coercive interventions? Do all MHCPs consider non-coercive intervention a viable alternative to older, more coercive measures? Do MHCPs see the usefulness and purpose of the new intervention?
	Capability	Workability:	How and when do the MHCPs implement the non-coercive interventions in practice?
		Integration	How does it fit in with current MHCP roles?
	Dynamic elements of context	Capacity	Material Resources
Informational Resources			How does the intervention change what MHCPs need to know to do their roles?
Social Norms			How does the intervention change the rules that govern (Policy) what MHCPs do?
Social Roles			How does the intervention change MHCPs' current roles?
Potential		Individual Intentions	To what extent does the intervention depend on individual engagement? Is there potential for individual engagement? Value? Feasibility?
		Collective Commitment	To what extent does the intervention depend on joint commitment? Is there potential for joint commitment? Value? Feasibility?

Table 8. ENPT Derived Analysis Matrix.

The third step was to incorporate the inductive coding process. This process involved analysing the transcribed interviews to form codes, categories, and themes through data abstraction at each step of the analysis to lead from the manifest and literal content to latent meanings. The transcripts were uploaded to Nvivo and reread to achieve this, and open codes were written in the margins. To generate the open codes within Nvivo, the transcripts were divided into meaning units (paragraphs), and the meaning units were condensed to reduce the text while preserving the core. The condensed meaning units were then abstracted and labelled with a code. At this stage, open discussions with the supervision team were conducted to determine the suitability of the codes assigned to the meaning units and provide feedback on the coding process. At the end of this stage, as many codes as necessary were written down to describe all aspects of the content related to the study's aim and questions.

After open coding all the transcripts, the codes were extracted from Nvivo and sorted onto the predetermined thematic coding frame, i.e., informed by ENPT. Codes that did not fit the analysis matrix were analysed to determine if they could be grouped to represent a new category, and thereby new categories would be formulated and added to the analysis matrix.

The next step was developing categories and themes. A category consists of codes that deal with the same issue, i.e., manifest content visible in the data. Themes express underlying meaning, i.e., latent content, and are formed by grouping two or more categories. It is only possible for the abstraction process to create themes if the data is rich with latent meaning.

Meetings were held with the supervision team to create the categories. Comparisons of similarities and differences between codes were made in these meetings, and the derivation and grouping of codes was discussed. Later discussions also involved how further amalgamation of coding groups might be approached. These meetings aimed to help with coding consistency, theme development, and to check the trustworthiness of the data by exploring the logical soundness of the auditable trail.

5.4. Research Governance

Ethical approval was granted by the School of Healthcare Research Ethics Committee, reference number (HREC17-047), on 10/09/2018. This study complied with the study protocol and University regulatory and monitoring requirements. The key ethical concerns are confidentiality and the duty to report, informed consent to participate in the research, participant distress, anonymity, and interviewing vulnerable groups.

- **Confidentiality and the duty to report**

Detailed participant information sheets were provided to participants before the interviews containing full details relating to confidentiality and anonymity. With any healthcare research, participants make disclosures that the research team has a duty to report. The duty to report is defined in guidance issued by the World Health Organisation that states that information about an imminent error or action that could result in severe and irreversible harm and that intervention from the research team may prevent or limit this harm or that if an incident has already occurred, intervention may reverse the effects then the researcher has a duty to act/report.

- **Obtaining informed consent**

All potential participants were given a PIS attached to the invitation email according to the current SHREC guidelines before the study commences. The PIS provided potential participants with information about the study, including the potential benefits and risks. We allowed a minimum of 24 hours between receiving the information about the interview and the interview taking place to ensure that participants could reflect on their decision. The researcher's contact details were provided to enable participants to contact the researcher with any questions before deciding to participate. Before the interview, the participant was emailed a copy of a consent form structured within the current SHREC guidelines. Then, at the beginning of the interview, the purpose and process were explained again using the PIS and consent was confirmed verbally by reading the consent form (of which they already had a copy). This process is in accordance with the University of Leeds verbal informed consent protocol, which applies to telephone/Skype interviews, and recordings of the verbal consent were retained. Participants were told they could change their minds and withdraw from the interview at any point before and within two weeks after the interview took place.

- **Interviewee distress**

Many people enjoy being interviewed, although there is a risk that people may become distressed when describing difficult personal experiences. As a result, the research contains an interview distress policy to ensure that participants were supported during and after participation if necessary.

- **Anonymity**

There was a potential risk that some participants from the national/international experts group might be identifiable even after anonymisation due to their known affiliations with specific projects within the field. The researcher attempted to minimise this risk through a careful selection of quotes, and this potential risk was made clear in the consent form and PIS.

- **Vulnerable groups**

It must be emphasised that participants in group 3 (Implementation experts through lived experience) routinely speak about their previous mental health care experiences, helping inform service and policy development, including the development of coercion reduction interventions. However, participants in group 3 were recruited to discuss their roles in this development process and were not recruited due to their current or past use of any services. This made them unlikely to disclose anything to the interviewer that they did not routinely discuss as part of their advisory role. Therefore, these individuals were not treated ethically as a vulnerable group.

Chapter 6: Analysis and Findings

Overview

After the open coding of the transcript data (section 5.1.3), the codes were examined for relationships and categories, and themes related to the implementation process were derived. The initial open coding resulted in 350 codes, and after repeated revision, these codes were reduced to 55. The codes were then grouped into 11 categories, and the categories then were consolidated under five themes: Intervention Design, Resources, Commitment, Agents as Workability Drivers, and Culture. Four of these themes were categorised under two overarching themes; Intervention-related and Agent-related factors. However, the fifth theme (Culture) did not fit solely under either of the overarching themes and partially overlapped with both, so a third overarching theme of Culture was created (Table 9).

Intervention-Related Factors					Agent-Related Factors					
Intervention Design			Resources		Commitment			Agents as Workability Drivers		
Achievable objectives	Valid measurable outcomes	Flexible	Physical space	Funding	Available qualified staff (training/ information programs)	Value of the intervention	Ownership	Team support	Understanding	How agents overcome barriers and resistance
					Culture					
Shading Key										
	Overarching Themes									
	Themes									

Table 9. Summary of Categories, Themes, and Overarching Themes.

The three overarching themes identified within the transcript data were;

1. Culture. This is a significant component in the context of the implementation and appears to have a modifying effect on the factors implicated as causing resistance during the implementation process. It should be noted that culture partially overlaps Intervention-related factors and Agent-related factors.
2. Intervention-related factors: These are necessary for an intervention to fulfil its objectives. Two themes were identified; Firstly, Intervention Design - the objectives of the intervention should be clear and achievable, and secondly, Resources, which include the physical, fiscal, and human resources required to implement the intervention.

3. Agent-related factors: These factors are necessary to get the intervention working. Two themes were identified; Commitment, which is the extent of support the agents had for the intervention, and Agents as Workability Drivers, which are the interactions instigated by the agents to overcome barriers and resistance and to enable the intervention to work and be sustainable.

Themes Identified in the Analysis of the Transcript Data

6.1. Overarching Theme 1: Culture

Culture is a major component in the context of the implementation of coercion reduction interventions. A hospital institutional culture is not comprised of a single culture but is a complex mix (Doyle et al., 2016), combining the dominant culture of the institution (its objectives, attitudes, and beliefs) with many subcultures. The existence of these subcultures, which are often specific to the different professional groups with individual cultural identities, may result in communication problems (Tucker et al., 2007). Certain organisational cultures, for example, hierarchical culture (Andres et al. (2019) and embedded blame culture (Kinney et al., 2021), when staff perceive the new intervention as putting them at a higher risk of blame (Waring, 2005), are a potential barrier to implementation. For this study, cultures that act as a barrier to implementation are referred to as problematic cultures.

Institutional culture can be expressed at three levels (Mannion and Davies, 2018):

1. What is Observed - the established professional hierarchy and associated policies.
2. Shared Values and Beliefs - about why things are done the way they are, e.g., belief in what is best for the service user.
3. Common Assumptions - underlying ideas about how things are, e.g., service users are too ill to be involved in their care decisions or psychiatrist's instructions, should never be questioned; these are often unspoken assumptions and go unchallenged.

When a new intervention is implemented, the existing embedded culture in a hospital can either be generally supportive or problematic to the intervention. The three main problematic cultures, as perceived by the interview participants in this study are, the hierarchy of control/power, the culture of blame, and a reactive rather than a proactive culture. Table 10 lists sample quotations from the transcripts, illustrating these problematic cultures and showing them mapped against the levels of expression of culture as described by Mannion and Davies (2018).

	Culture Characteristics		
	Hierarchy of control/power	Blame	Reactive
Observed Culture	(01C) "Because, unfortunately, in any big organisation, and I mean any, we've seen it come out all over the country, there is sometimes a culture that develops of control and power."	(14B) "If things go wrong, then we view that as an opportunity for learning, and not within the sort of traditional healthcare models, not an opportunity to find someone to blame and to hold them responsible for that."	(13B) "I suppose internally it is around changing cultures and ways of working because I suppose we are. The challenges are that over many years people have developed ways of working; they've developed blanket restrictions."
Shared Values and Beliefs	(01C) "I think because it's hard because restraint, when I first started, was embedded, and this is what you've got to do when someone is out of control and violent and aggressive, you stop them." (03B) "It's about...again, this is a massive culture shift, but it's getting a supportive environment where people can speak up with each other, and they can challenge each other, again in a supportive way, in a diplomatic way."	(02A) "Nurses feel fear about not using restraint." (05B) "They can have a culture where they can discuss openly the methods they are using and thereby get rid of the corrupted culture where they are, for instance, showing the patient to a room because he is not eating properly or things like that."	(11B) "Again, there was a time where the psychiatrists would come in and say that person had to be medicated, and it didn't really matter how that was achieved, as long as that was what was done. "
Common Assumptions	(14B) "We've had to chip away at this idea that if you run a very tight ship. If you control people's movements, if you control what they're doing, that ultimately keeps people safer." (14B) "I think training in that area kind of was a bit of a macho culture and that it was very much a 'them and us' sort of adversarial sort of feel. And that's had to be worked on and changed."	(03B) "It's trying to get away from a finger-pointing culture where people feel safe to talk about this."	(03B) "When you're trying to get it from being a reactive firefighting service with a siege mentality, and you're trying to get it around, it's difficult to change people's perspective into proactive because it's getting people to understand that firefighting takes almost as much work as working proactively."

Table 10. Characteristics of Problematic Cultures as Perceived by the Interview Participants.

It is important to realise that more than one of the above cultures to co-exist at the same institution. The following paragraph is a hypothetical scenario to demonstrate how this interaction might occur in a clinical context. Occurrences of problematic cultures, hierarchy control/power blame, and reactive behaviour are indicated in brackets throughout the section.

In traditional institutions where the focus was on keeping the patient under control, restraint was often the accepted automatic (reactive) response to acts of violence or aggression (control/power) or even for minor behavioural issues, e.g., not eating properly (blame).

These cultures also impact the treatment of staff and the relationships between them. Staff cannot challenge ideas or instructions received (control/power) and are afraid not to restrain patients when the prevalent culture expects it in case something goes wrong (blame).

The underlying assumptions are that, for patients, a strict regime of restraint is necessary to control them and ensure safety. Also, that control is exerted (control/power) as soon as any problematic behaviour is observed (reactive). Staff assume that challenging the opinions of anyone, especially someone in a more powerful position higher up the hierarchy, is unacceptable (control/power) and that should they transgress from what is expected; everyone is just waiting to accuse them (blame).

Although the above illustrates three problematic cultures interacting, in real-world situations, a mixture of problematic and supportive cultures may exist.

6.2. Overarching Theme 2: Intervention-Related Factors

These factors are essential for an intervention to be successful. They include the intervention's design and the availability of the necessary resources (physical space, funding, appropriately qualified and well-informed staff). A shortfall in any of these resources could ultimately lead to an intervention that is not entirely successful and implementation failure.

6.2.1. Theme Intervention Design

The goals, type, and use of the data collected are critical aspects of the intervention design. In addition, there must be a mechanism of reflexive monitoring to identify any necessary adaptations, and a well-designed intervention will have the flexibility to incorporate these adaptations.

The goals of the intervention must be realistic and achievable; seeking a total ban on physical restraint is probably unrealistic. However, using physical restraint or other coercive measures as a last resort and being accountable for when and how it is used is not. Evidence from the transcripts shows that problems can occur if the goals are unrealistic or perceived as unrealistic. Perceiving the goal of the intervention to be a complete ban on restraint can lead

to commitment problems (Section 6.3.1) and needs to be recognised and addressed; otherwise, it can become a possible cause of resistance.

(09B) *“And we sort of reassured them and said our aim is not to reduce, is not to eliminate restrictive practice. It is not a blanket ban on it. There may be cases where it does need to be used. The overall aim of the project is to reduce it by a third nationally across all 42 wards. I said, so we’re not saying, you know, we’re not eliminating it. It’s not a blanket ban.”*

The desire for a blanket ban on all restraint can sometimes be the aim of the hospital boards, possibly in response to public opinion. The scenario in the following quote demonstrates a possible disconnect between the board and the clinical reality on the ward. This has further possible implications for top-down management styles (Section 6.3.2.1) and team support (Section 6.3.2.2).

(04A) *“And the other thing I said to the board [REDACTED], ‘would you be happier that there’s one restraint or a thousand?’ And the answer was, ‘we’d be happier with none, none at all.’ So, they kind of said, ‘we’d like to see no restraint being used.’ And I said, ‘that’s fine because that’s our aim and ambition, but if there was a restraint, would you be happy with one restraint or a thousand?’ And, inevitably, they said, ‘one.’ And then I said, ‘if out of those thousand restraints, nobody was injured, nobody complained...Now, conversely, let’s look at the one restraint...as a result of the restraint, some members of staff were significantly injured, and/or the patient died. Which would you be happier with, one restraint or a thousand restraints?’ And it really threw the board. They never gave me an answer because I know the answer.”*

This quotation demonstrates the importance of setting appropriate goals and the need to choose an appropriate measure to evaluate the intervention. It is important to ensure that any chosen output is congruent with what the intervention intends to achieve. The quantitative data based only on the number of restraints (1000 restraints compared to one) does not fully describe the outcome. More details are required to understand the situation fully. These details could either come from more quantitative evidence, e.g., the percentage of restraints where injury or death occurred, or supporting qualitative evidence, e.g., descriptive case reports for each incidence of restraint, preferably with a post-restraint debriefing of the staff and patients. Tangible data, such as the number of injuries or restraint incidents, are relatively easy to represent quantitatively. However, when the outcome is nontangible, the need to consider qualitative evidence (e.g., the perception of safety on the ward or the ward culture) is even more important.

(02B) *“How do we actually capture a ward going from...and how do we capture culture change from the patient point of view?...I think the numbers now are almost immaterial, but that’s all anybody seems to be collecting, to be honest. Not all, but the vast majority are trying to get the numbers. And there’s no need.”*

This excerpt illustrates the interviewee's opinion that there is possibly an over-reliance on quantitative data and that quantitative data is possibly not the best way to document important changes on the ward, such as the ward culture. However, collecting quantitative evidence, such as the number of physical restraints per month, is important and gives a general measure of the trends.

(13B) *"So if you've got one adolescent unit in the north with three times as much restraint as an adolescent unit with the same function in the south, you are going to want to understand that data, and that's where there's been a lot more work around data-informed practice and looking at narratives within governance to support the data. So, there is the data aspect. Again, the number of incidents is key; if you've got a ward where people feel safe, and there's a lot going on, it's likely that you'll have fewer incidents, if it's meeting the needs of the service user group, which inevitably will then lead to a reduction in sort of conflict behaviours and containment behaviours."*

The quotation above demonstrates the value of quantitative data and the need to understand the numbers presented in the data. In this example, it is questioned why there is a threefold difference in restraint rates between the two units. Looking deeper into the context of the quantitative data allows observations to be made that can help modify practice. In the following excerpt, the examination of the numerical data facilitated conclusions to be drawn about the triggers of restraint and the subsequent changes made to clinical practice.

(17B) *"We took a measure of the number of incidents that were happening as a result of coercion or refusal to meet needs because of the so-called rules. I think at the time, there was quite a number...there were more than 45% that were as a result of refusing a patient things that we shouldn't have refused them. And on the back of the implementation, I think six months later, or 12 months later, that number went down to 20%, I think, at the time. So, there was a bit of a before and after measure."*

Therefore, although using quantitative outcomes and collecting numerical data is a useful measure of the success of an intervention, it may not give the entire picture.

(03B) *"We've been trying to implement Safewards for quite a while. I'll come back to that though because there are different levels for me of implementation; there's tick-box implementation, then there's an actual culture shift on all the wards as well."*

If too much emphasis is given to just the numbers and the achievement of a tick-box goal, other equally important qualitative aspects may be neglected. In addition, unfortunately, there are incidents where results may have been manipulated due to the pressure to achieve the desired optimal numerical data.

(02B) *"So what are we looking at? Are we looking at the staff and patients who are saying, 'wow, the ward's different.' Or do you want numbers? And if they say, right, we want numbers, you say, 'okay, are you prepared to clean the data?' And if people go at the end of it say, 'Oh no, I just thought it was a question of looking at our seclusion rate.' Well, you can look at your seclusion rates, but we're not lying to you. I get all sorts of graphs. Look, our seclusion rates have all gone down, and I go, 'thank you very*

much. That's wonderful.' But of course, what I know is all the people are going, 'fuck, our seclusion rates have gone up.' They're not sending me their graphs because that's not the mantra they want to...that's not the story they want to believe because they love it, and they want it to keep going. So, there is that little bit that people are getting the evidence to bolster their position."

It should be noted that this was not the only example of data manipulation to meet targets described in the transcripts, and no direct questions were posed to seek out such examples. Too much emphasis on achieving numerical goals can cause problems related to team support (Section 6.3.2.2), value, and long-term commitment (Section 6.3.1).

The third aspect of intervention design identified from the transcript data was the need for sufficient flexibility to cope with any differences and changes in context that may arise during the implementation process to keep the intervention on track. A process of reflexive monitoring must be in place to assess progress toward desirable outcomes to facilitate this, in quantitative and qualitative terms (Van Mierlo et al., 2010). Reflexive monitoring comprises a cycle of observing, analysing, reflecting on why any changes or variations have occurred, and then adjusting where necessary and is an important component of making the intervention workable. This process helps ensure the intervention is embedded into normal practice, and that sustainability can be achieved. Suppose the reflexive monitoring reveals that adjustments need to be made to get progress back on track; this can only be achieved if;

(02B) *"You don't need to ask, does it work? What you need to say is, 'how can I get it to work better on my ward?'"*

Flexibility within an intervention is its ability to adapt, increasing its workability and helping to raise a sense of ownership, ultimately driving commitment.

(01B) *"So yes, you would see it being implemented in different ways in different teams, but it's always about how you embed it based on knowing it works and on the evidence, that's telling you it's working, so use it, if it's not working, don't use it, tweak it or change it."*

Without reflexive monitoring and the necessary adjustments to get things back on track, initially successful interventions can sometimes become less successful; there may even be a reversion back to old practices.

(13B) *"The danger is if you take your foot off the pedal that a lot of the old restrictions and rules and ways of working quickly come back in. I think the challenge is, again, going back to what we've already said around the embedding of those practices and sustainability. Because you only need an incident, and then the risk is that people go back to their old ways of working."*

Effective reflexive monitoring can help establish sustainability with adjustments when required (Section 6.3.2.2).

6.2.2. Theme Resources

Sufficient resources must be available, including physical space, funding, and appropriately qualified staff.

6.2.2.1. Physical Space

Unless a purpose-built facility is planned, physical space is a limited resource to which little change can be made. It was only mentioned occasionally in the transcripts, possibly because this is an issue over which there is little control. However, the following excerpt illustrates how the lack of appropriate physical space can impact the intervention's implementation.

(15B) *"The environment just didn't lend itself, really. Anything that we had at our disposal didn't lend itself to what we really needed it to do, i.e., to give the patient further physical space. It was very difficult as well in terms of obviously staffing that."*

6.2.2.2. Funding and external policy drivers

Within mental health trusts/services, the total available budget is normally subject to external factors and not within the direct control of hospital management. An active National Health Service plan is now in progress aimed at bringing spending on mental health up to similar levels as spending on physical health, which is currently lagging (NHS, 2022). However, in the past, it has often appeared that increased government support for action to improve mental health services is only triggered in response to media awareness of negative events related to coercive restraint, for example, following incidents such as those which occurred during the reported institutional abuse at Winterbourne or those associated with 40 deaths over 2.5 years at assessment and treatment units (ATUs). After these incidents, and following the resulting groundswell of public opinion, national agencies reacted by producing new guidance related to the care of patients in mental health institutions, including "Positive and Proactive Care: reducing the need for restrictive interventions" produced by the Department of Health (DoH, 2014a), "The Winterbourne View: Transforming Care Two Years On" (DoH, 2015b), and "Brief guide: restraint (physical and mechanical)" by the Care Quality Commission (CQC, 2016). These documents outline procedures to follow if restraint is used and what must be avoided. They also emphasised that restraint should only be used as a last resort, the need for staff training, adoption of a patient-centred approach, and patient (service user) involvement.

It should be noted that although both incidents did not involve patients in acute mental health wards (this study's demographic), but concerned groups of institutionalised individuals with autistic and learning disabilities. The reaction to the incidents was such that it had a knock-on effect and effectively acted as an external driver to highlight the issue of patient treatment in all mental health institutions, including coercion and restraint. A more recent tragic incident

closely linked to the topic of this thesis was the death of Olaseni Lewis caused by the “disproportionate and inappropriate use of force in a mental health unit” (Department of Health and Social Care, 2021, p.3). The death and subsequent investigation led to the Mental Health Units (Use of Force) Act 2018. Although Winterbourne and the deaths at the ATU were referred to during the interviews by the interviewees, Olaseni Lewis was not. A possible explanation for this is that the bill was being passed during the same time the interviews were taking place, and the interviewees were being asked to reflect retrospectively on factors affecting the implementation of past interventions.

The rather unfortunate knee-jerk situation, where necessary support and finance depend on negative events, also occurs at the individual institution level, as described in the following quote.

(10B) *“An interesting point from somebody at the learning event whose trust is now in special measures...And somebody from another trust was, like, ‘they won’t let us have them, there’s no money for it, they won’t even let us, you know, buy tea and biscuits if we do have something.’ And he said, ‘well, for our trust, that’s exactly what we were like before we went into special measures; everything was about the finances. And they got themselves back into the black, but what was lost was patient care. So now we’re in special measures,’ and he was, like, ‘and now I can get whatever I want because we’re in this situation, we’re desperate to improve the care, but it’s taken that for us to get access to those resources.’”*

In this example, it was only when levels of patient care had deteriorated to such an extent that the hospital had been put under special measures that additional funding was made available, and the speaker considered he had an open budget.

(10B) *“Now I can get whatever I want because we’re in this situation.”*

Insufficient or limited funding impacts what interventions can be considered and limits what is possible during the implementation process, which may ultimately affect the long-term outcome.

(12B) *“We had to retrain all of our clinical staff in a five-day programme rather than just a one or two-day refresher. So I think having the right financial backing with the budget to support it was really important, and I think if we hadn’t had such support, it would have been an abridged version, which wouldn’t have worked as well. So, I think having leadership support, financial support, and the right people training it, I think that was our biggest preparation measures if anything.”*

Lack of sufficient funds can result in staff feeling that what is being asked of them is no longer feasible, which can lead to a loss of commitment.

(11B) *“As services have become more pressurised, more stretched, resources are very tight, and when people feel very pressured, that is what you will hear...One of the managers,... does as much as he humanly can...He’ll say to me, ‘what more can I do?’”*

And the problem isn't with what he's doing, it's with the bigger picture out there, and people seeing that, actually, Trusts are struggling financially and resource-wise."

6.2.2.3. Appropriately qualified staff

The workforce must know the intervention's goals and have the necessary skill set to implement it. Therefore, an intervention must include a well-designed training/information program to be successful. A review of the transcript data points to three major factors to consider when preparing a program: who gives it, what is the content, and to whom is it given.

Getting the right people to provide the training helps to promote the intervention's purpose as a complete concept.

(12B) *"It was people who needed to demonstrate a better level of least restrictive practice and not just a restraints tutor. So I think the biggest shift in our approach was people with the right values base and who wanted to promote the whole philosophy of what we're trying to achieve."*

Next, a well-designed program can increase the knowledge and skills of those attending and help shift and align cultural attitudes (Section 6.3.2.4). The content given during the training/information sessions is also important and is a matter of emphasis and balance. In the past, the emphasis was often primarily on physical skills.

(04A) *"So again, if the only training you provide staff with is physical, then it's kind of understandable that staff resort to using physical interventions perhaps more frequently than they should. Or, if they have more effective skills of identifying and eradicating or defusing conflict, then maybe those physical skills wouldn't be used as much."*

However, even now, with the training aimed at informing staff how important it is to listen to the patients and use de-escalation skills, it is frequently presented as discussion topics rather than hands-on skill training.

(04A) *"Our training covers ██████████, de-escalation, and all the rest of it, and our experience has been when we actually look at the training, it's all physical...The trainer... tells the people how important it is to listen to the patient and to use de-escalation skills, but when you then look at the training from a learning perspective, there's actually no learning around those topics; they're just discussion points. And what we have to remember is whilst there could be some staff highly skilled at those preventative interventions, we can't assume, just because we've employed you, that you've got those skills. And I think an organisation has a responsibility, because it's such a critical patient and staff safety issue, to make sure they train the staff and give the staff those skills because those are key competencies that frontline staff need."*

A balance between hands-on skills and open discussion is important since establishing an understanding of what the intervention involves and the aims and objectives is essential and can help avoid problems with commitment based on a lack of understanding.

(13B) *"We initially developed a restrictive practice awareness training package, which was a half-day session that we delivered right across the organisation because we felt strongly that staff needed to understand what restrictive practice was if we were then going to work with them around reducing restrictive practice."*

However, although discussion and understanding of issues are important, pausing and reflecting on how these are linked to their clinical experience can give them insight into their clinical practice and help embed the intervention.

(03B) *"It was getting people to....understand the model, getting them to understand where the originating domains come in, it was getting them to understand the premise of flashpoints, conflict, and containment...So, we linked it to their clinical environments and ...their clinical experience in perhaps where they might have seen things dealt with that haven't gone so well and who do they give it to. Where possible, there are obvious advantages to make as many of the staff aware of the aims and objectives of the intervention."*

Finally, selecting who needs to attend is also important. However, sometimes training is seen as a target to be met, rather than an opportunity to increase the staff's skills and knowledge.

(04A) *"That to me is a leadership issue, and it's not uncommon that at a senior level if you ask for more staff to be trained, they could probably say yes, and they'll probably give you some statistics that will have been generated because they'll be measuring that target, and that target is probably something like 80% of our workforce is trained in whatever...Okay, and then if you say, 'and what does that package actually teach the staff,' the answer we commonly get is, 'well, it teaches them how to manage aggression and violence'...the senior leaders aren't necessarily aware that it's primarily physical-based and not preventative."*

Again, like the reduction of restraint, achieving numerical goals, i.e., the required percentage of staff trained, although a useful measure of trends, can skew priorities, as can the apparent unawareness of management about what is being taught. In terms of the coercion reduction levels, there is possibly too much emphasis on achieving numerical goals, which can cause problems related to teambuilding (Section 6.3.2.2), value, and long-term commitment (Section 6.3.1).

(04A) *"I think organisations are naïve if they don't think of training as an entire process that impacts on performance. We often see, 'yeah, I've done a workshop, I've done a briefing, I've done some training, good, bad or indifferent, whatever that training is like'."*

Selecting who should attend training/information sessions can be challenging.

(03A) *"We have always tried to include people from all different professions in these courses to train together, and that doesn't work very well actually."*

The following quote illustrates that issues related to culture and team selection may arise. When all staff cannot attend, a selection has to be made. Unfortunately, this selection is not

always based on who needs to attend or would benefit most. Depending on the situation in the ward, inappropriate selection may occur.

(02B) *"So the ward manager would look around, and he'd think, 'I've got a million fucking things to do, I've got no staff, my budget's up the wall, I don't need this shit on top of it all. So, I'll send, you know, somebody who needs a break for the day or whatever.' So, there was a lot of that going on, so people would go off to these days, which were very well done, but they weren't the right people."*

This scenario raises several issues, including how staff value the intervention and their commitment. The implementation is being attempted where the ward manager is already under pressure due to a lack of resources (time, financial, and staffing). Given this context, the ward manager's commitment to the new intervention appears very low.

(02B) *"I don't need this shit on top of it all."*

A committed ward manager might be expected to prioritise selecting staff who might have the greatest impact on the intervention when they return to the ward. However, the ward manager described above appears to attribute little value to the intervention or to training staff for the intervention. He sees the time allocated for training solely as an opportunity for time off and selects staff accordingly.

6.3. Overarching Theme - Agent-Related Factors

Agents are individuals and teams involved in all aspects of the intervention. They are the ones who get things done and either drive the intervention or resist it. Evidence from the transcripts demonstrates that the existing culture can impact workability or overcome barriers and resistance since it influences the actions and beliefs of the agents involved. A culture that does not support the processes and changes required by the intervention can act as a barrier. Where this occurs, efforts should be made to achieve the necessary culture shift. The perceived effect of problematic cultures raised during the interviews and evidence, in the form of quotes, was explored earlier in (Section 6.1). Agents' attempts to promote a favourable culture to increase the overall workability of the intervention are described later (Section 6.3.2.4).

An examination of the complete transcript identifies two themes associated with Agent-related factors.

First is Commitment, which is the extent of support for the intervention.

Second is agents acting as key drivers for the intervention's workability, which is how agents overcome barriers and drive the implementation process.

Just as reflexive monitoring plays a role in adjusting the intervention to align it to the original aims and objectives, reflective practice is important at the individual agent level (Section 6.3.2.2).

6.3.1. Theme Commitment

Participation will be less than optimum without the commitment of at least a core of individuals who have buy-in to the aims and objectives of an intervention and who actively want to implement it. A degree of commitment is essential to prepare for any intervention, its implementation, and its long-term sustainability. Within the limitations of the available quotations in the data, set answers were sought to describe the process of commitment, focusing on the following;

who are the agents involved,

why they bought in/ became committed,

When the commitment was made during the implementation process (i.e., preparation, during the implementation, normalisation/sustainability),

what actions were undertaken by committed agents in the implementation process?

The next section covers the factors that elicit resistance and deter the development of successful commitment and possible actions the agents may take to restore commitment and the workability of the intervention(Section 6.3.2).

Before examining the role of commitment to the implementation process, the impact of recent media awareness on public opinion as a whole related to coercive interventions must be acknowledged. Incidents include those reported during the institutional abuse at Winterbourne, the ATUs, and the death of Olaseni Lewis mentioned previously (Section 6.2.2.2). Following these incidents, the combination of public opinion and official government guidelines resulted in an increased push for a reduction in coercive interventions and a rethinking of the treatment of patients.

Such public and governmental pushes can act as external drivers and result in increased levels of commitment among individuals at the senior managerial level to reduce coercion interventions and restrictive practices.

(01B) *“Because in every mental health provider, restraint was on most of their risk registers, it was a really quick buy-in really. Because they were looking for something... it met a need that was urgent for some.”*

Commitment is needed during the early stages from agents with sufficient power and influence to support the implementation process by making the necessary policy changes and facilitating the availability of staff and resources.

(02C) *“I other thing we did was we really got the buy-in of the chief executives and the senior leaders of the trust, but particularly the chief executive...I think that was really*

very important. Because, you know, if you're looking to have access to resources, you know, if you don't have buy-in from the senior leadership, that makes life more difficult."

(12B) *"The other part of the preparation, I suppose, is budgets. We were luckily very well supported in that the CEO (Chief Executive Officer) at the time wanted to ensure we had everything in place...I think having leadership support, financial support, and the right people training it. I think those were our biggest preparation measures, if anything."*

Having buy-in from senior management can aid access to resources and help when an intervention may require changes to established policies. Policy changes help to bring all policies and objectives into alignment, which is important for effective team working. The following quotes illustrate some examples of policy changes:

(05B) *"We have a change to our policies, so now it matches that the first approach is to use calming down methods, de-escalation, things like that."*

(13B) *"So there's a suite of policies that within our quality framework and our governance arrangements are regularly updated and reviewed in line with good practice. And sometimes, that might be a response to practice; so, for example, if we are looking at something that is not covered in the policy, then we need to ensure that it reflects national guidance and if it's going to happen in practice, then we include that."*

(13B) *"So, you know, one example might be something like mechanical restraint. If your policy doesn't include that, but there's an area of practice that might be using it, you've got to make sure that it's included in your policy. So, it's making sure those processes are really robust and strong and that all our policies are reviewed to reflect national guidance and legislation."*

Senior management can help facilitate these policy changes.

(14B) *"The values were in place, the organisational priorities were in place, and we had the resources. I think the organisational conversation was taking place, but what it needed was a policy to underpin all of that."*

Senior management can therefore contribute by providing the resources and supporting the necessary policy changes. To successfully achieve this contribution, commitment from senior management does not necessarily have to be demonstrated as 100% active, hands-on participation. It may be sufficient to commit to simply giving official approval to the intervention's requirement; however, senior management can also be much more actively engaged. The following two quotes are examples of the different extents of involvement:

(17B) *"Yes, they [senior management] were involved in it, but they were not formally part of the group to drive it...there was buy-in from the top, but they were not directly involved in carrying out the interventions."*

(02C) *"I think the other thing that was absolutely instrumental in driving the project forward as it was the clinical director's baby...That had a very big, you know, he was*

able to...whatever it be, pull the strings; maybe get some money from the budget, all those sorts of things."

Irrespective of the degree of hands-on participation, having the commitment from senior management defines the implementation as a priority during the preparation and the intervention's implementation and helps keep it a priority by facilitating its sustainability.

(14B) *"I can't emphasise enough the importance of having someone right at the top of the organisation who continually promotes this as a priority..... but what we've had is a chief executive who has constantly talked about this process and continually references it in social media and then in his messages to the trust. So it's very much kept it prominent in people's minds."*

Management participation in projects commonly consists of designated senior personnel and sponsors appointed to help facilitate the implementation on the ward and support the team.

(06A) *"Every ward has a sponsor, who is a senior person in the trust who can help guide them through some of the barriers they may face."*

(09B) *"For every project, there is a senior sponsor, and that is someone within the trust ...So when the team face any blockages, or we can't do this because of such and such, or you know, we need a bit of finance to do some...a certain idea, then they can go to their sponsor, and their sponsor is there to try and unblock anything and to give them that autonomy, and to say, go ahead and make some changes and I will support you. So that role has also been very key."*

Ultimately, however, getting commitment from the individuals on the ward who are involved hands-on to start the implementation is essential.

(02C) *"Getting the buy-in from staff, winning their hearts and minds, that was really important in the first instance."*

Compliance cannot be enforced, and gaining commitment to "winning their hearts and minds" can be complex and involve many factors, including ownership, preconceived ideas, trust, and culture.

(11B) *"You could go in and force change, sort of say, right, there'll be no more of this, there'll be no more of that. But I think that really just drives the practice underground, you know, so people will still do what they've come to do if they feel they can't be truthful or honest. So, I suppose it's about that honesty or relationship that you have with your staff and your staff teams. And you know, not trying to force change, but to bring people into implementing the change themselves."*

Commitment from influential individuals who act as champions for the implementation is valuable. It is also helpful to spread the commitment to the rest of the ward; however, ultimately, buy-in from the team implementing the intervention on the ward is also needed.

(02C) *"...well individual champions...particularly ward managers who were really behind it and like, so...individual champions. And then...but you also need the buy-in of the teams as well, engagement and commitment of the teams. I think you need*

both...It's no good if you've just got individual...if you haven't got team buy-in, then, you know, individual champions aren't going to be able to effect change on a large scale, really."

Commitment from management is essential to start the interventions and facilitate its successful long-term implementation. Commitment from the ward staff and those participating hands-on is essential to make the changes and implement the intervention.

The third category of individuals involved in the intervention is the service users. A service user is distinguished from individuals and experts-by-experience who are part of the implementation teams and who present their experience of restrictive practice from a service user's perspective. Explaining the intervention to the service user lets them know why it is being implemented and increases the chances of compliance.

(02B) *"So preparation, answering all those questions, giving people information,...including the patients. In fact, massively including the patients is crucial. And I think you can spend three to four months doing that and you haven't wasted a day because the minute you start...then you've got the ground swell of people who know what it's about, you've almost...you haven't won the battle because there's an awful lot to come, but you're in a much better situation than otherwise."*

6.3.2. Theme of Agents as Workability Drivers

Agents, both as teams and individuals, are the means by which an intervention is implemented. Given adequate resources (Section 6.2.2) and a well-designed intervention (Section 6.2.1), their actions contribute to gaining commitment. The quotations presented in the section above (6.3.1) demonstrate that achieving and maintaining commitment is a major agent-related factor. This section presents examples of how agents impact the implementation and how they have attempted to overcome barriers and resistance that have prevented or hindered commitment during the implementation process.

6.3.2.1. Agents' Role in Getting Commitment

Obtaining the commitment from individuals to make changes is not easy, but it is helped if the individuals feel they have been allowed to have input and are helped to make the required changes.

(10B) *"And I just think, yeah, that 100% the best way of getting people to make changes is allowing them to have ownership over that change and have their ideas be heard and valued and supported."*

The support of committed management can help drive commitment throughout the institution. Some managerial commitment is essential to facilitate the implementation process and prioritise the intervention. Appropriate support may even help nurture a latent

commitment to the principles of reducing coercive interventions already held by some of the staff, as demonstrated in the following excerpt:

(14B) *"We had a group of people who were passionate about this issue right at the onset. It didn't necessarily have a great deal of leverage in the organisation because when it wasn't a priority...people who were saying we need to do things differently, they weren't that prominent."*

Management's role is crucial to facilitate the logistics, approve any changes, and help the ward teams deal with the practicalities of integrating the intervention into their routine practice.

(09B) *"...someone senior within the trust in a managerial role, who has got that authority and that autonomy to assist the ward in making changes that will enable them to meet and to carry out the logistics of the project, but also changes that they are thinking of implementing on the ward and giving them that autonomy and ownership to be able to do that."*

The leadership providing teams with a degree of autonomy helps promote a sense of ownership, fully engages the ward staff, and increases their level of commitment.

(04A) *"We see in really good organisations, managers, particularly ward managers, really focused around reviewing every incident with staff involved and the team, and then organisations that aren't getting that leadership drive. We see incidents are reviewed sometimes, rarely, or not at all. So again, to me, it absolutely comes from the top down."*

This quote also emphasises the role of managers in establishing an effective team comprising managers, ward staff, and the implementation team.

Commitment from senior leadership and seeing them as part of the team also facilitates acceptance of the implementation by ward staff, some of whom may be reluctant to agree to something not previously approved by management. This could occur during preparation when they were introduced to the planned changes and while new protocols were implemented during the intervention. The knowledge that the top management is supportive and part of the team is enabling in any situation with an inherent culture of hierarchical top-down structure.

(07B) *"I think all I could see is the staff were a bit wary about, well, will the executive support this sort of work? ...Mental health seems to have quite a hierarchy of permissions. And I think that's something that...but I just have to let staff see that any work we are doing, we'll get support from the executive team."*

The transcript data clearly show that teamwork must be an established embedded part of the culture. A lack of evidence or belief that effective teamwork exists can act as a barrier to successful implementation. The establishment of a teamwork culture is explored further in section 6.3.2.4.2.1.

The evidence presented above demonstrates that top-down management effectively facilitates the implementation process. However, without careful handling, over-directive top-down management could stop the ward from developing a sense of ownership and ultimately affect levels of commitment and impact on sustainability.

6.3.2.2. Agents' Roles in Overcoming Barriers and Driving Workability and Sustainability

The transcript was screened for examples of resistance to identify the barriers faced by the agents during the implementation process. Sample quotations from the interviewees about the factors perceived to cause resistance are presented in Table 11.

Cause of Resistance	Quotation
Culture	(01C) <i>“There is sometimes a culture that develops of control and power. I think...there is going to be an element of old-school staff that still have those beliefs that people...should still be controlled and restrained. And that often is a barrier to trying out new ways and innovative ways of communicating with people who are distressed.”</i>
Lack of Resources	(10B) <i>“I think there's a lot of that; oh, I've just been too busy. The questions that have come up at the learning events where we've done the kind of shared discussions, things like how do people find extra time to do this.”</i>
Lack of Communication	(14B) <i>“We were never saying to people that physical intervention could never be used, but some clinical teams took that as the message from the organisation, so we had a lot of resistance based on that.”</i>
Lack of Buy-in/Value	(02B) <i>“If you get sabotaged, you know, directly kind of interfering with it...sabotage is also, you know, you're sitting in the office, and you're doing something...and I get somebody...I hear somebody say to junior nurses, ‘oh, why are you bothering with that?’ “</i>
Lack of Team Support	(01B) <i>“This particular ward had three consultant psychiatrists as well as two other psychiatrists from another area, but the whole week was taken up with consultant CPA reviews. So the staff were just feeding the machinery, and there was little time to do any interventions with patients, but management did not tackle that power dynamic.”</i>

Table 11. Sample Quotations for Incidents of Resistance.

An analysis of how agents attempt to overcome barriers to the implementation process fell into two broad categories, mobilisation of resources and facilitating a culture shift.

6.3.2.3. Agents' Role in Resource Mobilisation

Resources as a subcategory of intervention-related factors were described previously (Table 9). Of the four resource factors considered (space, funding, time, staff training/information programs), space is a fixed commodity, although its restriction may still result in problems (Section 6.2.2.1).

Funding in public healthcare systems usually comes from external sources such as the government (<https://www.kingsfund.org.uk/publications/how-health-care-is-funded>).

Therefore hospital management has limited control over the budget but can make some decisions about how the funding is spent. The implementation team can help mobilise resources by ensuring that management prioritises spending for the intervention by presenting them with a strong case for why spending is required on an intervention that is needed!

(15B) *"It needs to be something again that's supported, not just...that would be a nice thing to do, but actually something that is co-produced between the staff, the patients, relatives, and carers, everybody really. I think anyone who is in charge of the money is hard pushed if they come up against something that really is difficult to say no to."*

Another method to help tackle funding limitations and help sustainability by reducing the long-term cost is providing some in-house training.

(04B) *"It cost a lot of money for that specialist course. I think there would be a way of doing that in-house...Some of these specialist training courses are way overpriced. It's just not realistic. We've got hundreds and hundreds of thousands of staff...that's a massive cost implication. So, we'll have to do that in-house."*

A combination of these two approaches is shown in the following quotation, highlighting the need to create a business case.

(15B) *"So, what we did was just again get really, really creative with actually what resources we've got within our grasp and also with what's lacking across the trust that we can generally source externally for free. We've pushed some recognition as well that sometimes things do need to be paid for, but we've had to put a business case forward for that."*

Funding also relates to staff pay, which is government-controlled in public institutions and out of management's control. In the transcripts, the following quotations were the only ones that directly referred to staff wages when discussing causes for resistance and dissatisfaction.

(05B) *"So what they argue when we're talking about de-escalation and this approach is that it's too time-consuming...they want some more staff members, and they want some more money. They want to be appreciated by the management, so in a way, they want to change, but they think it's too hard to work with it because they don't feel appreciated."*

(05B) *"They like to work in this way, but they hate to be too busy, and they hate that they don't get enough money for their job, and so it's difficult for them to make a difference because they feel low-paid. They feel they're busy. They have a struggling job, and they're not appreciated by the government."*

In both examples, it should be noted that it is not the pay alone that is the cause of dissatisfaction; it is discussed in combination with concerns about lack of time and appreciation. Therefore, although management may not be able to authorise pay increases,

changes can be made to help alleviate the time restraints and ensure that staff are appreciated and recognised for their efforts. Increased appreciation and recognition will help increase the commitment among the staff.

(05B) *"Because people want to work like this if their colleagues like them and they are having feedback and they're feeling appreciated."*

Even small changes can make a difference. Meeting with staff and asking for their ideas shows their input is appreciated and recognised. In the following excerpt, awarding chocolate for the winning idea provided an incentive and additional recognition.

(08B) *"And we just got that idea through meeting with John Baker and getting a few of our staff together in a room and sort of saying, 'right, the implementation's gone to this point, now we need to start thinking about how we can reinvigorate it.' And we came away with that idea, and it has gone down really well. So...there might be a challenge for the week or something. But yes, they've enjoyed the recognition of winning, and they've enjoyed getting some chocolate."*

The third resource identified is time, and the perceived lack of time to implement the intervention was often referred to in the quotations as a potential cause of resistance. The following transcript suggests, in the speaker's opinion, that time was probably the most relevant of all the resources.

(03B) *"I: Did you require extra resources?
R: I mean, it would have been nice to have more time with the staff and them to have more time to do it [REDACTED]-wise, I suppose."*

The transcripts document two specific methods used to help alleviate the time constraints. The first quotation explains how time was allocated to staff to implement specific activities.

(08B) *"But if we're asking somebody to make a clinical improvement and it is part of their role...staff are provided with protected time on our wards, sort of an hour a day when they're on the short shift, and part of the use of that is outlined in our local systems and processes and is about service improvement...In terms of the time required to implement [REDACTED] a lot of it is around that generalised discussion within the team, I think, forward-level staff. And actually, anything else that they're doing that needs time."*

Moreover, the second refers to the arrangement of away days where staff would have the opportunity to discuss intervention-related issues.

(03B) *"Well, giving them time, but again, it's difficult, that it is. We've found that getting staff away for the full day, just actually getting them away from the unit, is helpful if you want to talk to them about things and you want them to engage them. So we've just done a massive thing on care planning, where we got a lot of the staff away from the unit. That way, it's difficult to be drawn back into the clinical load. So that was beneficial...the better we engage people in the first place, and we keep maintaining that engagement, the more inclined people are to sustain it."*

In addition, some sponsors went further to support the staff.

(10B) *"But that's something else where sponsors have been really noticeably good is where they have actively said to teams, 'we can give you money to pay people to come into meetings on their day off, or for supernumerary time.' So, you know, they might give people half a day every couple of weeks to concentrate on it. There are teams who already have really good structures in place like they'll have half-team away days every month, so they'll swap over each time. So, we've been able to come into that and kind of meet with the whole team."*

The availability of appropriate means to educate and inform staff about the intervention can be considered a resource. These include away days; described in the previous quotation, pre-implementation training, face-to-face mentoring, and a system for obtaining feedback so misunderstandings can be addressed, and all need to be arranged. Additionally, refresher training and training for new staff should be available to help ensure sustainability; training is not just a one-off pre-intervention event.

6.3.2.4. Agents' Role in Facilitating Culture Shift

6.3.2.4.1. Culture Shift

Hospital organisational cultures are complex and often include multiple interrelating sub-cultures (Doyle et al., 2016). The existence of established cultures being potentially problematic has been discussed earlier in Section 6.1. Problematic cultures are also listed in Table 10, including a hierarchy of control and power, a blame culture, and a reactive rather than proactive culture. These established problematic cultures were perceived as causing resistance and acting as barriers to implementing the intervention. They were the most frequent cause of resistance referred to by the interviewees (Table 11). These cultures are potentially problematic, especially if they are already embedded in the institution.

The challenge is to create a cultural shift where there are potentially problematic cultures. If a problematic culture is allowed to remain, implementation, even if initially successful, will ultimately likely fail, and the intervention will be unsustainable.

(05A) *"Yes, you can get change. I think it is much easier to get change than it is to sustain change because people tend to drop back to what they did before...because it is familiar, not because it is better healthcare...I also think some of the fundamental issues around...kind of power threatening psychiatry, as biomedical psychiatry disempowers service users, but I actually think it to some extent disempowers nurses."*

However, unembedding an old culture and replacing it with an alternative culture takes time and should not be rushed. Any change may meet with resistance.

(03B) *"It's about staff engagement. I think the second time I did it when I came to [REDACTED]...I think I was impatient because I think there was a lot of pressure that this just needed to be done, and it was, like, right, this needs implementing in six weeks. I*

always maintained this isn't a six-week venture. This is, like, you know, it takes four years for a culture to change."

The following section presents examples, from the transcript data, of how agents have attempted to address barriers to the implementation process by targeting problematic cultures and establishing more supportive ones.

6.3.2.4.2. Establishing a Culture of Reflective Practice

Reflexive monitoring and self-reflection can form part of a culture with active reflective practice. Reflexive monitoring consists of observing changes occurring during the implementation and then analysing and reflecting on why any changes or variations have occurred. This is followed by any adjustments and is essential to ensure that everything aligns with the original aims and objectives. It should be noted that although this process was described during the interviews, the term reflexive monitoring was not used; participants referred to the processes as reflection within a team. Reflective practice helps normalise openness within teams at all levels and breaks down some rigid established hierarchies.

(08B) *"I think it's just enabled that real openness in talking about practice in a really constructive way of challenging people. I don't think it's had any negative impacts on team dynamics. I think more just an openness to talk about things and reflect upon our own behaviour but between the team rather than it needing to come from above. And I think by the teams owning the work and that being at all levels, I think it's just allowed less hierarchy, really, when it comes to challenging and reflecting."*

Self-reflection is a well-established part of the nursing process (Davis, 2018). It is a self-monitoring method which can help individuals to recognise where their actions have either helped obtain a positive outcome or have acted as a barrier.

It is particularly important after a negative event (such as patient aggression or using restraints) to explore possible opportunities to avoid a negative outcome (Davis, 2018). The following quotation refers to this need for reflection.

(04A) *"After that incident, because it's an exceptional incident...it should always be reviewed, and the staff should be asked questions. A ward manager should be using the simple reflective framework...what, so what, what next?...Tell me what happened. Why did you find a need to use restraint? Why did you choose seclusion over medication? Why was...? So not why, as in you've done something wrong, but let's reflect on why we got there. What circumstances led to it? And what's been the impact?"*

Agents achieve this move towards reflective practice by meeting with teams and individuals and getting them to stop and think and reflect. Where individual staff members disagree or fail to see the value in what is being asked of them, they cannot commit. Encouraging reflective practice can be used as a mechanism to overcome resistance.

and power) and drive the establishment of more supportive cultures (person (staff)-centred, learning culture, proactive culture, patient-centred, and team culture).

6.3.2.4.2.1. Shift to team culture

Reflective practice can help reduce a hierarchical power/control culture and establish a more collaborative, less hierarchical team culture.

(08B) *"I think it's just enabled that real openness in talking about practice in a really constructive way of challenging people. I don't think it's had any negative impacts on team dynamics. I think more just an openness to talk about things and reflect upon our own behaviour and between the team rather than it needing to come from above. And I think by the teams owning the work and that being at all levels, I think it's just allowed less hierarchy, really, when it comes to challenging and reflecting."*

Reflective practice can also help overcome some barriers or resistance associated with the hierarchical control and power model.

Some resistance was reported concerning service user involvement. The following quote describes a scenario in a ward where there was an apparent rigid hierarchy, and the input from the invited service user was basically ignored.

(10B) *"So another ward I go to...I was really worried. It was all far too senior, the project lead is like the hospital manager...But the difference with this other one is that they just don't encourage that at all. And even when people come in... a couple of times, they've invited service users to come in and talk. But the first time, the guy had just really useful things to say about his experiences and ideas that would help, but then straightway one of the doctors started talking about the data and the driver diagram...the service user didn't know what those things were, and nobody stopped to explain it. So I was, like, 'do you want us to explain it?' And he was, like, 'no, I'm going, I don't understand this.' So, he left. But it felt like he took all of what he said with him because they didn't acknowledge anything. And I was, like, 'well, let's talk about some of his ideas.' 'Oh, no, no, no, we haven't got time left, we need to look at the driver diagram.'"*

The interviewee sums up this scenario by saying:

(10B) *"So it's all, I would say, a bit tokenistic and a bit too formal, not done in the right way."*

Tokenism is a form of non-confrontational resistance. Those in power within the hierarchy have allowed the inclusion of experts-by-experience, paying lip service to the ideas of government-backed expert-by-experience programs while using the same power and influence to ignore any input from them.

However, a reduction of hierarchical power/control and an increased teamwork culture help facilitate the introduction of service users as true contributing members of the team, as illustrated in Figure 15. Including service users as part of the implementation team is

important since it introduces the staff to the patient's perspective and enables them to think and reflect on the effect of coercive practice.

In another interview, the interviewee said, when asked what changes they would make to improve the implementation process if they had the opportunity to do it again.

(17B) *"Yes, I would get more champions quicker, and including service-user champions a lot quicker."*

When asked, as a follow-up, "What benefits do you think more service user involvement would bring?" the response was:

(17B) *"They are more experienced because they are at the receiving end of whatever coercion and restrictive practice. They've had more experience in terms of being part of it. So, the benefit would be that they will be able to question if it's been imposed on them or it's been imposed on people around them, other service users. So, they will question it a bit more and be able to raise it so that staff will think about what they are about to impose...They will see the impact of what behaving in a kind of way would cause and how it will...it may cause coercive practice."*

Also, Figure 15 shows how achieving a team culture supports the implementation process as it can help overcome some of the disconnect problems between the management and ward, which can develop into resistance.

(04A) *"Our experience is when you say [to senior management] trained in what, typically, they say, 'oh, we have a package around managing aggression and violence.' Okay, and then if you say, 'and what does that package actually teach the staff?' the answer we commonly get is, 'well, it teaches them how to manage aggression and violence.' In other words, at a senior level, the training itself hasn't been authorised and approved. The senior leaders aren't necessarily aware that it's primarily physical-based and it's not preventative-based."*

In this example, the senior management is unaware of the type of training package required, nor are they aware of what is being delivered. Effective teamwork would ensure that all (from the management to the ward) would have been consulted about the choice of package, all would know what was chosen, and all would give feedback on how useful (or not) it was so that changes could be made in the future if required.

6.3.2.4.2.2. Shift to patient-centred culture

Initial training sessions have been changed to help shift the emphasis from power and control over the patient to a patient-centred culture.

(14B) *"It's not spent in a gymnasium practising how to hold on to people; it's getting people to do classroom-based theoretical work, looking at their own values, their own approaches, and the human rights-based argument for care. And listening once again...to people who use the services, who are outlining their experiences for particular restraints and the re-traumatising effect that it's had on them...I think that's hugely influential. We do that training once a year. We get a captive audience of our ward teams, and it's a real chance to impact on culture."*

Interviewees have described the advantages in positive terms of having training that has moved away from physical restraint training to lectures designed to help staff reflect on their own values and clinical roles. In addition, service users' lectures describing their experiences further encourage staff to reflect on the relevance of past routine practices. Implementation teams now normally include experts-by-experience service users who co-produce the material. Including narratives by experts-by-experience is designed to have the maximum impact on the audience to think and reflect.

(14B) *"Importantly for us, they were co-produced by people who have used services and people who deliver services. And the central theme of those sessions was the lived experience narratives of people who had experienced physical restraint. And what those sessions did was enable people to tell their stories about just how traumatic physical intervention was for them because I think we believed, organisationally, that what we had to do was not just tell people that they had to change what they were doing, but to win over their hearts as well as their minds. So, we wanted to have an emotional impact on the staff so that they understood just what the impact was around some of the interventions they were using, and we felt that that had a high degree of success."*

Staff being able to reflect on the patient's perspective can help develop a more patient-centred culture (Figure 15). In the following excerpt, the interviewee expresses awareness of this cultural shift.

(16B) *"I: Were there any noticeable shifts in authority or empowerment to any of the team members or even the service users?
R: I think for both sides, definitely. I think that we worked more in collaboration with patients...you know, the patient debrief...We were also moving with the practice in that regard of patient-centred care and being involved with care planning and risk assessments and, you know, have they got copies of the care plans and...so I think again things weren't done for patients, they were done with patients."*

The patient-centred approach increases staff awareness of what might trigger an individual patient and the approaches most likely to help calm them down.

(02A) *"It's all about a patient-centred approach and a trauma-informed approach. If we can know people well enough to know what is really going to wind them up and know what is really going to help them calm down. [It's] about having a skilled workforce to do that."*

In a blame-focused culture, strengthened by a power/control hierarchy, the patient is blamed for failing to comply with the expected behaviour (aggressive or otherwise), and references to this type of culture were present in the transcripts. The patient-centred approach can help move the culture away from blame-focused towards one which focuses on what triggers the patient.

(05B) *"They can have a culture where they can discuss openly the methods they are using and thereby get rid of the corrupted culture [the blame culture] where they are,*

for instance, showing the patient to a room because he is not eating properly or things like that.”

In addition, developing a culture where there is a reduction in the tendency to “blame the patient” and increased awareness of what affects them can establish a proactive rather than reactive approach to patient care (Figure 15) (Table 10).

Reflective practice is essential in post-incident reviews and patient care plans. The post-incident review is a major part of best practice guidelines (NICE, 2017), where the team members reflect on what happened, why it happened, and how it might be better dealt with. The next quote emphasises the practical clinical benefits of implementing these guidelines:

(13B) *“Making them aware of different ways of working and what alternatives there are... is around, sort of, reflective practice, it is around post-incident review. So, for example, if you do get restraint incidents, this is where your learning comes from as much as it is supporting staff. It is around reflecting on the management of that incident and whether that could have been done differently or not.”*

Preparing patient care plans jointly with staff and the patient also requires reflection. Establishing this type of plan preparation as part of the normal routine helps create a proactive culture and drives the implementation of coercion reduction interventions.

(03B) *“People feeling more, I suppose, united. There’s a lot more thought going into how we can reduce restrictive interventions and how we can, you know, make a better experience for the service users within that in the way that we proactively care for people. And that takes greater thinking. It requires a collaborative approach for the MDT, it requires collaboration with the service user at the centre of it, it requires difficult conversations, but it requires an MDT approach and, you know, recording a robust plan of care based upon all of that, and I think, well, it’s just really empowered the nurses, I think.”*

6.3.2.4.2.3. Shift to a proactive culture

The establishment of reflective practice facilitates proactive care, which can help drive the culture shift from reactive to proactive (Figure 15).

(03B) *“When you’re trying to get it from being a reactive firefighting service with a siege mentality...it’s difficult to change people’s perspectives into proactive because it’s getting people to understand that firefighting takes almost as much work as working proactively. It’s like, well, we’d have to spend all of this time, and then we’re going to have to do this, but, you know, if we stop firefighting, we can turn this around again....we can work completely proactively...We’re going to work proactively in avoiding people escalating, and therefore, it’s going to reduce the restrictive interventions that are used. So that’s been it for me; it’s been having those people, the right people in the right place to talk about it at the right time and engage the staff, get them involved, getting them to understand it, getting them involved in doing it, and then taking it from there, really.”*

This last quotation discusses the transition from reactive firefighting to proactive care. It emphasises the need for one-to-one interactions with staff to help them accept the proactive approach as a viable alternative to more traditional reactive approaches.

6.3.2.4.2.4. Shift to person(staff)-focused culture

One type of reflective activity is supporting ward staff at an individual level and discussing their views and issues to increase their commitment to the intervention. The discussions are one-to-one. They ask for input and address issues of resistance and represent a person (staff)-centred approach (Figure 15), the outcome of which helps strengthen the development of a learning culture within the institution and commitment and ownership of the intervention.

(05A) *“Well, it is always important to work at the individual ward level to prompt them to... We have used approaches which are more akin to patient-centred approaches. We prompt staff to reflect on the issues involved and then develop a series of initiatives at the ward level. So ward X might be doing something slightly different from ward Y, and ward Y might be doing something slightly different from ward Z. It is critically important that these initiatives are owned by the staff. We are less interested in homogeneity and more interested in ownership and that what’s developed locally is more likely to work locally”.*

Typical concerns on the ward when introducing an intervention designed to reduce or remove the use of restraint are risk and safety, both for the staff and the patients. Staff support and one-to-one discussions can help defuse these concerns.

(04B) *“For example, leaving juice and some snacks for patients might seem like a trivial thing, but that never happened before. People had to go and ask for things. It was very restrictive. We’re doing the complete opposite to that, less restrictive, [such as] giving patients chargers for their phones rather than having to go and ask for a charger for your phone because of ligature risks. It’s a whole different mindset of how you work, so it needed a lot of support to do that. Staff would be cautious of introducing something different because they’d always worked in a certain way. It’s just historical. Mental health was very much restrictive. Everything was kept locked. Everything was kept away. Patients weren’t allowed this, and they weren’t allowed that. This is a completely different way of working where, well, why can’t we let them have it? Why don’t we individually risk assess it? What’s the risks? What are you scared of? It’s about checking things out. The old way of working would be that you’d have one incident where somebody had strangled themselves with a charger, so that meant that for the next five years, nobody was allowed a charger rather than, that was a one-off, never happened again in five years, why are we still restricting people? Do you know what I mean?”*

The quotation above describes staff’s caution and reluctance to try something so different from the old way of doing things, especially when they see it as potentially risky and possibly a safety issue. The type of questions that staff ought to reflect on when challenging long-standing blanket bans (such as access to a charger) are outlined in the following scenario.

(04B) *"Why can't we let them have it? Why don't we individual risk assess it? What's the risks? What are you scared of?"*

At the end of this scenario, the interviewee emphasised the need to support staff through this process and to be aware that they have leadership support.

(04B) *"It's that sort of mindset, I think, in mental health that was always there. It wasn't that staff were being punitive. Staff were just being...well, they were just wary of risk and scared. If you're being asked to take away that and be positive risk-taking, you need to know that the leadership team is behind you and everybody's supportive of it; otherwise, staff won't do it."*

Without this reassurance and support, many staff would not be prepared to take risks.

This one-to-one approach to encourage reflection and shift opinion isn't only applicable at the ward level; one interviewee recalled a scenario where it was effectively used to persuade senior management that the number of restraint incidents occurring during the month wasn't the entire picture.

(04A) *" I would present a numbers-based report to the board, and if those numbers were going down, the board, inevitably, would say, 'that's really good and pass on our thanks to the staff for all their hard work, that we're actually reducing restraints.' And then the next board report had arrived, and I'd go back, then I'd almost be on the back foot, under the spotlight, because the board would want to know why the numbers have gone up and what was it that staff were doing wrong? And the real answer was the staff weren't doing any different. We had a different mix of patients and the current population we've got, and the mix and the dynamics mean we're having a lot of incidents. And it's not necessarily a conflict between the staff and the support we're offering, the conflict is actually between two or three different patients who actually don't get on, but we're having to manage the consequence of that. And that, to me, was lost on the board because they weren't thinking of the wider system and the measures of success; they were purely focused on the target. So, using control charts, like flattening out the variances so that people can understand it's not just this peak-trough, peak-trough."*

6.3.2.4.3. Sustainability

The final measure of the success of an implementation is its sustainability. The need for sustainability and its challenges were raised during the interviews.

(13B) *"So the sustainability part certainly is a challenge, and that is where you need your frameworks in place to be able to monitor those, and if there are areas that need additional resources or additional support or maybe just to work with leadership, that does need to be encouraged."*

Once the intervention is operating, even when most staff are committed, and there is no active resistance or significant barriers, evidence from the transcripts indicates that continuous reflexive monitoring of the process is necessary to achieve sustainability.

(13B) *"And one of the challenges is sustainability because...the danger is if you take your foot off the pedal that a lot of the old restrictions and rules and ways of working quickly come back in."*

Similarly, a support mechanism has to be available for staff, including new staff who may join, to help address any problems that may arise.

(03A) *"A regular check with people on the floor...how are you...how's it going...can you implement this...does it feel meaningful? And also sometimes they give suggestions about something there should be more of on the course for refreshers or less of...so it's a bit like that...it's not a systematic basis...it's more like a dialogue with nurses continuously."*

(13B) *"So, for example, after three to six months, we would actually do a ward visit just to support their implementation of [REDACTED] and just to re-motivate and support that sustainability."*

Long-term sustainability is challenging, and a drop-off in enthusiasm is quite common. However, it is important to keep following up on what is happening to ensure the process stays within its goals by regular reflexive monitoring and realigning if necessary. It is also essential to ensure that staff are well supported and engaged through regular meetings, such as those described in the following quotation.

(15B) *"In any team or organisation, sometimes there can be a bit of a risk that actually when something is working then actually it can almost fall off. People sometimes take it upon themselves to stop things just because they can go, 'oh well, we've achieved that, tick, thanks ever so much.' But the way that I encourage the staff here, apart from obviously clear clinical guidance and leadership at all times, is that keeping it fresh, it's keeping people involved in terms of what their expressions of how they've actually felt. And again, that's like I say with the community meetings, with the hub circle meetings, with just the one-to-ones. Obviously, in the staff supervision and unit meetings, we have reflective practice every week; that type of thing is actually just to keep the momentum going. But within that, I think you need leaders and people who have got a bit of vision and a bit of excitement about them, really."*

The follow-up has to be regular and ongoing, not only at the ward level but throughout the institution and neighbouring institutions.

(05B) *"We are sitting together four times a year, discussing what to do next, how do the data look, how are the staff members, what do the patients say? And then we have another group, kind of working group or kind of good idea group, including staff members, service users, different persons from our hospitals, and then they are discussing or giving ideas as what to do next. So, we try to have this implementation process as a part of the strategy in our region in order to get rid of coercive measures."*

Follow-up helps to catch problems early and maintain motivation and interest in the intervention.

Summary

In summary, from the analysis of the transcripts, the most important driver is commitment, and adverse embedded cultures are the primary causes of resistance. Reflective practice positively impacts achieving a culture shift towards a more patient-centred, proactive culture

that aligns more with coercion reduction programs. The sustainability of a successfully-implemented intervention is best achieved by reflexive monitoring to enable readjustments to be made where necessary and monitoring of feedback from the staff so that support can be available if required.

Chapter 7: Discussion

This section summarises and compares the main findings with the literature review (section 4.5). These findings are discussed in relation to the existing general literature on the process of intervention implementation. Limitations of the project are discussed, and topics deserving further research are identified. Finally, the general significance of findings in guiding successful implementation in tertiary healthcare settings is discussed.

Overview

Figure 16 provides an overview of the proposed dynamic implementation process derived from the transcript data.

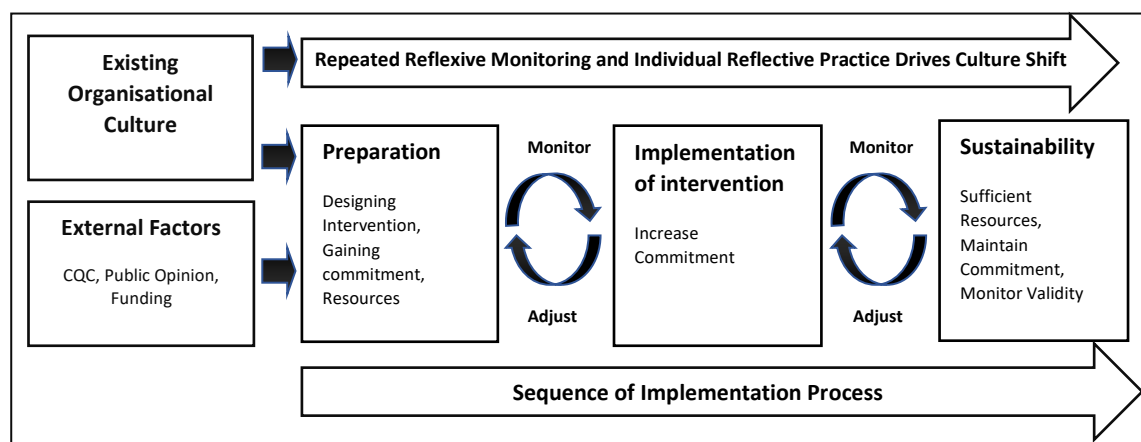


Figure 16. Overview of the Implementation Process Sequence.

Implementation and the required systematic and individual behavioural changes do not occur in a vacuum (Glasgow et al., 2003). The implementation of interventions is affected by the existing external context. Watson et al. (2018) proposed eight factors that contribute to the external context, six of which are relevant to this study: pressure from professional organisations, political climate, public opinion, legal requirements, funding, and the combined effect of all of these either pushing for or preventing, change. Local infrastructure and target population (Watson et al. (2018) are less relevant since this study is restricted to individuals within a hospital, not the external community. The potential pressure from some of these outside factors was described alongside the transcript analysis to provide background and context (e.g., the political and public pressure following the Winterbourne exposé and the funding of mental health services through the National Health Service (NHS)). However, these issues are outside of this study's remit.

The intervention's implementation is also affected by the existing organisational culture. The relevance of these existing cultures is explored since it occurs within the hospital and is frequently referenced in the transcript data. In Figure 16, the top horizontal arrow overarching the implementation process represents the facilitation of a shift towards supportive cultures

through ongoing reflexive monitoring by the teams and reflective practice by individuals. An overview of this dynamic interaction is illustrated in Figure 15. The implementation sequence comprises three stages, “Preparation”, “Implementation of the intervention”, and “Sustainability”. Commitment is the common factor throughout this process; gaining commitment during preparation, increasing commitment during intervention implementation, and maintaining a commitment for long-term sustainability.

7.1. Comparison of the barriers and drivers identified from the transcript analysis and literature review data

In the analysis of the transcripts, commitment is the most important driver, and adverse embedded cultures are the primary causes of resistance. Reflective practice positively impacts on achieving a culture shift towards a more patient-centred proactive culture (Naldemirci et al., 2017, Bokhour et al., 2018), which is more aligned with restraint reduction programs. In addition, the sustainability of a successfully implemented intervention is best achieved by reflexive monitoring to enable readjustments where necessary and monitoring feedback from staff to provide support if required.

The analysis of the literature data shows resistance as the main barrier. Almost half of the studies (9 out of 20) reported some form of resistance, although only half specified the cause. We identified three specific foci of resistance to the interventions presented: concerns about safety and resistance to change involving either the social role or the social norm. (Donat, 2005, Friedman et al., 2012, McCue et al., 2004, Sullivan et al., 2005, Taxis, 2002). There were no direct references related to drivers for the implementation process. However, Taxis (2002) credited monitoring by reflective analysis, described as establishing a communication feedback loop, and face-to-face discussions on the ward, as contributing to the observed increased team cohesion and ownership, both of which facilitate the implementation process.

7.1.1. Commitment as a driver

Analysis of the transcripts revealed commitment as the most important driver. A summary of the literature review identified trust, confidence, and a sense of ownership of the intervention as important drivers for implementation. Trust and confidence are necessary for an individual to value the intervention as something worth doing, and a sense of ownership is important for individuals to commit to it. These characteristics were also identified as important from the analysis of the transcripts. Failure to gain commitment or to find value in the intervention were possible sources of resistance and barriers to successful implementation (Table 11).

A major difference among the publications studied in the literature review was whether the intervention was initiated from the top down (management-initiated) (Friedman et al. (2012)

or bottom-up (ward-initiated) as in Sullivan et al. (2004) and in the City Nurse study (Bowers et al., 2006, Bowers et al., 2008, Brennan et al., 2006, Flood et al., 2006). Alternatively, some interventions took an integrated approach involving both the top and bottom (Godfrey et al., 2014, Guzman-Parra et al., 2016, Hellerstein et al., 2007, Taxis, 2002). All three approaches are represented in the literature analysis and can succeed. However, the extracted data suggests that successful implementation is based on the cooperation of senior management to sanction the intervention's requirements.

Top Down (no bottom-up)	Bottom Up (no top-down)	Top Down and Bottom Up - an integrated approach
<p>Pros: A directive from senior management throughout the institution. Compliance can be demanded.</p> <p>Cons: Without active ward-level staff involvement, it may be difficult to achieve buy-in and commitment. There may be a lack of some of the required skills.</p> <p>Possible barriers within teams in linking ward levels and management levels.</p>	<p>Pros: Facilitates buy-in and commitment from ward staff. Awareness of any needs to improve skill sets.</p> <p>Cons: Without active senior management involvement, any intervention relies on individual approval, and fully informed buy-in and commitment may be difficult to achieve.</p> <p>Possible barriers within teams in linking management levels and ward levels.</p>	<p>Facilitates:</p> <p>Synchronous commitment from ward-level staff and senior management.</p> <p>Establishment of effective teamwork.</p> <p>Awareness of staff development needs.</p>

Table 12. Summary of the Advantages and Disadvantages of Different Intervention Approaches.

An integrated approach has the best chance of success (Table 12). Similar conclusions were drawn by Stewart et al. (2015) in a study of the best implementation approaches for a hospital patient safety program. Their study found that an integrated top-down/bottom-up approach led to the best implementation outcomes. In contrast, a top-down approach resulted in lower levels of commitment at the ward level, and the bottom-up approach failed to access sufficient resources.

Half of the studies (10/20) directly expressed opinions on commitment or the value or feasibility of the implementation. Commitment was also discussed in the City Nurse Project publications (Bowers et al., 2006, Brennan et al., 2006, Flood et al., 2006). The commitment of staff to the project's principles was part of the framework for the City Nurse Project (Bowers et al., 2006); additionally, Flood et al. (2006) emphasised that the recorded improvements were due to the staff's commitment to the intervention and change the way things were done. An initial lack of commitment was reported by Brennan et al. (2006), where the implementation team was "often met with a wall of polite, but paralysing apathy"(Page 480). However, through face-to-face discussion and supporting staff, they gained commitment from the nursing teams. Similarly, Flood et al. (2006) described initial resistance; however, commitment

was gained through increased opportunities for the staff (including away days) to discuss their reservations, which helped increase a sense of ownership.

Other papers mentioned the necessity of commitment, some at the managerial level (Sullivan et al., 2005, Taxis, 2002), and others only mentioned the need for commitment at the ward level (Fisher (2003); Thomas et al. (2006). However, Godfrey et al. (2014) emphasised the need for commitment (described in the paper as buy-in) from senior management through all other levels of management and down to all ward staff. Obtaining commitment is important; Scalia et al. (2017) describe it as a precondition for implementation, “Commitment at multiple organisational levels has been recognised as an important precondition for implementation” (Page 8).

Commitment also is a central component of Potential in the ENPT model 2.4.1) and in other theoretical framework models used to study the implementation process, such as the Theoretical Domains Framework (TDF) (Section 2.3.2). A possible explanation for why commitment was a major theme in the transcript analysis but not in the literature review is due to the selection criteria for the literature review, which were for studies implementing interventions aimed at reducing coercive practice and not for papers researching the implementation process. After the study characteristics and intervention details were documented, the final stage of the analysis focused on the accounts of the implementation process and barriers or facilitators to implementation. At this stage, the extraction process was informed by ENPT. The themes depended on what the authors included in their papers. However, the semi-structured interviews were guided by ENPT (Section 5.2) and covered topics relevant to implementation. Questions were not deliberately focused on commitment; for example, the only question that directly asked about commitment was, “Would you say the intervention is driven by the engagement and commitment of individuals, or would you need the engagement and commitment of teams, or would you need both?” This question was posed towards the end of the interview. Therefore, commitment as a major theme does not appear to be an artefact of the question format.

7.1.2. Organisational culture as a barrier and a driver

Culture was one overarching theme identified from the transcript data analysis, the other two being agent-related and intervention-related factors. The organisational culture represents part of the context where the agents attempt to implement the intervention (May, 2013) and, as such, has the potential to interact with both agent-related and intervention-related factors. The organisational culture within hospitals has become a significant issue, especially in the wake of government reports describing serious management problems throughout the NHS.

Reports such as “Culture Change in the NHS: Applying the Lessons of the Francis Inquiries” (DoH, 2015a) and the review by Dixon-Woods et al. (2014) “Culture and behaviour in the English National Health Service: Overview of lessons from a large multimethod study,” emphasise the need for urgent changes.

Analysis of the transcript data showed embedded cultures were a major cause of resistance, particularly cultures which focused on hierarchy power/control or blame, and these acted as barriers to the implementation process. Potentially problematic organisational cultures are listed in Table 10. However, culture was not identified as a major theme in the literature review analysis; some of the studies only mentioned the need for change in attitudes, beliefs, and staff behaviour or culture (Fisher, 2003, Guzman-Parra et al., 2016, McCue et al., 2004) without specifying the changes required. However, most that mentioned culture change referred to a need to achieve a patient-centred culture (Godfrey et al., 2014, Hellerstein et al., 2007, Ray et al., 2011, Sivak, 2012, Taxis, 2002) or a proactive culture (Donat, 2006, Sullivan et al., 2005). Only one study, the City Nurse Project, discussed how the existing culture was a barrier to implementation (Brennan et al., 2006). It was proposed that the existing lack of trust and confidence among some staff led to a risk avoidance culture; staff resisted the reduction of coercive interventions due to fear that they would be held responsible if something went wrong.

Interactions exist between the performance of mental health hospitals and their managerial structure and organisational culture (Konteh et al., 2022). In 2015/16, Konteh and colleagues compared two low-ranking mental health institutions for leadership and inpatient services (based on a Care Quality Commission (CQC) ranking of needing improvement) with two higher-ranking mental health institutions with a good CQC ranking in these two categories (Konteh et al. (2022)). A summary of the existing managerial and cultural characteristics described by Konteh et al. (2022) is shown in Table 13.

	Low Ranking Institution	High Ranking Institution
Managerial Style	Top-down, highly centralised leadership, authoritarian	Decentralised and collaborative
	Reactive	Proactive
	Less visible	More visible
	Low confidence/trust in staff	High trust/confidence in staff
Managerial Focus	Cost saving	Quality of patient care
Culture	Blame culture	Teamwork, inclusivity, support
	Control/power	Learning culture

Table 13. Comparison of Observed Managerial Styles and Culture 2015/16.

The poor CQC report put pressure on the low-ranking institutions to improve (verified by a statement from the Director of Strategy at one of the hospitals); it is also possible that being

part of Konteh's study was additional pressure. Radical changes were made, including replacing the Chief Executive Officer at one of the institutions and extensive culture change programs. These programs targeted education, and particular support was given to managers on how to ensure that management styles were aligned with the revised institutional goals aimed at culture change. For example, managers were encouraged to implement procedures to obtain feedback about ward staff concerns and to act on them. These changes would help facilitate a shift from the blame culture towards one where staff could discuss, reflect, and learn from incidents without the fear of being targeted. This shift encourages establishing a learning culture (Section 6.3.2.4.2) (Figure 15). The management style also became more decentralised, collaborative, and generally closer to the style observed in higher-ranking institutions. The latest CQC report ranked one of the two previously low-ranking institutions as "outstanding" for leadership and general improvement for both. It is interesting to note that according to the CQC report, all four institutions showed low levels of service user engagement. However, by the end of the project, all four showed improvements, reflecting the influence of regulatory bodies such as the CQC to act as external drivers of change. In the hospitals described by Konteh et al. (2022), the organisational culture was closely linked to management style. The highly centralised reactive managerial style displayed cultures that were not supportive of achieving the standards required by the CQC. However, a culture shift was achieved towards a more collaborative learning culture with increased teamwork, closer to that seen in the higher-ranking institution. The interventions used to promote change, the realignment of management practice to fit new goals, and acting upon staff feedback describe the processes of reflexive monitoring. These processes agree with this study's findings that reflective practice was seen as an internal driver for culture shift.

7.1.3. Achieving culture shift

The transcript analysis revealed reflective practice as the major internal driver for achieving a culture shift (Figure 15); this occurred as individual reflection and team reflexivity. Figure 15 presents a diagrammatic representation of a pathway towards more supportive cultures driven by continuous reflective practice. This can relieve resistance triggered by problematic cultures and facilitate implementation by creating a more supportive culture. Recently, there has been an increasing number of NHS and Department of Health (DoH) publications promoting culture change in mental health care. Like the CQC rankings acting as external drivers for culture change (Konteh et al., 2022), official reports and policy recommendations (examples listed in Table 14) are also potential external drivers, putting pressure on the hospital management to change.

Publication Name/ Year	Promoting Culture Shift From/To	Quotation
Being fair: Supporting a just and learning culture for staff and patients following incidents in the NHS (NHS, 2019a)	From: Blame culture To: An open, learning culture	“The use of a tool such as a triage approach, checklist or prompts simply to help reflection and challenge prior to any disciplinary action...to ensure that they do not lead to an inappropriate focus on the individual or individuals, i.e., that they in themselves do not perpetuate a blame culture in some way.” (Page 7)
WE ARE THE NHS: People Plan for 2020/2021-action for us all (NHS, 2020)	From: Control/power hierarchy To: Person-centred supportive culture	“Every member of the NHS should have a health and well-being conversation and develop a personalised plan. These conversations may fit within an appraisal, job plan or one-to-one line management discussion.” (Page 19)
A positive and proactive workforce (DoH, 2014b)	From: Reactive, blame To: Proactive, learning, supportive	“Where restrictive practices may be used, many of the principles and techniques of PBS [positive behaviour support] will help to create a caring culture and a positive and proactive workforce.” (Page 10) “Develop a culture of learning from incidents and mistakes, avoiding attaching blame to genuine mistakes.” (Page 19) “When restrictive practices are used, it is essential to offer support and debriefing to the person concerned, their families and carers, the staff team.” (Page 27)
From observation to intervention health (NHS, 2019b)	From: Control/power To: Patient-centred care	“From Observation to Intervention recognises that the needs of today’s mental health care service users are increasingly complex and require a more personalised approach to care, treatment and safety planning.” (Page 11)

Table 14. Publications from the NHS and DoH which Promote the Need for a Culture Shift.

Reflexive monitoring was also a theme in the literature review. The process of non-judgemental debriefing, analysis, and discussion were parts of the intervention process (Forster et al., 1999, McCue et al., 2004, Taxis, 2002), all of which require reflection on what, how, and why a restrictive incident occurred happened, and what can be done to try to avoid a repeat incident. Taxis (2002) credited reflective analysis as underpinning team cohesion, and these were changes made from within the team rather than imposed as a numerical goal from above. More research is required to fully understand how reflexive monitoring affects internal and external dynamics and impacts the implementation process.

Wilshaw and Trodden (2015) described reflective practice as having a positive effect on nursing practice. However, it was still not part of the established culture, and the opportunity for discussing problems was limited. There was a concern that reflective supervision sessions were reduced to tick-box exercises for recording tasks performed in some instances. They proposed that ensuring supervision was performed with clinical rather than managerial staff might avoid this. However, the paper emphasised the need for a strong managerial lead to help normalise and embed reflective practice as part of the organisational culture. A recent paper by Patel and Metersky (2022) confirms the value of reflective practice in developing nursing practice. Additionally, it proposes that reflection is not just restricted to what has happened (reflection on action) but includes reflection on ongoing events (reflection in action) and plans for events yet to occur (reflection for action). These recommendations reflect the Team Reflexivity model proposed by Schmutz and Eppich (2017), which aimed to improve teamwork and patient care by using reflection between the team members on the existing process and proposed adaptations if needed.

Different types of reflection are relevant to different activities and are more likely to occur at different stages of the implementation process. Table 15 lists examples of when each type of reflection might occur.

	Example of the Reflective Practice (Reference)	Relevant Stage of the Implementation Process and Purpose
Reflection for Action	Planning and reflecting on the existing situation and how improvements might be made (Thompson and Pascal, 2012).	Preparation: Planning implementation and gaining commitment.
Reflection in Action	Reflection while doing the task so that modifications can be made at the time, self-awareness (Nicol and Dosser, 2016).	Implementation and Sustainability: Reflection while on the ward, changing actions or attitudes.
Reflection on Action	Reflection and discussion on cases or events, and identification of any changes they could make to improve their practice (Markey and Farvis, 2014).	Implementation and Sustainability: Post-incident debriefings, one-on-one ward support. Clinical supervision. Reflexive monitoring by the team.

Table 15. Types of Reflection and Examples of when they might occur.

Table 15 lists three types of reflective practice and how they relate to the stages of the implementation process. Reflection for action could include reflection on the existing situation and planning for how to improve the situation. Reflection in action could include all reflection, either individual reflection or one-on-one support. This process can help gain commitment by “talking through” some of the issues which may lead to resistance if left unchallenged. Reflection on action, possibly the most commonly used, includes event debriefings, clinical supervision, and team reflexive monitoring.

Although reflective practice might be considered a cornerstone of nursing (Oelofsen, 2012), the documented benefits of reflective practice are not just restricted to nursing; they extend to other mental health team members, including psychiatrists (Bekas, 2013) and the process of reflexivity within the mental health team (McHugh et al., 2020).

7.1.3.1. Learning Culture: using incidents to reflect, learn, and improve and not to attribute blame

Analysis of the transcript data emphasised the value of reflection to move away from a “finger-pointing culture”. Staff can be afraid to report incidents or challenge protocols they consider not in the patient's best interest, especially those that appear to be primarily punitive and without any apparent therapeutic benefit. Examples of patients being sent to their room for not eating properly and similar behaviours were described in the transcript data. Reflection of such incidents could result in long-standing protocols being reassessed and changed. Several examples of the use of reflection to change processes (reflexivity) were provided within the transcript data. Reflective practice is essential in the post-incident review and patient care plans.

(13B) *“Making them aware of different ways of working and what alternatives there are, but a piece of work, which is ongoing, is around sort of reflective practice; it is around post-incident review. So, for example, if you do get restraint incidents, this is where your learning comes from as much as it is supporting staff, it is around reflecting on the management of that incident and whether that could have been done differently or not.”*

These reflections were considered part of the learning process. , as shown in the above quotation.

A culture which reflects on actions and how improvements could be made and tries to make them is deemed a learning culture in the broadest terms. In their paper, Gawne et al. (2020) gave the following definition:

“We would define a learning culture as a supportive environment within which all staff members can talk freely about concerns and how to solve them, without fear of blame or punishment.”

(Gawne et al., 2020) (Page 5)

Failure to develop a learning culture has been proposed as contributing to some of the recent problems experienced in the NHS (Stevenson and Moore, 2019). The paper discusses the purported persistence of a culture of fear and blame within hospitals and throughout the hierarchy of the NHS and the detrimental effect this has on patient care. Similarly, Chaffer et al. (2019) emphasised how developing a learning culture benefits patients and staff. A study by Archer et al. (2020) about the barriers and facilitators for reporting aggressive behaviour identified five themes, including; education and learning and blame. Participants recognised that the post-incident report and reflection was a learning opportunity to improve practice;

however, they felt that it was an opportunity that was underutilised, and some suggested that the purpose of the reports was to apportion blame rather than to learn. This links to another theme, fear, the fear that if they report an incident, they will be blamed or blame will be put on their team. The NHS publication, “Being Fair: Supporting a just and learning culture for staff and patients following incidents in the NHS” (NHS, 2019a), clearly sets out the overall objectives to address this issue in its title. The report supplies a proposed sample, “Just Culture Learning Charter”, which outlines the objectives and procedures to be followed should an incident be reported and details related to patient and staff support following a major incident. Emphasis is also placed on the responsibilities of staff and the management, and training materials are included. Shifting the emphasis after a major incident towards learning with accountability rather than apportioning blame, is applicable to all hospitals, including mental health care units.

Learning culture within hospitals also refers to the postgraduate training of young professionals in the workplace. Gawne et al. (2020) provide an example of how workplace learning can help instil a patient-centred culture into young professionals at the start of their careers. Although postgraduate training was not a focus of this thesis, comments were made within the transcripts on the impact of lectures given by experts-by-experience implementation team members on postgraduate students. Evidence from the transcript data highlighted the important role of experts-by-experience in the implementation process, particularly in acting as triggers for reflection among staff during preparatory lectures and ward discussions. However, some resist accepting experts-by-experience as full colleagues, as demonstrated by the quotation about how their input was dismissed. “There is some stigma against experts-by-experience, but their increased involvement in professional education not only provides valuable insights into the patient perspective but also helps change attitudes” (Happell et al., 2022, Whitelaw et al., 2022).

7.1.3.2. *Proactive care*

Analysis of the transcript data showed an awareness of the advantage of shifting from a reactive to a proactive approach.

(03B) *“When you’re trying to get it from being a reactive firefighting service with a siege mentality, and you’re trying to get it round, it’s difficult to change people’s perspectives into proactive because it’s getting people to understand that firefighting takes almost as much work as working proactively.”*

Although the change in role was sometimes met by some resistance, ultimately, positive changes were observed after adopting this approach.

(03B) *“People feeling more, I suppose, united, there’s a lot more thought going into how we can reduce restrictive interventions, and how we can, you know, make a better*

experience for the service users within that in the way that we proactively care for people, and that takes greater thinking. It requires a collaborative approach for the MDT, it requires collaboration with the service user at the centre of it, it requires difficult conversations, but it requires an MDT approach and, you know, recording a robust plan of care based upon all of that, and I think, well, it's just really empowered the nurses, I think."

Minimal specific reference to proactive care was made in the selected literature; only Donat (2005) and Donat (2006) used the term when describing the process of redirecting behaviour.

"This also tested their ability to accurately identify and proactively encourage involvement in preferred behaviours that were reinforcing to the person and which could serve to break the former behaviour chain" (Donat, 2006) (Page 218)

Additionally, Sullivan et al. (2005) stated that one of the expectations from all staff was to:

"Intervene prior to loss of control, enhancing safety through identification and assessment for violence." (Sullivan et al., 2005) (Page 54)

The quote by Sullivan et al. (2005) is an example of a proactive approach to care, as are the patient care plans described in several of the studies (Godfrey et al., 2014, Jonikas et al., 2004, McCue et al., 2004). Other studies also describe using a crisis response team (Godfrey et al., 2014, Jonikas et al., 2004, McCue et al., 2004).

However, none of the studies describes any resistance directly attributed to the move from reactive and proactive care.

Cockerton et al. (2015) discussed early implementation of the recommendations of the DoH report "Positive and Proactive Care: reducing the need for Restrictive Interventions" (DoH, 2014a) in an inner London Mental Health Trust. The report's recommendations included co-produced care plans, including a behavioural support plan if the patient was to become agitated, debriefing of staff and patients if a restraint event occurred, and detailed monitoring of the restraint used to help reduce it. Cockerton et al. (2015) emphasised the need for the agreed care plans with behavioural support to be followed and recognised by the entire medical team as part of the patient's treatment and supported by the leadership. No conflict or resistance is mentioned, but it is implied that a lack of support and acceptance of the care plans with behavioural support could be a barrier to implementation. An alternative proactive approach was explored in a review by Rajwani et al. (2022), which analysed studies that proactively identified patients at risk for aggressive behaviour combined with the rapid deployment of a specialist multi-disciplinary Behavioural Emergency Response Team (BART). BART respond using de-escalation techniques and only use restraint as a last resort. Rajwani et al. (2022) concluded that the approach could decrease restraint incidences and increase staff satisfaction.

7.1.3.3. *Team culture*

Within the transcript data, some implementation barriers resulted from a lack of team support caused by an apparent disconnect between the management and the clinical reality on the wards. Interviewees expressed that they considered well-functioning, fully committed teams essential for a successful implementation. Although achieving commitment from influential individuals who act as champions and spreading the commitment to the rest of the ward is valuable, ultimately, full commitment from the team implementing the intervention on the ward is needed. Without a committed team, the individual champions will be unable to implement the necessary changes on their own.

Besides commitment, team members need to be able to work together and communicate between themselves and others outside the team (i.e., with management and on the ward). This is not always the case; for example, in one transcript, a scenario was described on a ward where the input from the invited service user was ignored. This appears to be an example of tokenism where those in power have allowed the inclusion of experts-by-experience, paying lip service to government recommendations but choosing to ignore them. However, a reduction in hierarchical power/control and an increased culture of teamworking facilitate introducing service users as fully contributing members of the team. Including service users as part of the implementation team is important since it introduces the staff to the patient's perspective and enables them to think and reflect on the effect of coercive practice.

Reflective practice helped develop a shift to a more effective team culture, resulting in a less hierarchical system with better communication.

This can help overcome some of the disconnects between the management and the ward, which may otherwise develop into resistance.

In the literature review, most of the role of teamwork came from the City Nurse Project, where teamworking skills and organisational support formed part of the working model and contributed to a successful ward (Bowers et al., 2006). In the same project, Flood et al. (2006) delved slightly deeper into the role of teamwork. The need to develop a culture to promote teamwork is not specifically mentioned, but the importance of developing teams is discussed.

Other papers also mentioned the development of multi-disciplinary specialist teams, such as case review teams and crisis response teams (Godfrey et al., 2014, Jonikas et al., 2004, McCue et al., 2004). None of these studies added much detail about the teams, their input, or how they functioned. The only exceptions were Sullivan et al. (2005), who mentioned the need for physicians and nurses, in particular, to work as a team with common goals and ongoing

communication for patient safety, possibly implying that this was not always the case and Taxis (2002) who mentions the benefit of cohesion to the functioning of a team.

Many potential challenges exist in setting up effective multi-professional teams, which Molin et al. (2016) discussed. The study demonstrated how a staff committed to change could become demotivated.

“To cope, the staff appeared to shift their focus from the patient’s best interests to self-survival.” (Molin et al., 2016) (Page 598)

The causes for demotivation are a lack of physical resources to implement change and problems related to poor interprofessional team functioning. Lack of physical resources was not a major barrier to implementation, either in the transcript analysis or in the literature review data; however, problems with teamworking were referred to in the transcript analysis. Molin et al. (2016) give examples of a disconnection between the team and the management, a lack of communication within the team, and a lack of an integrated approach to care. This resulted in a situation where the physicians, ward managers, and staff all felt isolated and without support or guidance. They tended to distance themselves from each other, each attempting to fulfil only their basic duties. The most significant problem is a lack of communication and lack of opportunity to communicate.

“Venues for joint discussion and reflection within the teams were conspicuous by their absence.”(Molin et al., 2016) (Page 601)

In conclusion, Molin et al. (2016) highlighted the need to establish opportunities for “reflective interprofessional dialogues” to promote effective teamwork and that these sessions should have the support of the management. They also suggested instating protected engagement time (PET) to facilitate interactions on the ward and enable staff to practice more effective care.

The picture painted by Molin et al. (2016) appears to be worse than any presented in the manuscripts. Nevertheless, several common problems can be recognised, particularly those related to poor inter-professional interactions and poor communication between the management and the ward, both characteristic of a rigid hierarchical culture. The suggestion to use “reflective interprofessional dialogues” to help improve teamwork also coincides with the findings of the transcript analysis.

The need for a culture shift from a rigid hierarchy to teamwork was recognised by Bate (2000), who also stated that support from all levels of the organisation is essential to achieve “a flexible and collaborative networked community.” This includes obtaining the necessary culture changes to ensure support from the leadership; which include the leadership being more reflective, being part of the team rather than in control, and moving away from a blame

culture to one of learning and accountability (Bailey and Burhouse, 2019). Eakin et al. (2015) also described the need for a shift toward a teamwork culture. They proposed establishing a multi-disciplinary team prepared in advance as part of the preparation phase of the implementation to facilitate the necessary culture change. Interprofessional teamwork training could be considered during this period; a proposal backed by the findings of a non-randomised intervention study by Marcussen et al. (2020) found higher satisfaction levels and mental health status at discharge in patients whose team had undergone interprofessional team training. Marcussen et al. (2020) mentioned the need for a more extended study, and I think that a comparison of staff satisfaction in the two teams would be of interest.

7.1.3.4. Patient-centred

Analysis of the transcript data identified the need to change the initial training sessions during the preparation phase to help the shift to patient-centred care. The change involved moving away from the previous content of physical restraint training to lectures designed to help staff reflect on their values and their clinical roles related to patient-centred care. The involvement of experts-by-experience as lecturers in these sessions, giving their first-hand experiences of what it was like to be restrained, had a major impact on the staff attending and encouraged their reflection on past routine practices.

(14B) “The central theme of those sessions was the lived experience narrative of people who had experienced physical restraint. And what those sessions did was enable people to tell their stories about just how traumatic physical intervention was for them because I think we believed, organisationally, that what we had to do was not just tell people that they had to change what they were doing, but to win over their hearts as well as their minds. So we wanted to have an emotional impact with the staff so that they understood just what the impact was around some of the interventions they were using, and we felt that that had a high degree of success.”

Including the experts-by-experience narratives were designed to have the maximum impact and trigger the audience to think and reflect. Reflecting on the patient’s perspective can help lead to the development of a more patient-centred culture.

A patient-centred approach includes care plans, including a behavioural support plan agreed upon in advance with the patient. The plans help to increase staff awareness of what might trigger a patient and the approaches most likely to help calm them down. Being directly involved in preparing the plans also positively impacts the patient experience because, as one interviewee described.

(16B) “...so I think again, things weren’t done for patients; they were done with patients.”

The focus is on what triggers the patient rather than having a culture where a patient might be blamed for failing to comply. A patient-centred approach can help shift away from a blame-focused culture.

The post-incident review is part of the best practice guidelines where the team members reflect on what happened, why, and how it might be dealt with better. It is also a patient-centred activity and involves the multi-disciplinary team and the patient. The behavioural plan emphasises the individual, incidents that may trigger their aggressions, and their preferences about how they might be helped rather than being solely guided by their clinical diagnosis.

In the analysis of the literature data, many studies referred to including patients in the development of their individual care plans for treatment and anger/aggression management (Cummings et al., 2010, Fisher, 2003, Guzman-Parra et al., 2016, Hellerstein et al., 2007, Jonikas et al., 2004, Sivak, 2012, Sullivan et al., 2005, Taxis, 2002, Thomas et al., 2006). Reference was also made in the literature review data to including patients in debriefings and post-event analysis following restraint events (Fisher, 2003, Guzman-Parra et al., 2016, Jonikas et al., 2004, Taxis, 2002). In the study by Taxis (2002), staff reflecting on the involvement of patients expressed surprise at how, by giving patients greater autonomy and involvement in their treatment choices, they gained greater flexibility to provide individualised care. After reflecting on patient-centred practices, such conclusions help establish the culture shift and increase satisfaction and commitment.

It is acknowledged in the general literature that implementing patient-centred care within an organisation is a complex process; it is still not fully understood and requires a basic culture change in all areas of the organisation, including the leadership (Bokhour et al., 2018). Barnes et al. (2022) discuss some of the challenges encountered when shifting from the traditionally held medical model, where mental health conditions are considered from the perspective of their biology and treatment and are therefore closely associated with the hierarchical culture, to a more holistic model of care in the patient-centred approach. At this stage, it is useful to note that the term person-centred is sometimes used instead of patient-centred under the rationale that the patient is not just a patient; they are a person (Håkansson Eklund et al., 2019). However, in this thesis, 'person-centred' is used to extend the approach to include staff and carers, as described in the next section. In this section, 'patient-centred' care is the term used where the patient as an individual is the focus of care rather than their disease or clinical condition, even if the referenced publication uses a different term.

The analysis of the transcript data emphasised the importance of promoting the goals and ideals of an intervention, such as a patient-centred approach to reducing coercive

interventions, during the pre-implementation phase at introductory workshops and training sessions. Bokhour et al. (2018) discussed the importance of education to make staff aware of the basic priorities of an intervention in the hope of winning their support and compliance, which was referred to as the 'enculturating of staff'. The study stressed that the process of enculturating needed to involve all staff and leaders and had to be repeated, but it was essential to gaining their engagement and support.

The analysis of the transcript data was very positive about the benefits of care plans and including behavioural plans for patients and how they helped staff proactively de-escalate potential incidents of aggression. The data also showed how a patient-centred focus with care plans and post-incident reports could help shift the organisational culture away from one of allocating blame to one of accountability, as described in the publication "Being Fair: Supporting a just and learning culture for staff and patients following incidents in the NHS" (NHS, 2019a). However, there are concerns about how effective the implementation is in practice. Patient involvement in care plans is a basic requirement in most institutions; however, as described by Rio et al. (2020), the danger is that in practice, this requirement may only result in nothing more than box-ticking by the staff member and tokenistic attendance by the patient. There are challenges in establishing an effective care plan package; some appear to be linked to embedded problematic cultures. Rio et al. (2020) suggested a reason why staff may not always fully engage with the choices proposed by the patients and, in fact, tick what is expected due to a fear of blame. Suppose insufficient time is dedicated to discussing the plan with patients and making it truly collaborative. In that case, this may result in administrative completion of the plan rather than it being of benefit as a therapeutic interaction (Terry and Coffey (2019). In a review on patient engagement to improve the quality of care, Bombard et al. (2018) discussed some of these issues, including the need for leadership support; they also concluded that when successfully introduced, patient engagement can shift the organisational culture to one with greater team working. Although Bombard et al. (2018) reported favourably on patient involvement in mental health services in the NHS and proposed it as an example which might be used elsewhere, the concerns raised by Rio et al. (2020) and the observations noted by Terry and Coffey (2019) could benefit from further research.

7.1.3.5. Person (staff)-centred

The goal of a patient-centred approach is the aim of most modern patient care (Edgar et al., 2020). However, it is argued that the culture needs to be expanded to include all staff and carers looking after the patients. This view is discussed in Buetow et al. (2016), where the intention for the expansion is summarised as follows;

“Rather than take the spotlight off the patient, enlarge the light to include clinicians and others.” (Buetow et al., 2016) (Page 1)

Edgar et al. (2020) discussed the benefits of extending the culture of patient-centred care and including person-centred care in the healthcare environment and presented the argument that patient outcomes are related to the satisfaction and well-being of the staff. Dixon-Woods et al. (2014) described the changes needed to achieve satisfaction and well-being. Staff need to feel supported and fully engaged, which requires a supportive organisational culture and, therefore, a shift away from less problematic cultures such as those outlined in Table 10. Edgar et al. (2020) also promoted reflective practice for management and staff to challenge problematic organisational cultures and establish supportive care for all groups. Reflective practice was also proposed as a positive approach to help support staff (Davey et al., 2020) and identified as an area deserving of more research.

A recent NHS campaign targeted staff well-being; “WE ARE THE NHS: People Plan 2020/21 - action for us all” (NHS, 2020). This included the appointment of a well-being guardian from the senior management to ensure that the organisation’s activities and policies supported staff well-being. The guidelines aim to make the workplace more supportive and person-centred and deal with workplace bullying and intimidation, which may be symptomatic of underlying organisational problems. The publication proposed a deadline of September 2020 by which line managers would be expected to have established workplace health and well-being protocols where staff could reflect on any challenges they faced at work. This compares directly with the face-to-face discussions referred to in the transcripts, which the implementation team found beneficial in addressing causes of resistance and is a definite step towards establishing a person-centred culture for hospital staff.

Analysis of the transcript data suggests that a person-centred culture would benefit any intervention. This is because all staff know that they are supported as individuals within such a culture, which is an important part of gaining their commitment to the intervention. Individual support is essential at all levels of the organisation. For example, the knowledge that top management is supportive and part of the team is particularly enabling in a situation with an inherent hierarchical top-down structure.

...mental health seems to have quite a hierarchy of permissions. And I think that’s something that...but I just have to let staff see that any work we are doing, we’ll get support from the executive team.”

This last example demonstrates an implementation team sponsor supporting a concerned staff by reassuring them that the intervention (and, indirectly, the actions they are being asked to take as part of the intervention) have support from above. The team sponsor

facilitates changes by helping ensure necessary resources are available and supporting the ward in the changes they are making, encouraging them, and backing them up.

(09B) *"...and to give them that autonomy and to say, go ahead and make some changes, and I will support you. So that role has also been very key."*

Team sponsors also support staff directly on the ward as a group or as individuals by discussing problems and helping them reflect on the situation. Support for the staff through one-on-one discussions can help defuse these concerns. These discussions represent a person (staff)-centred approach, as illustrated in Figure 15, which can help strengthen the development of a learning culture within the institution and strengthen commitment to and ownership of the intervention.

This quotation directly equates person-centred approach support for staff to the support provided to patients through patient-centred approaches and gives an example of the type of reflective process.

(05A) *"Well, the importance is always to work at the individual ward level to prompt them to... we have used approaches which are more akin to patient-centred approaches.."*

The mechanisms for support must always be present and ongoing to ensure their availability for new staff and sustainability.

In the above examples, staff concerns were listened to and answered, and officials were available if needed. Keeping regular contact and showing concern and interest makes staff feel appreciated.

(03A) *"...a regular check with people on the floor...how are you...how's it going...can you implement this...does it feel meaningful? And also sometimes they give suggestions about something there should be more of on the course for refreshers or less of. So it's a bit like that ...it's not systematic basis...it's more like a dialogue with nurses continuously."*

Another important part of staff support is having their ideas and work valued and appreciated; ensuring individuals receive appreciation and recognition for their efforts will help increase their commitment.

Nothing could be extracted from the literature review data about a person (staff)-centred approach, possibly because these papers were primarily reports on the intervention, not research on staff opinions or feedback on interventions.

7.1.4. Sustainability

Analysis of the transcript data showed that sustainability was considered as important. Emphasis was placed on establishing and monitoring the process through reflexive monitoring,

and that adjustments should be made if necessary. Even after the successful implementation of an intervention, efforts must be made to continuously monitor the process.

(13B) *“The danger is if you take your foot off the pedal that a lot of the old restrictions and rules and ways of working quickly come back in. I think the challenge is, again, going back to what we’ve already said, is around the embedding of those practices and the sustainability. Because you only need an incident, and then the risk is that people go back to their old ways of working.”*

Long-term sustainability is a challenge, and a drop-off in enthusiasm is quite common, but it is important to keep following up on what is happening. This is essential to ensure the process stays within its goals by regular reflexive monitoring and realigning if necessary. Also, staff must be well supported and engaged by holding regular meetings. The follow-up must be regular and ongoing, not only at the ward level but throughout the institution and neighbouring institutions.

Continuous monitoring is essential to ensure the intervention achieves the required outcomes, and continuous support for the staff is needed to solve any problems and maintain their commitment. Reference was also made to sustainability in the transcripts. Ongoing commitment from staff and management for an intervention was necessary to maintain management support for the staff as it is implemented.

The analysis of the literature review data did not result in many references to sustainability; this was possibly because the selected papers were reports about interventions and not long-term follow-ups. However, two papers did raise concerns about sustainability; Brennan et al. (2006) and Bowers et al. (2015). In a randomised control trial of Safewards, Bowers et al. (2015) expressed the concern that it was impossible to predict the long-term sustainability without the researcher’s support, who was taking an equivalent role to a ward-level team sponsor. In the conclusion of a publication from the City Nurse Project, Brennan et al. (2006) speculated that the changes achieved would only be difficult to sustain if the underlying organisational problems faced during the project were not met; this comment was not explored or explained further.

Analysis of the transcript data revealed that the factors facilitating sustainability were the same as those associated with implementing a successful intervention (intervention-specific factors, agent-specific factors, and culture) with the important addition of a continuous monitoring process and the capability to make suitable adjustments if needed to keep the process on track and maintain commitment.

A sustainability model and guide were produced for the NHS (Maher et al., 2010) to facilitate embedding and predict sustainability. The model was represented by three overlapping circles

(Process, Staff, and Organisation), each circle with two to four sub-topics. The overlapping circles represent interactions between the three, but there was no indication of how the interaction occurred. Within the publication, each sub-topic listed a set of questions and multiple-choice answers, with a score allocated according to the answer selected. The sum of all of the scores resulted in a prediction for sustainability. The model contained only one 'yes' or 'no' answer question related to culture; "Has there been successful sustainability of other interventions previously, and did the organisation have a "can do" culture?" This question does not clarify what a "can do" culture is; it does not establish what the existing culture is or the culture best suited to the new intervention. Besides, even if interventions for improvements have been sustainably established in the past, this does not ensure that all interventions will be in future. The implementation of interventions is context-dependent, and the organisational culture is part of that context. This observation that the NHS sustainability model lacked a significant cultural organisation component is confirmed by Nadalin Penno et al. (2019).

In a review of sustainability frameworks, Nadalin Penno et al. (2019) compared common core factors. They identified 37 concepts, of which 16 were described as core concepts found in four or more of the frameworks. Based on this analysis, the NHS sustainability model contained 13 concepts (eight core concepts), but the core concept of culture was not part of the model.

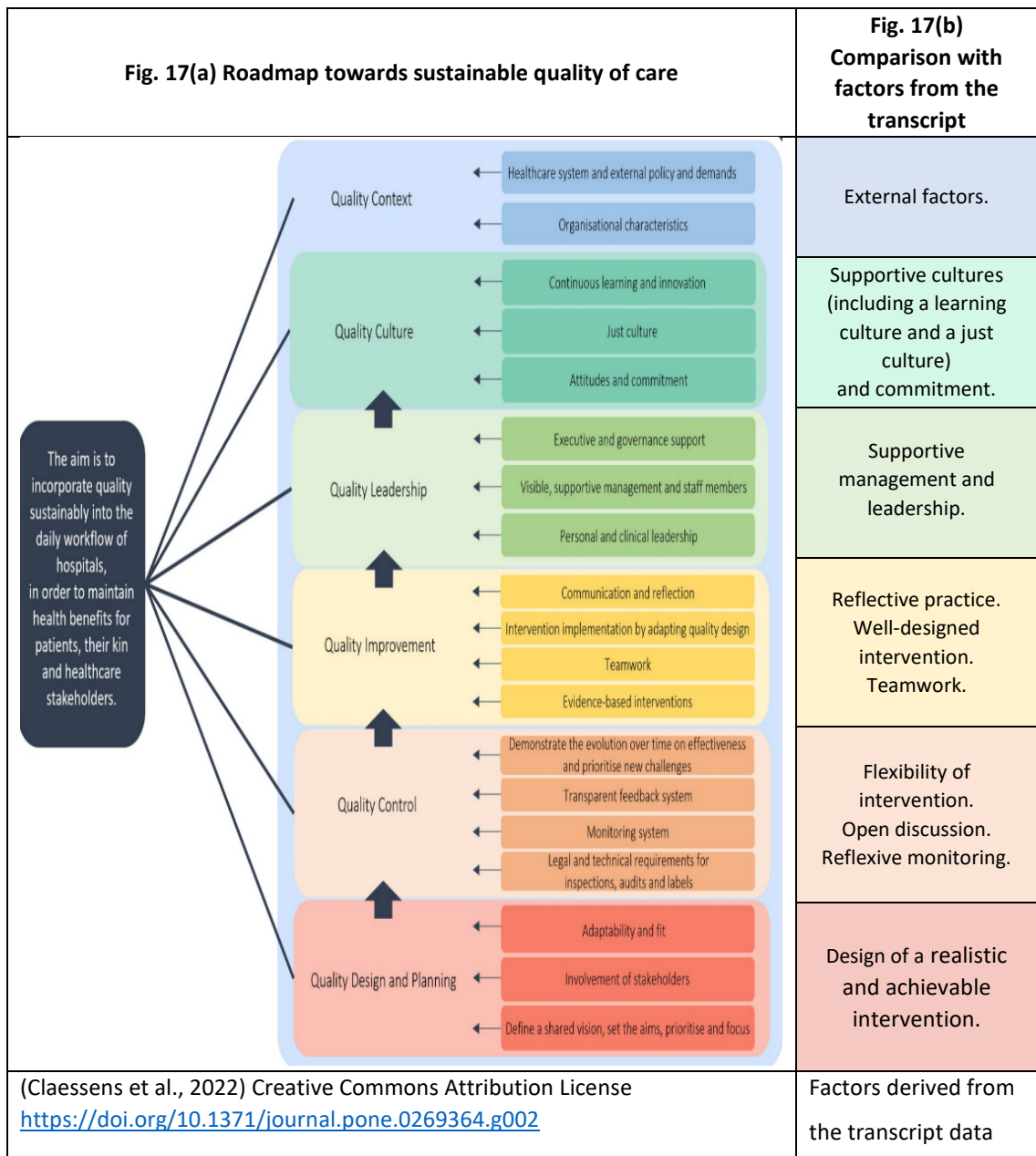


Figure 17. Diagrammatic Representation of what is referred to in Claessens et al. (2022) as a Roadmap Towards Sustainable Quality of Care.

The roadmap has six drivers (Figure 17), each divided into contributing components (between two and four for each driver). Although not identical, there is a close parallel between the drivers on the road map and the factors described during the transcription analysis. Notable differences are “The quality context,” which refers to organisational characteristics and external factors such as the healthcare system and national policies. These external factors were mentioned but were not this study’s focus. Also, experts-by-experience are not mentioned in the roadmap, although they may be considered within the design or teamwork sections. Experts-by-experience potentially significantly impact the implementation process, and clarifying their role as an integral part of the implementation process is vital. Clarification of their role would help avoid the “box tick” situation, which sometimes arises where experts-

by-experience are included as a “box tick”, but their input is not valued or listened to (as was evidenced in the transcript data).

7.2. Conclusion

Process-relevant content from the literature review and transcript datasets was successfully extracted using ENPT as the framework to guide the analysis. The literature review dataset analysis qualitatively examined the papers’ scripts using ENPT as a framework. ENPT placed the focus of the analysis on considering the process and context of studies that reported interventions to reduce coercive practice. It also facilitated the identification of possible barriers and drivers to implementation as they were reported *in situ* during the intervention. However, ENPT was used as a guide rather than a rigid framework during the transcript analysis. The questions were deliberately structured to be as open-ended and non-directive as possible, and ENPT was the lens used to frame the range of questions rather than a rigid framework. Interviewees were encouraged to describe their experiences in an open narrative wherever possible to avoid specific tick box-like answers and discuss all the relevant topics. Additional questions were only asked as follow-ups on their comments or to move their narrative on (e.g., so then after the initial preparation...). The overlap between drivers and barriers to the normalisation process identified from the transcript analysis in the literature review dataset and alongside the barriers and drivers reported in the general literature acts as a form of triangulation to support the validity of the approach.

The degree of triangulation utilised for this study is limited. Other triangulation approaches could be used to further strengthen the findings. Of the triangulation approaches discussed in Thurmond (2001), data source triangulation, particularly that related to time, and theoretical triangulation might be beneficial additions to the study. These are discussed fully in 7.5 under the limitations.

As a mental health nurse with 12 years of clinical experience, I have been able to relate my experiences with many of those expressed by the interviewees from the viewpoint of an “insider” who has shared the problem. At the same time, as my experience was gained outside of the NHS and the UK, it distanced me from the interviewees’ experience and helped me gain perspective as an “outside” observer. My identity as an “insider” and an “outsider” might have indirectly impacted the interviews. Although I didn’t offer my own opinions, my personal experiences might have resulted in an appropriately expressed and stressed “yes” during the interviews; this might have helped to build an unspoken rapport.

Being an “outsider” with respect to having had my clinical experience outside of the NHS was a challenge and a benefit. Understanding the structure, in some cases the common

abbreviations, and the process of obtaining ethical approval across different organisations was a learning curve and something which would have been easier for someone with personal experience within the NHS. However, being unfamiliar with recent developments within the NHS was advantageous, especially during the analysis of the findings.

The advantage of my position was that although I empathised, at a clinical level, with many of the observations and comments made by the interviewees, my opinions were not coloured by personal experience of the interventions being discussed. My position as an “outsider” allowed me to analyse their experiences of the interventions’ implementation with a ‘fresh pair of eyes’ and no preconceptions.

No unique factors were identified, but three points of interest emerged. These were: the extent of the impact of problematic cultures as a barrier to obtaining and keeping the commitment, the potential of integrated reflective practice to overcome or reduce this barrier (Figure 15), and the potential of experts-by-experience to act as drivers for reflective practice. These findings apply to most interventions in tertiary care hospitals, not just those specialising in mental health, and more research is warranted in all three areas.

Because organisational culture has the potential to be a major barrier to the implementation of new interventions, time should be devoted during the preparation phase to understanding the existing organisational cultures. This could take the form of a cultural audit process, as suggested by Selzer and Foley (2018), followed by lectures and workshops to promote supportive organisational cultures. The current NHS campaign to facilitate supportive culture change, “Culture and Leadership programme-Discovery Phase” (NHS, 2021), offers resources targeted at the leadership. Research into the effectiveness of this intervention to assess and, where necessary, achieve culture change would help prove its usefulness within the NHS and promote the use of similar programmes globally.

The use of experts-by-experience and the interactions between culture, reflection, and culture shift should be further explored. Experts-by-experience participate in fields outside of mental health, for example, in social work (MacKinnon et al., 2021). The CQC has a long list of individuals whose lived experience may help hospitals develop improved interventions. Therefore, the suggested research would be relevant to a wide range of situations.

This study is the first to my knowledge to use ENPT to investigate factors influencing the implementation process of coercion reduction interventions and represents an original contribution to the field of implementation science. The study’s results present evidence of how specific factors have a major impact on the success, or otherwise, of the implementation process and the need to consider the implementation process as holistically as possible. The

findings are not unique, but as part of an interactive system, they represent a novel focus and emphasis on implementing interventions.

A holistic approach is proposed focusing on planning, monitoring, and support for all stages of the implementation process, and not just during the initial implementation. Figure 16 presents an overview of the sequence of these stages. In addition, support for the intervention must come from all organisational levels and stages. Emphasis must be on understanding the existing context before implementation to enable an optimal preparation phase to be designed and initiated; it should not be assumed that the pre-existing context is always receptive to the new intervention. This study has identified that existing organisational culture is a crucial aspect of this pre-existing context.

Reflexive monitoring and individual reflective practice have been identified as having the dual function of both monitoring and identifying necessary adjustments needed during the intervention and drive the implementation process by facilitating positive and supportive cultural change. The dynamics underlying this, derived from the transcript data, are illustrated in Figure 15. Experts-by-experience have a key role by stimulating reflection on the impact of restrictive practice on individuals. Their increased involvement in implementation projects is highly recommended.

This study's findings have implications beyond the tertiary mental health care setting. They are potentially relevant to other fields by demonstrating that adverse contexts created by problematic cultures can cause barriers to successful long-term implementation. The findings also demonstrate the potential of reflective practice to help address these problematic cultures.

7.3. Suggestions for Future Research

Based on this study's findings and the recent literature, organisational culture has an important impact on the implementation process. Organisational cultures develop over many years; therefore, they cannot be expected to change overnight, and it often takes years to fully embed cultural change (Mierke and Williamson, 2017). Some variations in the uptake and sustainability of interventions may be attributable to institutions in a transitional state of a culture shift. It would be interesting to consider the differences between the organisational culture as it is officially stated by the organisation, the perceived culture by different healthcare professions, and what is implemented in practice. It is possible for organisational change to occur on paper but not in reality. For example, all patients have co-produced behavioural care plans, but these plans are no more than a routine filling-in of checkboxes with minimal input from the patient, as described in Rio et al. (2020). Further study might help us

understand how culture shift occurs within an institution and possibly target areas where more support for change may be needed.

Another challenge is how to measure the effectiveness of interventions; quantitative measurements, although valuable for highlighting trends and hotspots, often do not give the whole picture. One of the interviewees summed up the problem as follows:

(Q2B) *"How do you capture culture change? How do we actually capture a ward going from...and how do we capture culture change from the patient's point of view? Because that's...it's a bit of an elephant in the room often, what do your patients think? Because it's a very hard question to answer. But it doesn't mean to say we shouldn't give it a go."*

Research on how to effectively measure and monitor these changes, alongside the quantitative data, would be very valuable.

Several quotations from the transcripts provided accounts of the impact sessions led by experts-by-experience had on promoting reflection. Recent studies on using experts-by-experience in teaching undergraduates (Happell et al., 2020, Horgan et al., 2020) were valuable in promoting patient-centred principles in young professionals. However, much less research has been undertaken on the impact of experts-by-experience during the implementation process. A study examining any opinion changes and subsequent changes in behaviour and practice could provide more evidence for the positive role played by experts-by-experience and their impact on reflective practice.

7.4. Implications for clinical practice suggested change of practice

The most significant change required is increased attention to the pre-implementation planning and sustainability phases; without these, any intervention's effectiveness, however good, will be reduced.

In line with the documented evidence about the benefits of a person-centred approach (Buetow et al., 2016) and the goals of programs such as the "WE ARE THE NHS: People Plan 2020/21 - action for us all" (NHS, 2020), a person-centred approach should be emphasised during the implementation process. The following quote is from an established expert in the field of implementing restraint reduction programs;

(14B) *"No, but I think the whole idea of change around reducing coercion is suggesting that what we did in the past wasn't acceptable and can't be the way forward in the future. I think that has been difficult for some people. I guess, again, in terms of selling that to the nursing staff, it's about this idea of being honest as well. So, a lot of things now that I argue need to change; I think on the wards, I was responsible for implementing those interventions as well. So, I'm loathed to be too critical of people because I've been part of coercive practices in the past that I thought...that I was convinced just had to be the way of doing things, and I've had to change. So, I certainly would never approach colleagues*

and say they need to be like me. I wouldn't do that. I would say, you need support to make the journey that I've made to a different way of thinking and a different way of approaching things."

Organisational culture cannot change overnight, and neither is it easy for professionals to reject the old ideas and established protocols and switch to a new approach. Support and acknowledgement during this process will facilitate its acceptance, reduce resistance, and increase commitment, as evidenced by the transcript data. One suggestion that might be useful to consider when initiating pre-implementation programs is how the intervention's aims are framed:

"Decreasing restrictive practice was the primary objective; however, challenging customs and practice can make staff defensive, so the message to the front line was a positive reframe around enhancing the patient experience." (Lombardo et al., 2018) (Page 1)

The pre-implementation phase is an essential part of the implementation pathway, and many activities during this period are designed to inform staff about the intervention and build commitment.

Because organisational culture has the potential to be a major barrier to the implementation of new interventions, time should be devoted during the preparation phase to understanding the existing organisational cultures. This could be conducted through a cultural audit process, as Selzer and Foley (2018) suggested, followed by lectures and workshops to promote supportive organisational cultures. The current NHS campaign to facilitate supportive culture change, "Culture and Leadership Programme - Discovery Phase" (NHS, 2021), offers resources targeted at the leadership. Research into the effectiveness of an intervention to assess and, where necessary, achieve a culture change would help to prove its usefulness within the NHS and promote the use of similar programs globally. Consideration should be given to holding the sessions for individual professional groups, e.g., management, psychiatrists, and nursing staff, to establish how the "new" cultural approach can be applied as part of their routine work. Some of these sessions should be led by experts-by-experience, and adequate discussion and reflection should be encouraged. Following these sessions, there should be an extended series of scenario-solving activities in interprofessional groups, further demonstrating how theories can be integrated into practice and develop teamwork and interprofessional communication.

Alongside sessions to promote a supportive organisational culture, staff should be allowed to develop the skills required for de-escalation and proactive management of patients. Role-play sessions would be useful for gaining confidence, as would supportive clinical mentoring on the wards.

Finally, before the start of any implementation, plans and budgets must be made available for continuing long-term support, which is essential for the sustainability of any intervention.

7.5. Limitations

The main limitations of this study relate to interviewee sampling and recruitment. Twenty-three individuals were recruited, but a factor which may impact the results is that of these 23, only two were experts-by-experience. The three groups comprised two experts-by-experience, six academic experts, and 17 clinical experts, but this was not a balanced representation. Therefore, the opinions and accounts given may not be as representative as hoped.

The use of social media to recruit hard-to-reach populations has been proven (Arigo et al., 2018), and with more time, is a possible approach that could be used to reach more experts-by-experience. However, snowballing was quite effective since the experts-by-experience who participated in the thesis were already members of established research development teams rather than ex-service users from the general population. However, due to other delays, there was insufficient time to recruit a more representative group. The identification and obtaining the correct ethical approval delayed the recruitment process the most. The research was undertaken when ethics policies were in flux due to the introduction of the Data Protection Act 2018, referred to as the General Data Protection Regulation (GDPR). During this transition time, it was difficult to identify the exact ethics clearance required and, equally important, to reassure potential interviewees that the ethics approval that had been obtained was sufficient to satisfy their individual Trusts.

A larger number of participants would have allowed for a better balance between the groups (7 – 10 individuals per group). This would have ensured more representative results and avoided potential bias introduced by an opinion held by the largest group. A larger balanced sample would also facilitate stratification of the results by participant category (experts-by-experience, academic experts, and clinical experts), enabling a comparison between the groups to identify possible heterogeneity of their perceptions and observations.

The investigation was retrospective due to time constraints. Had more time been available, including a prospective element through direct observations or confidential reflective journals and focusing on the implementation process would have provided an additional level of data. The addition of such studies would allow a comparison of prospective data with reported data (extracted from published texts) and the recalled data (transcripts) and would facilitate a rigorous triangulation of data with respect to time (Thurmond 2001). Time constraints also limited the use of a single chosen theoretical approach, whereas parallel studies using other approaches would have allowed for theoretical triangulation. This would have been very

interesting, particularly because there is much common ground between the different theories and frameworks, yet each has a slightly different focus. Parallel studies, one using a realist approach and one utilising I-PARIHS with the spiral implementation model instead of ENPT, would also have been interesting.

The broad scope of the research may also be a limitation. A narrower research aim would have enabled a greater focus during the interviews and might have resulted in a more in-depth analysis. However, the breadth of the topic is also a strength since it has allowed a greater insight into the implementation process and helped identify areas for future study.

REFERENCES

- ALEXANDER, K. E., BRIJNATH, B. & MAZZA, D. 2014. Barriers and enablers to delivery of the Healthy Kids Check: an analysis informed by the Theoretical Domains Framework and COM-B model. *Implementation Science*, 9, 1-14.
- ANDRES, E. B., SONG, W., SCHOOLING, C. M. & JOHNSTON, J. M. 2019. The influence of hospital accreditation: a longitudinal assessment of organisational culture. *BMC health services research*, 19, 1-8.
- ANGUERA, M. T., BLANCO-VILLASEÑOR, A., LOSADA, J. L., SÁNCHEZ-ALGARRA, P. & ONWUEGBUZIE, A. J. 2018. Revisiting the difference between mixed methods and multimethods: Is it all in the name? *Quality & Quantity*, 1-14.
- APPELBAUM, P. S. 2016. Protecting the Rights of Persons With Disabilities: An International Convention and Its Problems. *Psychiatr Serv*, 67, 366-8.
- ARCHER, S., THIBAUT, B. I., DEWA, L. H., RAMTALE, C., D'LIMA, D., SIMPSON, A., MURRAY, K., ADAM, S. & DARZI, A. 2020. Barriers and facilitators to incident reporting in mental healthcare settings: A qualitative study. *Journal of Psychiatric and Mental Health Nursing*, 27, 211-223.
- ARIGO, D., PAGOTO, S., CARTER-HARRIS, L., LILLIE, S. E. & NEBEKER, C. 2018. Using social media for health research: Methodological and ethical considerations for recruitment and intervention delivery. *Digital health*, 4, 2055207618771757.
- ARKSEY, H. & O'MALLEY, L. 2005. Scoping studies: towards a methodological framework. *International Journal of Social Research Methodology*, 8, 19-32.
- ASHCRAFT, L. & ANTHONY, W. 2008. Eliminating Seclusion and Restraint in Recovery-Oriented Crisis Services. *Psychiatric Services*, 59, 1198-1202.
- ASHCRAFT, L., BLOSS, M. & ANTHONY, W. A. 2012. Best Practices: The Development and Implementation of "No Force First" as a Best Practice. *Psychiatric Services*, 63, 415-417.
- ATKINS, S., LEWIN, S., RINGSBERG, K. C. & THORSON, A. 2011. Provider experiences of the implementation of a new tuberculosis treatment programme: a qualitative study using the normalisation process model. *BMC health services research*, 11, 275.
- AUDREY, S., HOLLIDAY, J., PARRY-LANGDON, N. & CAMPBELL, R. 2006. Meeting the challenges of implementing process evaluation within randomized controlled trials: the example of ASSIST (A Stop Smoking in Schools Trial). *Health education research*, 21, 366-377.
- BACCHUS, L. J., ALKAIYAT, A., SHAHEEN, A., ALKHAYYAT, A. S., OWDA, H., HALASEH, R., JERIES, I., FEDER, G., SANDOUKA, R. & COLOMBINI, M. 2021. Adaptive work in the primary health care response to domestic violence in occupied Palestinian territory: a qualitative evaluation using Extended Normalisation Process Theory. *BMC family practice*, 22, 1-18.
- BAILEY, S. & BURHOUSE, A. 2019. From super-hero to super-connector, changing the leadership culture in the NHS. *Future Healthcare Journal*, 6, 106.
- BAIN, E., BUBNER, T., ASHWOOD, P., VAN RYSWYK, E., SIMMONDS, L., REID, S., MIDDLETON, P. & CROWTHER, C. A. 2015. Barriers and enablers to implementing antenatal magnesium sulphate for fetal neuroprotection guidelines: a study using the theoretical domains framework. *BMC pregnancy and childbirth*, 15, 1-11.
- BAK, J. & AGGERNÆS, H. 2012. Coercion within Danish psychiatry compared with 10 other European countries. *Nordic Journal of Psychiatry*, 66, 297-302.
- BAMFORD, C., POOLE, M., BRITAIN, K., CHEW-GRAHAM, C., FOX, C., ILIFFE, S., MANTHORPE, J. & ROBINSON, L. 2014. Understanding the challenges to implementing case management for people with dementia in primary care in England: a qualitative study using Normalization Process Theory. *BMC health services research*, 14, 549.
- BARNES, G. L., HAGHIRAN, M. Z. & TRACY, D. K. 2022. Contemporary perceptions and meanings of 'the medical model' amongst NHS mental health inpatient clinicians. *International journal of mental health nursing*, 31, 567-575.

- BARNETT, R., STIRLING, C., HALL, J., DAVIES, A. & ORME, P. 2016. Perceptions of supported and unsupported prone - restraint positions. *Journal of psychiatric and mental health nursing*, 23, 172-178.
- BARNICOT, K., INSUA-SUMMERHAYES, B., PLUMMER, E., HART, A., BARKER, C. & PRIEBE, S. 2017. Staff and patient experiences of decision-making about continuous observation in psychiatric hospitals. *Social psychiatry and psychiatric epidemiology*, 52, 473-483.
- BARRIBALL, K. L. & WHILE, A. 1993. Collecting data using a semi-structured interview: a discussion paper. *Journal of advanced nursing*, 18, 328-335.
- BARTLETT, P. 2012. The United Nations Convention on the Rights of Persons with Disabilities and mental health law. *The Modern Law Review*, 75, 752-778.
- BATE, P. 2000. Changing the culture of a hospital: from hierarchy to networked community. *Public Administration*, 78, 485-512.
- BAUMGARDT, J., JÄCKEL, D., HELBER-BÖHLEN, H., STIEHM, N., MORGENSTERN, K., VOIGT, A., SCHÖPPE, E., MC CUTCHEON, A.-K., VELASQUEZ LECCA, E. E. & LÖHR, M. 2019. Preventing and reducing coercive measures—an evaluation of the implementation of the Safewards model in two locked wards in Germany. *Frontiers in Psychiatry*, 10, 340.
- BEE, P., LOVELL, K., AIRNES, Z. & PRUSZYNSKA, A. 2016. Embedding telephone therapy in statutory mental health services: a qualitative, theory-driven analysis. *BMC psychiatry*, 16, 56.
- BEKAS, S. 2013. Critical reflection: A sound foundation for learning and practice in psychiatry. *Advances in psychiatric treatment*, 19, 320-328.
- BERG, K. E. & LATIN, R. W. 2008. *Essentials of research methods in health, physical education, exercise science, and recreation*, Lippincott Williams & Wilkins.
- BERRING, L. L., PEDERSEN, L. & BUUS, N. 2016. Coping with violence in mental health care settings: patient and staff member perspectives on de-escalation practices. *Archives of psychiatric nursing*, 30, 499-507.
- BIEZEN, R., BRIJNATH, B., GRANDO, D. & MAZZA, D. 2017. Management of respiratory tract infections in young children—a qualitative study of primary care providers' perspectives. *NPJ primary care respiratory medicine*, 27, 1-7.
- BILANAKIS, N., CHRISTOU, K., KALABOKIS, G., GOULIA, P. & MAVREAS, V. 2008. Use of coercive physical measures in a Psychiatric Unit of a University General Hospital in Greece. *Annals of General Psychiatry*, 7, S326.
- BIRKEN, S. A., POWELL, B. J., SHEA, C. M., HAINES, E. R., ALEXIS KIRK, M., LEEMAN, J., ROHWEDER, C., DAMSCHRODER, L. & PRESSEAU, J. 2017. Criteria for selecting implementation science theories and frameworks: results from an international survey. *Implementation Science*, 12, 1-9.
- BLAIR, M. & MOULTON-ADELMAN, F. 2015. The Engagement Model for Reducing Seclusion and Restraint: 13 Years Later. *Journal of psychosocial nursing and mental health services*, 53, 39-45.
- BOKHOUR, B. G., FIX, G. M., MUELLER, N. M., BARKER, A. M., LAVELA, S. L., HILL, J. N., SOLOMON, J. L. & LUKAS, C. V. 2018. How can healthcare organizations implement patient-centered care? Examining a large-scale cultural transformation. *BMC health services research*, 18, 1-11.
- BOMBARD, Y., BAKER, G. R., ORLANDO, E., FANCOTT, C., BHATIA, P., CASALINO, S., ONATE, K., DENIS, J.-L. & POMEY, M.-P. 2018. Engaging patients to improve quality of care: a systematic review. *Implementation Science*, 13, 1-22.
- BORKETEY, P. 2017. A literature review on the challenges of eHealth implementation in developing countries among rural folks: A case of Ghana.
- BOWERS, L., ALEXANDER, J., BILGIN, H., BOTHA, M., DACK, C., JAMES, K., JARRETT, M., JEFFERY, D., NIJMAN, H., OWITI, J. A., PAPADOPOULOS, C., ROSS, J., WRIGHT, S. & STEWART, D. 2014. Safewards: the empirical basis of the model and a critical appraisal. *Journal of Psychiatric and Mental Health Nursing*, 21, 354-364.

- BOWERS, L., BRENNAN, G., FLOOD, C., LIPANG, M. & OLADAPO, P. 2006. Preliminary outcomes of a trial to reduce conflict and containment on acute psychiatric wards: City Nurses. *Journal of Psychiatric & Mental Health Nursing*, 13, 165-172.
- BOWERS, L., FLOOD, C., BRENNAN, G. & ALLAN, T. 2008. A replication study of the City nurse intervention: reducing conflict and containment on three acute psychiatric wards. *Journal of psychiatric and mental health nursing*, 15, 737-742.
- BOWERS, L., JAMES, K., QUIRK, A., SIMPSON, A., STEWART, D. & HODSOLL, J. 2015. Reducing conflict and containment rates on acute psychiatric wards: The Safewards cluster randomised controlled trial. *International journal of nursing studies*, 52, 1412-1422.
- BRACHER, M., MURPHY, J., STEWARD, K., WALLIS, K. & MAY, C. R. 2019. What factors promote or inhibit implementation of a new procedure for screening and treatment of malnutrition in community settings? A prospective process evaluation of the Implementing Nutrition Screening in Community Care for Older People (INSCOPE) project (UK). *BMJ open*, 9, e023362.
- BRADSHAW, A., SANTARELLI, M., MULDERRIG, M., KHAMIS, A., SARTAIN, K., BOLAND, J. W., BENNETT, M. I., JOHNSON, M., PEARSON, M. & MURTAGH, F. E. 2021. Implementing person-centred outcome measures in palliative care: an exploratory qualitative study using normalisation process theory to understand processes and context. *Palliative medicine*, 35, 397-407.
- BRAUN, V. & CLARKE, V. 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77-101.
- BRENNAN, G., FLOOD, C. & BOWERS, L. 2006. Constraints and blocks to change and improvement on acute psychiatric wards -- lessons from the City Nurses project. *Journal of Psychiatric & Mental Health Nursing*, 13, 475-482.
- BRIERE, C. E., MCGRATH, J., CONG, X. & CUSSON, R. 2014. An integrative review of factors that influence breastfeeding duration for premature infants after NICU hospitalization. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 43, 272-281.
- BUETOW, S. A., MARTÍNEZ-MARTÍN, P., HIRSCH, M. A. & OKUN, M. S. 2016. Beyond patient-centered care: person-centered care for Parkinson's disease. *npj Parkinson's Disease*, 2, 1-4.
- BUSETTO, L., LUIJKX, K., CALCIOLARI, S., ORTIZ, L. G. & VRIJHOEF, H. 2017. The development, description and appraisal of an emergent multimethod research design to study workforce changes in integrated care interventions. *International journal of integrated care*, 17.
- CAMERON, J. I., TSOI, C. & MARSELLA, A. 2008. Optimizing Stroke Systems of Care by Enhancing Transitions Across Care Environments. *Stroke*, 39, 2637-2643.
- CAMPBELL, M., DONNER, A. & KLAR, N. 2007a. Developments in cluster randomized trials and statistics in medicine. *Statistics in medicine*, 26, 2-19.
- CAMPBELL, N. C., MURRAY, E., DARBYSHIRE, J., EMERY, J., FARMER, A., GRIFFITHS, F., GUTHRIE, B., LESTER, H., WILSON, P. & KINMONTH, A. L. 2007b. Designing and evaluating complex interventions to improve health care. *Bmj*, 334, 455-459.
- CANE, J., O'CONNOR, D. & MICHIE, S. 2012. Validation of the theoretical domains framework for use in behaviour change and implementation research. *Implementation science*, 7, 1-17.
- CAO, S., GU, M., FENG, M., JIA, Y., ZHAO, Y., CHEN, S., ZHU, L., BO, S. & ZHAO, Q. 2022. Implementation of evidence in preventing medical device - related pressure injury in ICU patients using the i - PARIHS framework. *Journal of Nursing Management*, 30, 318-327.
- CESARIO, A., GALETTA, D., RUSSO, P., MARGARITORA, S. & GRANONE, P. 2003. The role of the surgeon in translational research. *The Lancet*, 362, 1082.
- CHAFFER, D., KLINE, R. & WOODWARD, S. 2019. Being Fair. Supporting a just and learning culture for staff and patients following incidents in the NHS.
- CHO, J. Y. & LEE, E.-H. 2014. Reducing confusion about grounded theory and qualitative content analysis: Similarities and differences. *The qualitative report*, 19, 1.

- CLAESSENS, F., SEYS, D., BROUWERS, J., VAN WILDER, A., JANS, A., CASTRO, E. M., BRUYNEEL, L., DE RIDDER, D. & VANHAECHT, K. 2022. A co-creation roadmap towards sustainable quality of care: A multi-method study. *PloS one*, 17, e0269364.
- COCKERTON, R., O'BRIEN, A. & OATES, J. 2015. Implementing positive and proactive care. *Mental Health Practice*, 19.
- COHEN, J. & EZER, T. 2013. Human rights in patient care: a theoretical and practical framework. *health and human rights*, 15, 7-19.
- COLAIZZI, J. 2005. Seclusion & restraint: a historical perspective. *Journal of psychosocial nursing and mental health services*, 43, 31-37.
- CONNELL, L. A., MCMAHON, N. E., TYSON, S. F., WATKINS, C. L. & ENG, J. J. 2016. Mechanisms of action of an implementation intervention in stroke rehabilitation: a qualitative interview study. *BMC health services research*, 16, 534.
- COOKSEY, D. 2006. A Review of UK Health Research Funding *In: TREASURY, H. (ed.)*. Norwich: The Stationary Office.
- CORBIN, J. & STRAUSS, A. 2014. *Basics of qualitative research: Techniques and procedures for developing grounded theory*, Sage publications.
- COWMAN, S., BJÖRKDAHL, A., CLARKE, E., GETHIN, G. & MAGUIRE, J. 2017. A descriptive survey study of violence management and priorities among psychiatric staff in mental health services, across seventeen european countries. *BMC health services research*, 17, 59.
- CQC 2016. Brief guide: restraint (physical and mechanical).
- CQC 2017a. Mental Health Act - A focus on restrictive intervention reduction programmes in inpatient mental health services. Available Online: http://www.cqc.org.uk/sites/default/files/201701207b_restrictivepractice_resource.pdf.
- CQC 2017b. The state of care in mental health services 2014 to 2017. *Care Quality Commission, Newcastle-upon-Tyne, available at: http://www.cqc.org.uk/sites/default/files/20170720_stateofmh_report.pdf [Google Scholar]*.
- CQC. 2022. *Experts by Experience* [Online]. Available: <https://www.cqc.org.uk/about-us/jobs/experts-experience> [Accessed 30 September 2022].
- CRAIG, L. E., MCINNES, E., TAYLOR, N., GRIMLEY, R., CADILHAC, D. A., CONSIDINE, J. & MIDDLETON, S. 2016. Identifying the barriers and enablers for a triage, treatment, and transfer clinical intervention to manage acute stroke patients in the emergency department: a systematic review using the theoretical domains framework (TDF). *Implementation Science*, 11, 1-18.
- CRAIG, P., DIEPPE, P., MACINTYRE, S., MICHIE, S., NAZARETH, I. & PETTICREW, M. 2008. Developing and evaluating complex interventions: the new Medical Research Council guidance. *Bmj*, 337.
- CUMMINGS, K. S., GRANDFIELD, S. A. & COLDWELL, C. M. 2010. Caring with comfort rooms: reducing seclusion and restraint use in psychiatric facilities. *Journal of Psychosocial Nursing & Mental Health Services*, 48, 26-30.
- CURRIE, K., KING, C., MCALONEY-KOCAMAN, K., ROBERTS, N., MACDONALD, J., DICKSON, A., CAIRNS, S., KHANNA, N., FLOWERS, P. & REILLY, J. 2019. Barriers and enablers to meticillin-resistant Staphylococcus aureus admission screening in hospitals: a mixed-methods study. *Journal of Hospital Infection*, 101, 100-108.
- CUSACK, P., MCANDREW, S., CUSACK, F. & WARNE, T. 2016. Restraining good practice: Reviewing evidence of the effects of restraint from the perspective of service users and mental health professionals in the United Kingdom (UK). *International journal of law and psychiatry*, 46, 20-26.
- DACK, C., ROSS, J., PAPADOPOULOS, C., STEWART, D. & BOWERS, L. 2013. A review and meta - analysis of the patient factors associated with psychiatric in - patient aggression. *Acta Psychiatrica Scandinavica*, 127, 255-268.

- DAMSCHRODER, L. J., ARON, D. C., KEITH, R. E., KIRSH, S. R., ALEXANDER, J. A. & LOWERY, J. C. 2009. Fostering implementation of health services research findings into practice: a consolidated framework for advancing implementation science. *Implementation science*, 4, 1-15.
- DAVEY, B. R., BYRNE, S. J., MILLEAR, P. M., DAWBER, C. & MEDORO, L. 2020. Evaluating the impact of reflective practice groups for nurses in an acute hospital setting. *Australian Journal of Advanced Nursing, The*, 38, 6-17.
- DAVIS, C. B. 2018. Self-reflection, vision, and inquiry. *Nursing made Incredibly Easy*.
- DE GEEST, S., ZÚÑIGA, F., BRUNKERT, T., DESCHODT, M., ZULLIG, L. L., WYSS, K. & UTZINGER, J. 2020. Powering Swiss health care for the future: implementation science to bridge “the valley of death”. *Swiss Medical Weekly*.
- DICTIONARY, C. 2018. *Collins Dictionary* [Online]. Available: <https://www.collinsdictionary.com/dictionary/english/coercive> [Accessed 5 February. 2018].
- DIXON-WOODS, M., BAKER, R., CHARLES, K., DAWSON, J., JERZEMBEK, G., MARTIN, G., MCCARTHY, I., MCKEE, L., MINION, J. & OZIERANSKI, P. 2014. Culture and behaviour in the English National Health Service: overview of lessons from a large multimethod study. *BMJ quality & safety*, 23, 106-115.
- DOH 2014a. Positive and Proactive Care: reducing the need for restrictive interventions. Department of Health U.K.
- DOH. 2014b. *A positive and proactive workforce A guide to workforce development for commissioners and employers seeking to minimise the use of restrictive practices in social care and health* [Online]. Available: <https://www.skillsforcare.org.uk/Document-library/Skills/Restrictive-practices/A-positive-and-proactive-workforce-WEB.pdf> [Accessed 30 September 2022].
- DOH. 2015a. *Culture change in the NHS Applying the lessons of the Francis Inquiries* [Online]. Available: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/403010/culture-change-nhs.pdf [Accessed 30 September 2022].
- DOH 2015b. Winterbourne View: Transforming Care Two Years On. The Stationery Office. London.
- DONAT, D. C. 1998. Impact of a mandatory behavioral consultation on seclusion/restraint utilization in a psychiatric hospital. *Journal of Behavior Therapy and Experimental Psychiatry*, 29, 13-19.
- DONAT, D. C. 2002. Employing behavioral methods to improve the context of care in a public psychiatric hospital: Reducing hospital reliance on seclusion/restraint and psychotropic PRN medication. *Cognitive and Behavioral Practice*, 9, 28-37.
- DONAT, D. C. 2003a. An analysis of successful efforts to reduce the use of seclusion and restraint at a public psychiatric hospital. *Psychiatric Services*, 54, 1119-1123.
- DONAT, D. C. 2003b. Employing behavioral methods to improve the context of care in a public psychiatric hospital: Some applications to health care management. *Psychiatric rehabilitation journal*, 27, 177.
- DONAT, D. C. 2005. Special section on seclusion and restraint: Encouraging alternatives to seclusion, restraint, and reliance on PRN drugs in a public psychiatric hospital. *Psychiatric Services*, 56, 1105-1108.
- DONAT, D. C. 2006. Impact of a clinical-administrative review procedure on reducing reliance on psychotropic PRN medication. *Psychiatric rehabilitation journal*, 29, 215.
- DOYLE, L., KELLIHER, F. & HARRINGTON, D. 2016. How multi-levels of individual and team learning interact in a public healthcare organisation: a conceptual framework. *Action Learning: Research and Practice*, 13, 10-22.
- DRAINONI, M.-L., KOPPELMAN, E. A., FELDMAN, J. A., WALLEY, A. Y., MITCHELL, P. M., ELLISON, J. & BERNSTEIN, E. 2016. Why is it so hard to implement change? A qualitative examination of barriers and facilitators to distribution of naloxone for overdose prevention in a safety net environment. *BMC Research Notes*, 9, 1-14.

- DREW, S., JUDGE, A., MAY, C., FARMER, A., COOPER, C., JAVAID, M. K. & GOOBERMAN-HILL, R. 2015. Implementation of secondary fracture prevention services after hip fracture: a qualitative study using extended Normalization Process Theory. *Implementation Science*, 10, 57.
- DUXBURY, J., BAKER, J., DOWNE, S., JONES, F., GREENWOOD, P., THYGESEN, H., MCKEOWN, M., PRICE, O., SCHOLE, A. & THOMSON, G. 2019. Minimising the use of physical restraint in acute mental health services: the outcome of a restraint reduction programme ('ReSTRAIN YOURSELF'). *International journal of nursing studies*, 95, 40-48.
- EAKIN, M. N., UGBAH, L., ARNAUTOVIC, T., PARKER, A. M. & NEEDHAM, D. M. 2015. Implementing and sustaining an early rehabilitation program in a medical intensive care unit: a qualitative analysis. *Journal of critical care*, 30, 698-704.
- ECPR. 2002. *European Charter of Patients' Rights*, [Online]. Available: https://ec.europa.eu/health/ph_overview/co_operation/mobility/docs/health_services_co108_en.pdf [Accessed 15/08/2022].
- EDGAR, D. A., WILSON, V. J. & MORONEY, T. 2020. Which is it, person-centred culture, practice or care? It matters.
- EGERTON, T., DIAMOND, L., BUCHBINDER, R., BENNELL, K. & SLADE, S. C. 2016. Barriers and enablers in primary care clinicians' management of osteoarthritis: protocol for a systematic review and qualitative evidence synthesis. *BMJ Open*, 6.
- EHRlich, C. & KENDALL, E. 2015. Integrating collaborative place-based health promotion coalitions into existing health system structures: the experience from one Australian health coalition. *International Journal of Integrated Care*, 15.
- ELLIS, L. A., CHURRUCA, K. & BRAITHWAITE, J. 2017. Mental health services conceptualised as complex adaptive systems: what can be learned? *International journal of mental health systems*, 11, 1-5.
- ELO, S. & KYNGÄS, H. 2008. The qualitative content analysis process. *Journal of advanced nursing*, 62, 107-115.
- EMANUEL, E. J. & EMANUEL, L. L. 1992. Four models of the physician-patient relationship. *Jama*, 267, 2221-6.
- FAGNAN, L. J., DAVIS, M., DEYO, R. A., WERNER, J. W. & STANGE, K. C. 2010. Linking practice-based research networks and Clinical and Translational Science Awards: new opportunities for community engagement by academic health centers. *Academic medicine: journal of the Association of American Medical Colleges*, 85, 476.
- FENNELL, P. 2008. Best interests and treatment for mental disorder. *Health Care Anal*, 16, 255-67.
- FINCH, T. 2008. Teledermatology for chronic disease management: coherence and normalization. *Chronic illness*, 4, 127-134.
- FINCH, T. L., RAPLEY, T., GIRLING, M., MAIR, F. S., MURRAY, E., TREWEEK, S., MCCOLL, E., STEEN, I. N. & MAY, C. R. 2013. Improving the normalization of complex interventions: measure development based on normalization process theory (NoMAD): study protocol. *Implementation Science*, 8, 43.
- FISHER, W. A. 2003. Elements of successful restraint and seclusion reduction program and their application in a large, urban, state psychiatric hospital. *Journal of Psychiatric Practice*, 9, 7-15.
- FLANNERY, C., MCHUGH, S., ANABA, A. E., CLIFFORD, E., O'RIORDAN, M., KENNY, L. C., MCAULIFFE, F. M., KEARNEY, P. M. & BYRNE, M. 2018. Enablers and barriers to physical activity in overweight and obese pregnant women: an analysis informed by the theoretical domains framework and COM-B model. *BMC pregnancy and childbirth*, 18, 1-13.
- FLETCHER, A., JAMAL, F., MOORE, G., EVANS, R. E., MURPHY, S. & BONELL, C. 2016. Realist complex intervention science: applying realist principles across all phases of the Medical Research Council framework for developing and evaluating complex interventions. *Evaluation*, 22, 286-303.

- FLETCHER, J., SPITTAL, M., BROPHY, L., TIBBLE, H., KINNER, S., ELSOM, S. & HAMILTON, B. 2017. Outcomes of the Victorian Safewards trial in 13 wards: Impact on seclusion rates and fidelity measurement. *International journal of mental health nursing*, 26, 461-471.
- FLOOD, C., BRENNAN, G., BOWERS, L., HAMILTON, B., LIPANG, M. & OLADAPO, P. 2006. Reflections on the process of change on acute psychiatric wards during the City Nurse Project. *Journal of Psychiatric & Mental Health Nursing*, 13, 260-268.
- FORSTER, P. L., CAVNESS, C. & PHELPS, M. A. 1999. Staff training decreases use of seclusion and restraint in an acute psychiatric hospital. *Archives of Psychiatric Nursing*, 13, 269-271.
- FOX, N. 2009. Using interviews in a research project. *The NIHR RDS for the East Midlands/Yorkshire & the Humber*, 26.
- FRIEDMAN, R., NURENBERG, J. R., BIRNBAUM, S. & SCHLEIFER, S. J. 2012. Using structured clinical feedback to encourage alternatives to use of 'p.R.N.' medication in a state psychiatric hospital. *Journal of Psychiatric Practice*, 18, 381-387.
- FUNK, M. & DREW, N. 2017. WHO QualityRights: transforming mental health services. *The Lancet Psychiatry*, 4, 826-827.
- GARBUTT, J. M., DODD, S., WALLING, E., LEE, A. A., KULKA, K. & LOBB, R. 2018. Barriers and facilitators to HPV vaccination in primary care practices: a mixed methods study using the Consolidated Framework for Implementation Research. *BMC Family Practice*, 19, 1-11.
- GAWNE, S., FISH, R. & MACHIN, L. 2020. Developing a workplace-based learning culture in the NHS: Aspirations and challenges. *Journal of Medical Education and Curricular Development*, 7, 2382120520947063.
- GEORGIEVA, I. 2012. *Coercive Interventions during Inpatient Psychiatric Care Patient's preference, prevention and effects*.
- GIBBONS, M. 2000. Mode 2 society and the emergence of context-sensitive science. *Science and public policy*, 27, 159-163.
- GIRLANDA, F., FIEDLER, I., BECKER, T., BARBUI, C. & KOESTERS, M. 2017. The evidence–practice gap in specialist mental healthcare: systematic review and meta-analysis of guideline implementation studies. *The British Journal of Psychiatry*, 210, 24-30.
- GLASGOW, R. E., DAVIS, C. L., FUNNELL, M. M. & BECK, A. 2003. Implementing practical interventions to support chronic illness self-management. *The joint commission journal on quality and safety*, 29, 563-574.
- GODDARD, S. L., LORENCATTO, F., KOO, E., ROSE, L., FAN, E., KHO, M. E., NEEDHAM, D. M., RUBENFELD, G. D., FRANCIS, J. J. & CUTHBERTSON, B. H. 2018. Barriers and facilitators to early rehabilitation in mechanically ventilated patients—a theory-driven interview study. *Journal of intensive care*, 6, 1-8.
- GODFREY, J. L., MCGILL, A. C., JONES, N. T., OXLEY, S. L. & CARR, R. M. 2014. Anatomy of a transformation: a systematic effort to reduce mechanical restraints at a state psychiatric hospital. *Psychiatric Services*, 65, 1277-1280.
- GOULET, M.-H., LARUE, C. & DUMAIS, A. 2017. Evaluation of seclusion and restraint reduction programs in mental health: A systematic review. *Aggression and violent behavior*, 34, 139-146.
- GRADY, C. 2015. Enduring and Emerging Challenges of Informed Consent. *New England Journal of Medicine*, 372, 855-862.
- GRADY, P. A. 2010. Translational research and nursing science. *Nursing Outlook*, 58, 164-166.
- GRAHAM, I. D., LOGAN, J., HARRISON, M. B., STRAUS, S. E., TETROE, J., CASWELL, W. & ROBINSON, N. 2006. Lost in knowledge translation: time for a map? *Journal of continuing education in the health professions*, 26, 13-24.
- GRAHAM, I. D. & TETROE, J. 2008. Nomenclature in translational research. *JAMA*, 299, 2148-2150.
- GRANEHEIM, U. H. & LUNDMAN, B. 2004. Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse education today*, 24, 105-112.

- GRANT, A., TREWEEK, S., DREISCHULTE, T., FOY, R. & GUTHRIE, B. 2013. Process evaluations for cluster-randomised trials of complex interventions: a proposed framework for design and reporting. *Trials*, 14, 1-10.
- GRANT, M. J. & BOOTH, A. 2009. A typology of reviews: an analysis of 14 review types and associated methodologies. *Health Info Libr J*, 26, 91-108.
- GRBICH, C. 1998. *Qualitative research in health: An introduction*, sage.
- GRBICH, C. 2012. *Qualitative data analysis: An introduction*, sage.
- GREALISH, L., CHABOYER, W., MUDGE, A., SIMPSON, T., CAHILL, M., TODD, J. A., OWNSWORTH, T., KRUG, M., TEODORCZUK, A. & MARSHALL, A. P. 2019. Using a general theory of implementation to plan the introduction of delirium prevention for older people in hospital. *Journal of Nursing Management*, 27, 1631-1639.
- GREEN, L. W. 2014. Closing the chasm between research and practice: evidence of and for change. *Health Promotion Journal of Australia*, 25, 25-29.
- GROL, R. P., BOSCH, M. C., HULSCHER, M. E., ECCLES, M. P. & WENSING, M. 2007. Planning and studying improvement in patient care: the use of theoretical perspectives. *The Milbank Quarterly*, 85, 93-138.
- GUERON, J. M. 2002. Implementing Studies and Affecting Policy. *Evidence matters: Randomized trials in education research*, 15.
- GUZMAN-PARRA, J., AGUILERA SERRANO, C., GARCÍA-SÁNCHEZ, J. A., PINO-BENÍTEZ, I., ALBA-VALLEJO, M., MORENO-KÜSTNER, B. & MAYORAL-CLERIES, F. 2016. Effectiveness of a Multimodal Intervention Program for Restraint Prevention in an Acute Spanish Psychiatric Ward. *Journal of the American Psychiatric Nurses Association*, 22, 233-241.
- HÅKANSSON EKLUND, J., HOLMSTRÖM, I. K., KUMLIN, T., KAMINSKY, E., SKOGLUND, K., HÖGLANDER, J., SUNDLER, A. J., CONDÉN, E. & SUMMER MERENIUS, M. 2019. Same same or different? A review of reviews of person-centred and patient-centred care. *Patient education and counseling*, 3-11.
- HALES, D. 2010. An introduction to triangulation. *Geneva: UNAIDS Monitoring and Education Division*, 13-17.
- HALL, A. M., SCURREY, S. R., PIKE, A. E., ALBURY, C., RICHMOND, H. L., MATTHEWS, J., TOOMEY, E., HAYDEN, J. A. & ETCHEGARY, H. 2019. Physician-reported barriers to using evidence-based recommendations for low back pain in clinical practice: a systematic review and synthesis of qualitative studies using the Theoretical Domains Framework. *Implementation Science*, 14, 1-19.
- HAPPELL, B., WAKS, S., HORGAN, A., GREANEY, S., MANNING, F., GOODWIN, J., BOCKING, J., SCHOLZ, B., HALS, E. & GRANERUD, A. 2020. "It is much more real when it comes from them": The role of experts by experience in the integration of mental health nursing theory and practice. *Perspectives in psychiatric care*, 56, 811-819.
- HAPPELL, B., WARNER, T., WAKS, S., O'DONOVAN, A., MANNING, F., DOODY, R., GREANEY, S., GOODWIN, J., HALS, E. & GRIFFIN, M. 2022. Something special, something unique: perspectives of experts by experience in mental health nursing education on their contribution. *Journal of Psychiatric and Mental Health Nursing*, 29, 346-358.
- HARDEMAN, W., SUTTON, S., GRIFFIN, S., JOHNSTON, M., WHITE, A., WAREHAM, N. J. & KINMONTH, A. L. 2005. A causal modelling approach to the development of theory-based behaviour change programmes for trial evaluation. *Health education research*, 20, 676-687.
- HARVEY, G. & KITSON, A. 2015. PARIHS revisited: from heuristic to integrated framework for the successful implementation of knowledge into practice. *Implementation science*, 11, 1-13.
- HAUGVALDSTAD, M. J. & HUSUM, T. L. 2016. Influence of staff's emotional reactions on the escalation of patient aggression in mental health care. *International journal of law and psychiatry*, 49, 130-137.
- HÉBERT, R. 2003. NIDCD Supports Collaborative Efforts in Translational Research. *APS Observer*, 16.

- HELLERSTEIN, D. J., STAUB, A. B. & LEQUESNE, E. 2007. Decreasing the use of restraint and seclusion among psychiatric inpatients. *Journal of Psychiatric Practice*, 13, 308-317.
- HELMERS, S. L., PHILLIPS, V. L. & ESPER, G. J. 2010. Translational medicine in neurology: The time is right. *Archives of neurology*, 67, 1263-1266.
- HEM, M. H., MOLEWIJK, B. & PEDERSEN, R. 2014. Ethical challenges in connection with the use of coercion: a focus group study of health care personnel in mental health care. *BMC medical ethics*, 15, 82.
- HILFERTY, F., CASSELLS, R., MUIR, K. & KATZ, I. 2016. Is headspace making a difference to young people's lives?
- HOAGWOOD, K. & OLIN, S. S. 2002. The NIMH blueprint for change report: Research priorities in child and adolescent mental health. *Journal of the American Academy of Child & Adolescent Psychiatry*, 41, 760-767.
- HOFFMAN, S. J., SRITHARAN, L. & TEJPAN, A. 2016. Is the UN Convention on the Rights of Persons with Disabilities Impacting Mental Health Laws and Policies in High-Income Countries? A Case Study of Implementation in Canada. *BMC Int Health Hum Rights*, 16, 28.
- HOHMANN, A. A. 1999. A contextual model for clinical mental health effectiveness research. *Mental Health Services Research*, 1, 83-91.
- HOHMANN, A. A. & SHEAR, M. K. 2002. Community-based intervention research: Coping with the "noise" of real life in study design. *American Journal of Psychiatry*, 159, 201-207.
- HOLLINS, L. 2017. The Nice 10 minute physical restraint rule: A discussion of the relative risks. *Journal of psychiatric and mental health nursing*.
- HONG, Q. N., FÀBREGUES, S., BARTLETT, G., BOARDMAN, F., CARGO, M., DAGENAIS, P., GAGNON, M.-P., GRIFFITHS, F., NICOLAU, B. & O'CATHAIN, A. 2018b. The Mixed Methods Appraisal Tool (MMAT) version 2018 for information professionals and researchers. *Education for Information*, 1-7.
- HONG, Q. N., PLUYE, P., FÀBREGUES, S., BARTLETT, G., BOARDMAN, F., CARGO, M., DAGENAIS, P., GAGNON, M.-P., GRIFFITHS, F. & NICOLAU, B. 2018a. Mixed methods appraisal tool (MMAT), version 2018. *IC Canadian Intellectual Property Office, Canada*.
- HOOKER, L., SMALL, R., HUMPHREYS, C., HEGARTY, K. & TAFT, A. 2015. Applying normalization process theory to understand implementation of a family violence screening and care model in maternal and child health nursing practice: a mixed method process evaluation of a randomised controlled trial. *Implementation science*, 10, 1-13.
- HORGAN, A., MANNING, F., DONOVAN, M. O., DOODY, R., SAVAGE, E., BRADLEY, S. K., DORRITY, C., O' SULLIVAN, H., GOODWIN, J. & GREANEY, S. 2020. Expert by experience involvement in mental health nursing education: the co - production of standards between Experts by Experience and academics in mental health nursing. *Journal of psychiatric and mental health nursing*, 27, 553-562.
- HOWELL, D., POWIS, M., KIRKBY, R., AMERNIC, H., MOODY, L., BRYANT-LUKOSIUS, D., O'BRIEN, M. A., RASK, S. & KRZYZANOWSKA, M. 2022. Improving the quality of self-management support in ambulatory cancer care: a mixed-method study of organisational and clinician readiness, barriers and enablers for tailoring of implementation strategies to multisites. *BMJ Quality & Safety*, 31, 12-22.
- HOYER, G., KJELLIN, L., ENGBERG, M., KALTIALA-HEINO, R., NILSTUN, T., SIGURJONSDOTTIR, M. & SYSE, A. 2002. Paternalism and autonomy: a presentation of a Nordic study on the use of coercion in the mental health care system. *Int J Law Psychiatry*, 25, 93-108.
- HSIEH, H.-F. & SHANNON, S. E. 2005. Three approaches to qualitative content analysis. *Qualitative health research*, 15, 1277-1288.
- HUCKSHORN, K. A. 2004. Reducing seclusion & restraint use in mental health settings: Core strategies for prevention. *Journal of Psychosocial Nursing and Mental Health Services*, 42, 22-33.
- HUDDLESTONE, L., TURNER, J., EBORALL, H., HUDSON, N., DAVIES, M. & MARTIN, G. 2020. Application of normalisation process theory in understanding implementation

- processes in primary care settings in the UK: a systematic review. *BMC family practice*, 21, 1-16.
- HUNTER, S., KIM, B., MUDGE, A., HALL, L., YOUNG, A., MCRAE, P. & KITSON, A. 2020. Experiences of using the i-PARIHS framework: a co-designed case study of four multi-site implementation projects. *BMC health services research*, 20, 1-14.
- HURST, H., GRIFFITHS, J., HUNT, C. & MARTINEZ, E. 2019. A realist evaluation of the implementation of open visiting in an acute care setting for older people. *BMC health services research*, 19, 1-11.
- IBRAHIM, K., MAY, C. R., PATEL, H. P., BAXTER, M., SAYER, A. A. & ROBERTS, H. C. 2018. Implementation of grip strength measurement in medicine for older people wards as part of routine admission assessment: identifying facilitators and barriers using a theory-led intervention. *BMC geriatrics*, 18, 1-14.
- IOZZINO, L., FERRARI, C., LARGE, M., NIELSSEN, O. & DE GIROLAMO, G. 2015. Prevalence and risk factors of violence by psychiatric acute inpatients: a systematic review and meta-analysis. *PloS one*, 10, e0128536.
- ISENOR, J. E., MINARD, L. V., STEWART, S. A., CURRAN, J. A., DEAL, H., RODRIGUES, G. & SKETRIS, I. S. 2018. Identification of the relationship between barriers and facilitators of pharmacist prescribing and self-reported prescribing activity using the theoretical domains framework. *Research in Social and Administrative Pharmacy*, 14, 784-791.
- JABBOUR, M., NEWTON, A. S., JOHNSON, D. & CURRAN, J. A. 2018. Defining barriers and enablers for clinical pathway implementation in complex clinical settings. *Implementation Science*, 13, 1-13.
- JACOBOWITZ, W. 2013. PTSD in psychiatric nurses and other mental health providers: a review of the literature. *Issues in mental health nursing*, 34, 787-795.
- JAMES, K., QUIRK, A., PATTERSON, S., BRENNAN, G. & STEWART, D. 2017. Quality of intervention delivery in a cluster randomised controlled trial: a qualitative observational study with lessons for fidelity. *Trials*, 18, 548.
- JENNINGS, B. M. 2004. Translational research: Disrupting the status quo. *Nursing Outlook*, 52, 66.
- JOHNSON, R. B., ONWUEGBUZIE, A. J. & TURNER, L. A. 2007. Toward a definition of mixed methods research. *Journal of mixed methods research*, 1, 112-133.
- JONES, R. & EAYRS, C. 1993. Challenging behaviour and intellectual disability: an overview. *Challenging Behaviour and Intellectual Disability: A Psychological Perspective*, Clevedon, BILD. *Google Scholar*.
- JONIKAS, J. A., COOK, J. A., ROSEN, C., LARIS, A. & KIM, J. 2004. A program to reduce use of physical restraint in psychiatric inpatient facilities. *Psychiatric Services*, 55, 818-820.
- JONKER, E., GOOSSENS, P., STEENHUIS, I. & OUD, N. 2008. Patient aggression in clinical psychiatry: perceptions of mental health nurses. *Journal of Psychiatric and Mental Health Nursing*, 15, 492-499.
- KALTMAN, J. R., SCHRAMM, C. & PEARSON, G. D. 2010. The national heart, lung, and blood institute bench to bassinet program: A new paradigm for translational research. *Journal of the American College of Cardiology*, 55, 1262-1265.
- KANDEL, P., LIM, S., PIROTTA, S., SKOUTERIS, H., MORAN, L. J. & HILL, B. 2021. Enablers and barriers to women's lifestyle behavior change during the preconception period: A systematic review. *Obesity Reviews*.
- KANHADILOK, S. & MCGRATH, J. M. 2015. An integrative review of factors influencing breastfeeding in adolescent mothers. *The Journal of perinatal education*, 24, 119-127.
- KENNEDY, A., ROGERS, A., BOWEN, R., LEE, V., BLAKEMAN, T., GARDNER, C., MORRIS, R., PROTHEROE, J. & CHEW-GRAHAM, C. 2014a. Implementing, embedding and integrating self-management support tools for people with long-term conditions in primary care nursing: a qualitative study. *International journal of nursing studies*, 51, 1103-1113.
- KENNEDY, A., ROGERS, A., CHEW-GRAHAM, C., BLAKEMAN, T., BOWEN, R., GARDNER, C., LEE, V., MORRIS, R. & PROTHEROE, J. 2014b. Implementation of a self-management

- support approach (WISE) across a health system: a process evaluation explaining what did and did not work for organisations, clinicians and patients. *Implementation Science*, 9, 129.
- KERR, K., ORAM, J., TINSON, H. & SHUM, D. 2017. Health care workers' experiences of aggression. *Archives of psychiatric nursing*, 31, 457-462.
- KESSLER, R. & GLASGOW, R. E. 2011. A proposal to speed translation of healthcare research into practice: dramatic change is needed. *American journal of preventive medicine*, 40, 637-644.
- KHALIL, H. 2016. Knowledge translation and implementation science: what is the difference? : LWW.
- KHOURY, M. J., GWINN, M., YOON, P. W., DOWLING, N., MOORE, C. A. & BRADLEY, L. 2007. The continuum of translation research in genomic medicine: how can we accelerate the appropriate integration of human genome discoveries into health care and disease prevention? *Genetics in Medicine*, 9, 665-674.
- KIRK, M. A., KELLEY, C., YANKEY, N., BIRKEN, S. A., ABADIE, B. & DAMSCHRODER, L. 2015. A systematic review of the use of the consolidated framework for implementation research. *Implementation Science*, 11, 1-13.
- KITSON, A., HARVEY, G. & MCCORMACK, B. 1998. Enabling the implementation of evidence based practice: a conceptual framework. *BMJ Quality & Safety*, 7, 149-158.
- KITSON, A. L., RYCROFT-MALONE, J., HARVEY, G., MCCORMACK, B., SEERS, K. & TITCHEN, A. 2008. Evaluating the successful implementation of evidence into practice using the PARIHS framework: theoretical and practical challenges. *Implementation science*, 3, 1-12.
- KLEIN, K. J. & SORRA, J. S. 1996. The challenge of innovation implementation. *Academy of management review*, 21, 1055-1080.
- KLEINMAN, I. 1991. The right to refuse treatment: ethical considerations for the competent patient. *CMAJ: Canadian Medical Association Journal*, 144, 1219-1222.
- KNOWLES, S., COTTERILL, S., COUPE, N. & SPENCE, M. 2019. Referral of patients to diabetes prevention programmes from community campaigns and general practices: mixed-method evaluation using the RE-AIM framework and Normalisation Process Theory. *BMC Health Services Research*, 19, 1-14.
- KONTEH, F. H., MANNION, R. & JACOBS, R. 2022. Changing leadership, management and culture in mental health trusts. *Mental Health Review Journal*.
- KRISTENSEN, H. K., BORG, T. & HOUNSGAARD, L. 2012. Aspects affecting occupational therapists' reasoning when implementing research-based evidence in stroke rehabilitation. *Scandinavian journal of occupational therapy*, 19, 118-131.
- LAMANNA, D., NINKOVIC, D., VIJAYARATNAM, V., BALDERSON, K., SPIVAK, H., BROOK, S. & ROBERTSON, D. 2016. Aggression in psychiatric hospitalizations: a qualitative study of patient and provider perspectives. *Journal of Mental Health*, 25, 536-542.
- LAUER, M. S. & SKARLATOS, S. 2010. Translational research for cardiovascular diseases at the National Heart, Lung, and Blood Institute: moving from bench to bedside and from bedside to community. *Circulation*, 121, 929-933.
- LAVELLE, M., STEWART, D., JAMES, K., RICHARDSON, M., RENWICK, L., BRENNAN, G. & BOWERS, L. 2016. Predictors of effective de-escalation in acute inpatient psychiatric settings. *Journal of clinical nursing*, 25, 2180-2188.
- LAYCOCK, A., HARVEY, G., PERCIVAL, N., CUNNINGHAM, F., BAILIE, J., MATTHEWS, V., COPLEY, K., PATEL, L. & BAILIE, R. 2018. Application of the i-PARIHS framework for enhancing understanding of interactive dissemination to achieve wide-scale improvement in Indigenous primary healthcare. *Health research policy and systems*, 16, 1-16.
- LDT. 2018. *40 recent ATU deaths revealed | LDT* [Online]. Available: <https://www.learningdisabilitytoday.co.uk/40-recent-atu-deaths-revealed> [Accessed 30 September 2022].

- LEBEL, J. L., DUXBURY, J. A., PUTKONEN, A., SPRAGUE, T., RAE, C. & SHARPE, J. 2014. Multinational experiences in reducing and preventing the use of restraint and seclusion. *Journal of psychosocial nursing and mental health services*, 52, 22-29.
- LEE, S. J., COX, A., WHITECROSS, F., WILLIAMS, P. & HOLLANDER, Y. 2010. Sensory assessment and therapy to help reduce seclusion use with service users needing psychiatric intensive care. *Journal of Psychiatric Intensive Care*, 6, 83-90.
- LENFANT, C. 2003. Clinical research to clinical practice—lost in translation? *New England Journal of Medicine*, 349, 868-874.
- LEPPIN, A. L., MAHONEY, J. E., STEVENS, K. R., BARTELS, S. J., BALDWIN, L.-M., DOLOR, R. J., PROCTOR, E. K., SCHOLL, L., MOORE, J. B. & BAUMANN, A. A. 2020. Situating dissemination and implementation sciences within and across the translational research spectrum. *Journal of Clinical and Translational Science*, 4, 152-158.
- LEVAC, D., WISHART, L., MISSIUNA, C. & WRIGHT, V. 2009. The application of motor learning strategies within functionally based interventions for children with neuromotor conditions. *Pediatric Physical Therapy*, 21, 345-355.
- LI, S.-A., JEFFS, L., BARWICK, M. & STEVENS, B. 2018. Organizational contextual features that influence the implementation of evidence-based practices across healthcare settings: a systematic integrative review. *Systematic reviews*, 7, 72.
- LIN, Y., MYALL, M. & JARRETT, N. 2017. Uncovering the decision - making work of transferring dying patients home from critical care units: An integrative review. *Journal of advanced nursing*, 73, 2864-2876.
- LLOYD, C., KING, R. & MACHINGURA, T. 2014. An investigation into the effectiveness of sensory modulation in reducing seclusion within an acute mental health unit. *Advances in Mental Health*, 12, 93-100.
- LOMBARDO, C., VAN BORTEL, T., WAGNER, A. P., KAMINSKIY, E., WILSON, C., KRISHNAMOORTHY, T., RAE, S., ROUSE, L., JONES, P. B. & RAY, M. K. 2018. PROGRESS: the PROMISE governance framework to decrease coercion in mental healthcare. *BMJ open quality*, 7, e000332.
- LUND, S., RICHARDSON, A. & MAY, C. 2015. Barriers to advance care planning at the end of life: an explanatory systematic review of implementation studies. *Plos one*, 10, e0116629.
- LYNCH, E. A., MUDGE, A., KNOWLES, S., KITSON, A. L., HUNTER, S. C. & HARVEY, G. 2018. "There is nothing so practical as a good theory": a pragmatic guide for selecting theoretical approaches for implementation projects. *BMC Health Services Research*, 18, 1-11.
- MACFARLANE, A. & O'REILLY-DE BRÚN, M. 2012. Using a theory-driven conceptual framework in qualitative health research. *Qualitative Health Research*, 22, 607-618.
- MACKINNON, K. R., GUTA, A., VORONKA, J., PILLING, M., WILLIAMS, C. C., STRIKE, C. & ROSS, L. E. 2021. The political economy of peer research: mapping the possibilities and precarities of paying people for lived experience. *The British Journal of Social Work*, 51, 888-906.
- MAHER, L., GRUSTAFSON, D. & EVANS, A. 2010. NHS sustainability model: NHS Institute for Innovation and Improvement. 2010.
- MAIR, F. S., MAY, C., O'DONNELL, C., FINCH, T., SULLIVAN, F. & MURRAY, E. 2012. Factors that promote or inhibit the implementation of e-health systems: an explanatory systematic review. *Bulletin of the World Health Organization*, 90, 357-364.
- MANNION, R. & DAVIES, H. 2018. Understanding organisational culture for healthcare quality improvement. *Bmj*, 363.
- MARCUSSEN, M., NØRGAARD, B., BORGNACKE, K. & ARNFRED, S. 2020. Improved patient-reported outcomes after interprofessional training in mental health: a nonrandomized intervention study. *BMC psychiatry*, 20, 1-9.
- MARKEY, L. & FARVIS, R. 2014. Reflective practice in an acute setting. *Nursing Times*, 110, 16-18.
- MAY, C. 2006. A rational model for assessing and evaluating complex interventions in health care. *BMC health services research*, 6, 86.

- MAY, C. 2013. Towards a general theory of implementation. *Implementation Science*, 8, 18.
- MAY, C. & FINCH, T. 2009. Implementing, embedding, and integrating practices: an outline of normalization process theory. *Sociology*, 43, 535-554.
- MAY, C., FINCH, T., MAIR, F., BALLINI, L., DOWRICK, C., ECCLES, M., GASK, L., MACFARLANE, A., MURRAY, E. & RAPLEY, T. 2007. Understanding the implementation of complex interventions in health care: the normalization process model. *BMC health services research*, 7, 148.
- MAY, C., SIBLEY, A. & HUNT, K. 2014. The nursing work of hospital-based clinical practice guideline implementation: An explanatory systematic review using Normalisation Process Theory. *International Journal of Nursing Studies*, 51, 289-299.
- MAY, C. R., CUMMINGS, A., GIRLING, M., BRACHER, M., MAIR, F. S., MAY, C. M., MURRAY, E., MYALL, M., RAPLEY, T. & FINCH, T. 2018. Using Normalization Process Theory in feasibility studies and process evaluations of complex healthcare interventions: a systematic review. *Implementation Science*, 13, 80.
- MAY, C. R., JOHNSON, M. & FINCH, T. 2016. Implementation, context and complexity. *Implementation Science*, 11, 141.
- MAY, C. R., MAIR, F., FINCH, T., MACFARLANE, A., DOWRICK, C., TREWEEK, S., RAPLEY, T., BALLINI, L., ONG, B. N. & ROGERS, A. 2009. Development of a theory of implementation and integration: Normalization Process Theory. *Implementation Science*, 4, 29.
- MAYERS, P., KEET, N., WINKLER, G. & FLISHER, A. J. 2010. Mental health service users' perceptions and experiences of sedation, seclusion and restraint. *International Journal of Social Psychiatry*, 56, 60-73.
- MCCUE, R. E., URCUYO, L., LILU, Y., TOBIAS, T. & CHAMBERS, M. J. 2004. Reducing restraint use in a public psychiatric inpatient service. *The Journal of Behavioral Health Services & Research*, 31, 217-224.
- MCEVOY, R., BALLINI, L., MALTONI, S., O'DONNELL, C. A., MAIR, F. S. & MACFARLANE, A. 2014. A qualitative systematic review of studies using the normalization process theory to research implementation processes. *Implementation Science*, 9, 2.
- MCHUGH, S. K., LAWTON, R., O'HARA, J. K. & SHEARD, L. 2020. Does team reflexivity impact teamwork and communication in interprofessional hospital-based healthcare teams? A systematic review and narrative synthesis. *BMJ quality & safety*, 29, 672-683.
- MCKENNA, B., MCEVEDY, S., MAGUIRE, T., RYAN, J. & FURNESS, T. 2017. Prolonged use of seclusion and mechanical restraint in mental health services: A statewide retrospective cohort study. *International journal of mental health nursing*, 26, 491-499.
- MCLAUGHLIN, P., GIACCO, D. & PRIEBE, S. 2016. Use of coercive measures during involuntary psychiatric admission and treatment outcomes: Data from a prospective study across 10 European countries. *PloS one*, 11, e0168720.
- MCSHERRY, B. 2017. Regulating seclusion and restraint in health care settings: The promise of the Convention on the Rights of Persons with Disabilities. *Int J Law Psychiatry*, 53, 39-44.
- MCSHERRY, B. & WADDINGTON, L. 2017. Treat with care: the right to informed consent for medical treatment of persons with mental impairments in Australia. *Australian Journal of Human Rights*, 23, 109-129.
- MÉNDEZ, J. E. 2013. Report of the Special Rapporteur on Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment. 22 nd sess. Agenda Item 3, UN Doc A. HRC/22/53 (1 February 2013). Available online: http://www.ohchr.org/Documents/HRBodies/HRCouncil/RegularSession/Session22/A.HRC.22.53_English.pdf (accessed on 7 May 2016).
- MICHIE, S., JOHNSTON, M., ABRAHAM, C., LAWTON, R., PARKER, D. & WALKER, A. 2005. Making psychological theory useful for implementing evidence based practice: a consensus approach. *BMJ Quality & Safety*, 14, 26-33.

- MICHIE, S., VAN STRALEN, M. M. & WEST, R. 2011. The behaviour change wheel: a new method for characterising and designing behaviour change interventions. *Implementation science*, 6, 1-12.
- MIERKE, J. & WILLIAMSON, V. 2017. A framework for achieving organizational culture change.
- MILAT, A. J. & LI, B. 2017. Narrative review of frameworks for translating research evidence into policy and practice. *Public Health Res Pract*, 27, e2711704.
- MIRBAHA, F., SHALVIRI, G., YAZDIZADEH, B., GHOLAMI, K. & MAJZADEH, R. 2015. Perceived barriers to reporting adverse drug events in hospitals: a qualitative study using theoretical domains framework approach. *Implementation science*, 10, 1-10.
- MOHR, W. K., PETTI, T. A. & MOHR, B. D. 2003. Adverse effects associated with physical restraint. *The Canadian Journal of Psychiatry*, 48, 330-337.
- MOLIN, J., GRANEHEIM, U. H., RINGNÉR, A. & LINDGREN, B. M. 2016. From ideals to resignation—interprofessional teams perspectives on everyday life processes in psychiatric inpatient care. *Journal of Psychiatric and Mental Health Nursing*, 23, 595-604.
- MÖLLER-LEIMKÜHLER, A. M., MÖLLER, H. J., MAIER, W., GAEBEL, W. & FALKAI, P. 2016. EPA guidance on improving the image of psychiatry. *European Archives of Psychiatry and Clinical Neuroscience*, 266, 139-154.
- MOLODYNSKI, A., KHAZAAL, Y. & CALLARD, F. 2016. Coercion in mental healthcare: time for a change in direction. *BJPsych International*, 13, 1-3.
- MONTENA, A. L., POSSEMATO, K., KUHN, E., CARLSON, E. B., MCGOVERN, M., SMITH, J. & BLONIGEN, D. 2022. Barriers and facilitators to peer-supported implementation of mental health mobile applications with veterans in primary care. *Journal of Technology in Behavioral Science*, 7, 1-12.
- MOORE, G., AUDREY, S., BARKER, M., BOND, L., BONELL, C., COOPER, C., HARDEMAN, W., MOORE, L., O'CATHAIN, A. & TINATI, T. 2013. Process evaluation in complex public health intervention studies: the need for guidance. BMJ Publishing Group Ltd.
- MOORE, G. F., AUDREY, S., BARKER, M., BOND, L., BONELL, C., HARDEMAN, W., MOORE, L., O'CATHAIN, A., TINATI, T. & WIGHT, D. 2015. Process evaluation of complex interventions: Medical Research Council guidance. *bmj*, 350.
- MORAN, A., COCOMAN, A., SCOTT, P., MATTHEWS, A., STANIULIENE, V. & VALIMAKI, M. 2009. Restraint and seclusion: a distressing treatment option? *Journal of psychiatric and mental health nursing*, 16, 599-605.
- MOSAVIANPOUR, M., SARMAST, H. H., KISSOON, N. & COLLET, J.-P. 2016. Theoretical domains framework to assess barriers to change for planning health care quality interventions: a systematic literature review. *Journal of Multidisciplinary Healthcare*, 9, 303.
- MOULLIN, J. C., DICKSON, K. S., STADNICK, N. A., ALBERS, B., NILSEN, P., BRODER-FINGERT, S., MUKASA, B. & AARONS, G. A. 2020. Ten recommendations for using implementation frameworks in research and practice. *Implementation science communications*, 1, 1-12.
- MRC 2000. *A framework for development and evaluation of RCTs for complex interventions to improve health*, Medical Research Council.
- MRC. 2015. *Process evaluation of complex interventions* [Online]. Available: <https://www.ukri.org/wp-content/uploads/2015/05/MRC-71221-ProcessEvaluationComplexInterventions-FullGuidance.pdf> [Accessed 30 September 2022].
- MULLEN, A., BROWNE, G., HAMILTON, B., SKINNER, S. & HAPPELL, B. 2022. Safewards: An integrative review of the literature within inpatient and forensic mental health units. *International Journal of Mental Health Nursing*.
- MURPHY, T. & BENNINGTON-DAVIS, M. 2005. *Restraint and seclusion: The model for eliminating their use in healthcare*, HC Pro, Inc.
- MURRAY, E., TREWEEK, S., POPE, C., MACFARLANE, A., BALLINI, L., DOWRICK, C., FINCH, T., KENNEDY, A., MAIR, F. & O'DONNELL, C. 2010. Normalisation process theory: a

- framework for developing, evaluating and implementing complex interventions. *BMC medicine*, 8, 63.
- MYERS, B., CARNEY, T., JOHNSON, K., BROWNE, F. A. & WECHSBERG, W. M. 2020. Service providers' perceptions of barriers to the implementation of trauma-focused substance use services for women in Cape Town, South Africa. *International Journal of Drug Policy*, 75, 102628.
- NADALIN PENNO, L., DAVIES, B., GRAHAM, I. D., BACKMAN, C., MACDONALD, I., BAIN, J., JOHNSON, A. M., MOORE, J. & SQUIRES, J. 2019. Identifying relevant concepts and factors for the sustainability of evidence-based practices within acute care contexts: a systematic review and theory analysis of selected sustainability frameworks. *Implementation Science*, 14, 1-16.
- NALDEMIRCI, Ö., WOLF, A., ELAM, M., LYDAHL, D., MOORE, L. & BRITTEN, N. 2017. Deliberate and emergent strategies for implementing person-centred care: a qualitative interview study with researchers, professionals and patients. *BMC health services research*, 17, 1-10.
- NATHAN, R., GABBAY, M., BOYLE, S., ELLIOTT, P., GIEBEL, C., O'LOUGHLIN, C., WILSON, P. & SAINI, P. 2021. Use of acute psychiatric hospitalisation: A study of the factors influencing decisions to arrange acute admission to inpatient mental health facilities. *Frontiers in Psychiatry*, 12, 891.
- NHS. 2019a. *Being fair supporting a just and learning culture for staff and patients following incidents in the NHS* [Online]. Available: <https://resolution.nhs.uk/wp-content/uploads/2019/07/NHS-Resolution-Being-Fair-Report-2.pdf> [Accessed 30 September 2022].
- NHS. 2019b. *From Observation to Intervention* [Online]. Available: <https://ihub.scot/project-toolkits/improving-observation-practice/from-observation-to-intervention/> [Accessed 30 September 2022].
- NHS. 2020. *WE ARE THE NHS: People Plan 2020/21 - action for us all* [Online]. Available: <https://www.england.nhs.uk/wp-content/uploads/2020/07/We-Are-The-NHS-Action-For-All-Of-Us-FINAL-March-21.pdf> [Accessed 30 September 2022].
- NHS. 2021. *Culture and Leadership Programme – Discovery Phase VERSION 3 2021* [Online]. Available: <https://www.england.nhs.uk/wp-content/uploads/2021/08/01-NHS101-07-03-Toolkits-2021-Discovery-phase-guidance-080721.pdf> [Accessed 30 September 2022].
- NHS. 2022. *NHS mental health dashboard* [Online]. Available: <https://www.england.nhs.uk/mental-health/taskforce/imp/mh-dashboard/> [Accessed 22/09/2022 2022].
- NICE. 2015. *[NG10] Violence and Aggression Short-term management in mental health, health and community settings* [Online]. Available: <https://www.nice.org.uk/guidance/ng10> [Accessed 15/08/2022].
- NICE. 2017. *Violent and aggressive behaviours in people with mental health problems* [Online]. Available: <https://www.nice.org.uk/guidance/qs154/resources/violent-and-aggressive-behaviours-in-people-with-mental-health-problems-pdf-75545539974853> [Accessed 30 September 2022].
- NICOL, J. S. & DOSSER, I. 2016. Understanding reflective practice. *Nursing Standard (2014+)*, 30, 34.
- NILSEN, P. 2015. Making sense of implementation theories, models and frameworks.
- NODA, T., SUGIYAMA, N., SATO, M., ITO, H., SAILAS, E., PUTKONEN, H., KONTIO, R. & JOFFE, G. 2013. Influence of patient characteristics on duration of seclusion/restraint in acute psychiatric settings in Japan. *Psychiatry and clinical neurosciences*, 67, 405-411.
- NOORTHOORN, E., LEPPING, P., JANSSEN, W., HOOGENDOORN, A., NIJMAN, H., WIDDERSHOVEN, G. & STEINERT, T. 2015. One-year incidence and prevalence of seclusion: Dutch findings in an international perspective. *Social psychiatry and psychiatric epidemiology*, 50, 1857-1869.

- NORVOLL, R., HEM, M. H. & PEDERSEN, R. 2017. The Role of Ethics in Reducing and Improving the Quality of Coercion in Mental Health Care. *HEC Forum*, 29, 59-74.
- NYTTINGNES, O., RUUD, T. & RUGKÅSA, J. 2016. 'It's unbelievably humiliating'—Patients' expressions of negative effects of coercion in mental health care. *International journal of law and psychiatry*, 49, 147-153.
- O'REILLY, P., LEE, S. H., O'SULLIVAN, M., CULLEN, W., KENNEDY, C. & MACFARLANE, A. 2017. Assessing the facilitators and barriers of interdisciplinary team working in primary care using normalisation process theory: An integrative review. *PloS one*, 12, e0177026.
- OAKLEY, A., STRANGE, V., BONELL, C., ALLEN, E. & STEPHENSON, J. 2006. Process evaluation in randomised controlled trials of complex interventions. *Bmj*, 332, 413-416.
- OELOFSEN, N. 2012. Using reflective practice in frontline nursing. *Nursing Times*, 108, 22-24.
- ONLINE, G. 2013. *Experts by Experience Programme* [Online]. Available: <https://www.government-online.net/experts-by-experience-programme/> [Accessed 30 September 2022].
- OSTER, C., GERACE, A., THOMSON, D. & MUIR-COCHRANE, E. 2016. Seclusion and restraint use in adult inpatient mental health care: An Australian perspective. *Collegian*, 23, 183-190.
- OVERBECK, G., DAVIDSEN, A. S. & KOUSGAARD, M. B. 2016. Enablers and barriers to implementing collaborative care for anxiety and depression: a systematic qualitative review. *Implementation Science*, 11, 165.
- OWEN, G. S., SPENCER, B. W. & KANAAN, R. A. 2016. The legal and ethical framework for compulsory psychiatric treatment. *Medicine*, 44, 734-736.
- PATEL, K. M. & METERSKY, K. 2022. Reflective practice in nursing: A concept analysis. *International Journal of Nursing Knowledge*, 33, 180-187.
- PATERSON, B. & DUXBURY, J. 2007. Restraint and the question of validity. *Nursing Ethics*, 14, 535-545.
- PERRY, Y. & BENNETT - LEVY, J. 2014. Delivering the 'H' in NHMRC: the case for implementation research in mental health. *Australian and New Zealand Journal of Public Health*, 38, 411-413.
- PETTICREW, M. 2011. When are complex interventions 'complex'? When are simple interventions 'simple'? : Oxford University Press.
- PETTICREW, M., KNAI, C., THOMAS, J., REHFUESS, E. A., NOYES, J., GERHARDUS, A., GRIMSHAW, J. M., RUTTER, H. & MCGILL, E. 2019. Implications of a complexity perspective for systematic reviews and guideline development in health decision making. *BMJ Global Health*, 4, e000899.
- PPAFF, K., BAXTER, P., JACK, S. & PLOEG, J. 2014. An integrative review of the factors influencing new graduate nurse engagement in interprofessional collaboration. *Journal of advanced nursing*, 70, 4-20.
- PHAM, M. T., RAJIĆ, A., GREIG, J. D., SARGEANT, J. M., PAPADOPOULOS, A. & MCEWEN, S. A. 2014. A scoping review of scoping reviews: advancing the approach and enhancing the consistency. *Research Synthesis Methods*, 5, 371-385.
- PIRKIS, J., BLOOD, R. W., FRANCIS, C., PUTNIS, P., BURGESS, P., MORLEY, B., STEWART, A. & PAYNE, T. 2001. *The Media Monitoring Project: A Baseline description of how the Australian media report and portray suicide and mental health and illness*, Commonwealth Department of Health and Aged Care Canberra, Australia.
- PLUYE, P. & HONG, Q. N. 2014. Combining the power of stories and the power of numbers: mixed methods research and mixed studies reviews. *Annual review of public health*, 35, 29-45.
- PLUYE, P., ROBERT, E., CARGO, M., BARTLETT, G., O'CATHAIN, A., GRIFFITHS, F., BOARDMAN, F., GAGNON, M.-P. & ROUSSEAU, M. 2011. Proposal: A mixed methods appraisal tool for systematic mixed studies reviews. *Montréal: McGill University*, 2, 1-8.
- PODUBINSKI, T., LEE, S., HOLLANDER, Y. & DAFFERN, M. 2017. Patient characteristics associated with aggression in mental health units. *Psychiatry research*, 250, 141-145.

- POLACEK, M. J., ALLEN, D. E., DAMIN-MOSS, R. S., SCHWARTZ, A. J. A., SHARP, D., SHATTELL, M., SOUTHER, J. & DELANEY, K. R. 2015. Engagement as an element of safe inpatient psychiatric environments. *Journal of the American Psychiatric Nurses Association*, 21, 181-190.
- PORROCHE-ESCUADERO, A., POPAY, J., WARD, F., AHMED, S., AKEJU, D., CLOKE, J., GABBAY, M., HASSAN, S., KHAN, K. & KKHEDMATI-MORASAE, E. 2021. From fringe to Centre-stage: experiences of mainstreaming health inequalities through in a collaborative health research organisation. *Health Research Policy and Systems*, 19.
- POWERS, B. A. & KNAPP, T. R. 2010. *Dictionary of nursing theory and research*, Springer publishing company.
- PRICE, O. & BAKER, J. 2012. Key components of de-escalation techniques: A thematic synthesis. *International journal of mental health nursing*, 21, 310-319.
- PRICE, O., BAKER, J., BEE, P. & LOVELL, K. 2018. The support-control continuum: An investigation of staff perspectives on factors influencing the success or failure of de-escalation techniques for the management of violence and aggression in mental health settings. *International journal of nursing studies*, 77, 197-206.
- PRICE, O., BURBERY, P., LEONARD, S.-J. & DOYLE, M. 2016. Evaluation of safeguards in forensic mental health. *Mental Health Practice (2014+)*, 19, 14.
- PROMISE. 2016. *Proactive Management of Integrated Services & Environments* [Online]. <http://www.promise.global/>. [Accessed 5. February. 2018].
- QURESHI, O., ENDALE, T., RYAN, G., MIGUEL-ESPONDA, G., IYER, S. N., EATON, J., DE SILVA, M. & MURPHY, J. 2021. Barriers and drivers to service delivery in global mental health projects. *International Journal of Mental Health Systems*, 15, 1-13.
- RAJWANI, A., CLARK, N. & MONTALVO, C. 2022. Understanding Best Practices in Implementation of Behavioral Emergency Response Teams Through a Scoping Review. *Journal of the American Psychiatric Nurses Association*, 10783903221114335.
- RAY, M. K., RAE, S. & AGIUS, M. 2015. PROMISE. Beyond frontiers. *Psychiatria Danubina*, 27, 497-498.
- RAY, R., PERKINS, E. & MEIJER, B. 2011. The Evolution of Practice Changes in the Use of Special Observations. *Archives of Psychiatric Nursing*, 25, 90-100.
- RIAHI, S., DAWE, I. C., STUCKEY, M. I. & KLASSEN, P. E. 2016a. Implementation of the six core strategies for restraint minimization in a specialized mental health organization. *Journal of psychosocial nursing and mental health services*, 54, 32-39.
- RIAHI, S., THOMSON, G. & DUXBURY, J. 2016b. An integrative review exploring decision-making factors influencing mental health nurses in the use of restraint. *Journal of psychiatric and mental health nursing*, 23, 116-128.
- RICKLES, D., HAWES, P. & SHIELL, A. 2007. A simple guide to chaos and complexity. *Journal of Epidemiology & Community Health*, 61, 933-937.
- RIGHTS, E. U. A. F. F. 2012. *Involuntary placement and involuntary treatment of persons with mental health problems* [Online]. Available Online: <http://fra.europa.eu/en/publication/2012/involuntary-placement-and-involuntary-treatment-persons-mental-health-problems>. Available: <http://fra.europa.eu/en/publication/2012/involuntary-placement-and-involuntary-treatment-persons-mental-health-problems> [Accessed].
- RIO, J. H., FULLER, J., TAYLOR, K. & MUIR - COCHRANE, E. 2020. A lack of therapeutic engagement and consumer input in acute inpatient care planning limits fully accountable mental health nursing practice. *International Journal of Mental Health Nursing*, 29, 290-298.
- RITCHIE, J., LEWIS, J., NICHOLLS, C. M. & ORMSTON, R. 2013. *Qualitative research practice: A guide for social science students and researchers*, sage.
- ROBERTS, N. A., JANDA, M., STOVER, A. M., ALEXANDER, K. E., WYLD, D. & MUDGE, A. 2021. The utility of the implementation science framework "Integrated Promoting Action on Research Implementation in Health Services" (i-PARIHS) and the facilitator role for

- introducing patient-reported outcome measures (PROMs) in a medical oncology outpatient department. *Quality of Life Research*, 30, 3063-3071.
- ROMAN, J. 2009. Creating a culture of discovery through clinical trials and translational research. *The American journal of the medical sciences*, 337, 155.
- ROSENBLUM, D. & ALVING, B. 2011. The role of the clinical and translational science awards program in improving the quality and efficiency of clinical research. *Chest*, 140, 764-767.
- RUBIO, D. M., SCHOENBAUM, E. E., LEE, L. S., SCHTEINGART, D. E., MARANTZ, P. R., ANDERSON, K. E., PLATT, L. D., BAEZ, A. & ESPOSITO, K. 2010. Defining translational research: implications for training. *Academic medicine: journal of the Association of American Medical Colleges*, 85, 470.
- RUSHFORTH, B., MCCRORIE, C., GLIDEWELL, L., MIDGLEY, E. & FOY, R. 2016. Barriers to effective management of type 2 diabetes in primary care: qualitative systematic review. *Br J Gen Pract*, 66, e114-e127.
- RYCROFT-MALONE, J. 2010. Promoting action on research implementation in health services (PARIHS). *Models and frameworks for implementing evidence-based practice: linking evidence to action*, 109, 135.
- SAFEWARDS. *Safewards* [Online]. Available: <https://www.safewards.net/> [Accessed 30 September 2022].
- SANGSTER - GORMLEY, E., MARTIN - MISENER, R., DOWNE - WAMBOLDT, B. & DICENSO, A. 2011. Factors affecting nurse practitioner role implementation in Canadian practice settings: an integrative review. *Journal of advanced nursing*, 67, 1178-1190.
- SANTOS MESQUITA, C. & COSTA MAIA, Â. 2016. When the safe place does not protect: reports of victimisation and adverse experiences in psychiatric institutions. *Scandinavian journal of caring sciences*, 30, 741-748.
- SARKAR, S. & SESHADRI, D. 2014. Conducting record review studies in clinical practice. *Journal of clinical and diagnostic research: JCDR*, 8, JG01.
- SASHIDHARAN, S. P., MEZZINA, R. & PURAS, D. 2019. Reducing coercion in mental healthcare. *Epidemiology and psychiatric sciences*, 28, 605-612.
- SCALIA, P., ELWYN, G. & DURAND, M.-A. 2017. Provoking conversations”: case studies of organizations where Option Grid™ decision aids have become ‘normalized. *BMC medical informatics and decision making*, 17, 1-10.
- SCHMUTZ, J. B. & EPPICH, W. J. 2017. Promoting learning and patient care through shared reflection: a conceptual framework for team reflexivity in health care. *Academic Medicine*, 92, 1555-1563.
- SCHOENWALD, S. K. & HOAGWOOD, K. 2001. Effectiveness, transportability, and dissemination of interventions: What matters when? *Psychiatric services*, 52, 1190-1197.
- SEGROTT, J., MURPHY, S., ROTHWELL, H., SCOURFIELD, J., FOXCROFT, D., GILLESPIE, D., HOLLIDAY, J., HOOD, K., HURLLOW, C. & MORGAN-TRIMMER, S. 2017. An application of extended normalisation process theory in a randomised controlled trial of a complex social intervention: process evaluation of the strengthening families Programme (10–14) in Wales, UK. *SSM-population health*, 3, 255-265.
- SELZER, R. & FOLEY, T. 2018. Implementing grassroots inclusive change through a cultural audit. *Qualitative Research in Organizations and Management: An International Journal*, 13, 284-302.
- SHEPHERD, N., PARKER, C. & ARIF, N. 2015. Pattern of rapid tranquillisation and restraint use in a central London mental health service. *Journal of Psychiatric Intensive Care*, 11, 78-83.
- SHIELL, A., HAWES, P. & GOLD, L. 2008. Complex interventions or complex systems? Implications for health economic evaluation. *Bmj*, 336, 1281-1283.
- SIVAK, K. 2012. Implementation of comfort rooms to reduce seclusion, restraint use, and acting-out behaviors. *Journal of psychosocial nursing and mental health services*, 50, 24-34.
- SKIVINGTON, K., MATTHEWS, L., SIMPSON, S. A., CRAIG, P., BAIRD, J., BLAZEY, J. M., BOYD, K. A., CRAIG, N., FRENCH, D. P. & MCINTOSH, E. 2021. Framework for the development

and evaluation of complex interventions: gap analysis, workshop and consultation-informed update.

- SOININEN, P., VÄLIMÄKI, M., NODA, T., PUUKKA, P., KORKEILA, J., JOFFE, G. & PUTKONEN, H. 2013. Secluded and restrained patients' perceptions of their treatment. *International Journal of Mental Health Nursing*, 22, 47-55.
- SOUZA, M. T. D., SILVA, M. D. D. & CARVALHO, R. D. 2010. Integrative review: what is it? How to do it? *Einstein (São Paulo)*, 8, 102-106.
- SPANGARO, J., POULOS, R. G. & ZWI, A. B. 2011. Pandora doesn't live here anymore: normalization of screening for intimate partner violence in Australian antenatal, mental health, and substance abuse services. *Violence and victims*, 26, 130.
- SPRINGER, G. 2015. When and how to use restraints. *American Nurse Today*, 10, 26-27.
- STEINERT, T., HIRSCH, S., GOEBEL, R., SNELGROVE, B. & FLAMMER, E. 2020. Reduction of coercive measures under routine conditions in psychiatric hospitals 2004–2019: Strong effects in old age psychiatry, much less in general psychiatry. *European Psychiatry*, 63.
- STEINERT, T., LEPPING, P., BERNHARDSGRÜTTER, R., CONCA, A., HATLING, T., JANSSEN, W., KESKI-VALKAMA, A., MAYORAL, F. & WHITTINGTON, R. 2010. Incidence of seclusion and restraint in psychiatric hospitals: a literature review and survey of international trends. *Social psychiatry and psychiatric epidemiology*, 45, 889-897.
- STENHOUSE, R. C. 2013. 'Safe enough in here?': patients' expectations and experiences of feeling safe in an acute psychiatric inpatient ward. *Journal of clinical nursing*, 22, 3109-3119.
- STEVENSON, R. D. & MOORE, D. E. 2019. A Culture of Learning for the NHS. *Journal of European CME*, 8, 1613862.
- STEWART, D., BOWERS, L., SIMPSON, A., RYAN, C. & TZIGGILI, M. 2009. Manual restraint of adult psychiatric inpatients: a literature review. *Journal of Psychiatric and Mental Health Nursing*, 16, 749-757.
- STEWART, G. L., MANGES, K. A. & WARD, M. M. 2015. Empowering sustained patient safety: the benefits of combining top-down and bottom-up approaches. *Journal of nursing care quality*, 30, 240-246.
- STOKES, T., SHAW, E. J., CAMOSSO-STEFINOVIC, J., IMAMURA, M., KANGURU, L. & HUSSEIN, J. 2016. Barriers and enablers to guideline implementation strategies to improve obstetric care practice in low- and middle-income countries: a systematic review of qualitative evidence. *Implement Sci*, 11, 144.
- STOLEE, P., STEEVES, B., MANDERSON, B. L., TOSCAN, J. L., GLENNY, C. & BERG, K. 2010. Health information use in home care: brainstorming barriers, facilitators, and recommendations. *Home health care services quarterly*, 29, 37-53.
- SULLIVAN, A. M., BEZMEN, J., BARRON, C. T., RIVERA, J., CURLEY-CASEY, L. & MARINO, D. 2005. Reducing restraints: alternatives to restraints on an inpatient psychiatric service—utilizing safe and effective methods to evaluate and treat the violent patient. *Psychiatric Quarterly*, 76, 51-65.
- SULLIVAN, D., WALLIS, M. & LLOYD, C. 2004. Effects of patient-focused care on seclusion in a psychiatric intensive care unit...including commentary by Holmes D and Perron A. *International Journal of Therapy & Rehabilitation*, 11, 503-508.
- TABAK, R. G., KHOONG, E. C., CHAMBERS, D. A. & BROWNSON, R. C. 2012. Bridging Research and Practice: Models for Dissemination and Implementation Research. *American Journal of Preventive Medicine*, 43, 337-350.
- TARZIA, L., MAY, C. & HEGARTY, K. 2016. Assessing the feasibility of a web-based domestic violence intervention using chronic disease frameworks: reducing the burden of 'treatment' and promoting capacity for action in women abused by a partner. *BMC women's health*, 16, 1-9.
- TAXIS, J. C. 2002. Ethics and praxis: Alternative strategies to physical restraint and seclusion in a psychiatric setting. *Issues in Mental health nursing*, 23, 157-170.

- TAYLOR-WATT, J., CRUICKSHANK, A., INNES, J., BROME, B. & SHAH, A. 2017. Reducing physical violence and developing a safety culture across wards in East London. *British Journal of Mental Health Nursing*, 6, 35-43.
- TERRY, J. & COFFEY, M. 2019. Too busy to talk: Examining service user involvement in nursing work. *Issues in Mental Health Nursing*, 40, 957-965.
- THOMAS, B., JONES, M., JOHNS, P. & TRAUER, T. 2006. P.r.n. medication use in a psychiatric high-dependency unit following the introduction of a nurse-led activity programme. *International Journal of Mental Health Nursing*, 15, 266-71.
- THOMAS, K., BENDTSEN, P. & KREVERS, B. 2015. Towards implementing coordinated healthy lifestyle promotion in primary care: a mixed method study. *International journal of integrated care*, 15.
- THOMPSON, N. & PASCAL, J. 2012. Developing critically reflective practice. *Reflective practice*, 13, 311-325.
- THOMSEN, C., STARKOPF, L., HASTRUP, L. H., ANDERSEN, P. K., NORDENTOFT, M. & BENROS, M. E. 2017. Risk factors of coercion among psychiatric inpatients: a nationwide register-based cohort study. *Social psychiatry and psychiatric epidemiology*, 52, 979-987.
- THURMOND, V. A. 2001. The point of triangulation. *Journal of nursing scholarship*, 33, 253-258.
- TORRACO, R. J. 2016. Writing integrative literature reviews: Using the past and present to explore the future. *Human Resource Development Review*, 15, 404-428.
- TRAUTNER, B. W., PRASAD, P., GRIGORYAN, L., HYSOONG, S. J., KRAMER, J. R., RAJAN, S., PETERSEN, N. J., ROSEN, T., DREKONJA, D. M. & GRABER, C. 2018. Protocol to disseminate a hospital-site controlled intervention using audit and feedback to implement guidelines concerning inappropriate treatment of asymptomatic bacteriuria. *Implementation Science*, 13, 1-11.
- TUCKER, A. L., NEMBHARD, I. M. & EDMONDSON, A. C. 2007. Implementing new practices: An empirical study of organizational learning in hospital intensive care units. *Management science*, 53, 894-907.
- UN 1991. Principles for the Protection of Persons with Mental Illness and for the Improvement of Mental Health Care. G.A. Res. 119, U.N. GAOR, 46th Sess., Supp. No. 49, Annex, at 188-92, U.N. Dot. A/46/49. Available Online: http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/46/119.
- UN 2006. Convention on the rights of persons with disabilities. *Treaty Series*. Available Online: <http://www.un.org/disabilities/documents/convention/convoptprot-e.pdf>.
- UN. 2018. <http://www.un.org/en/index.html>. [Accessed 5. February. 2018].
- VAISMORADI, M., TURUNEN, H. & BONDAS, T. 2013. Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing & health sciences*, 15, 398-405.
- VAN MIERLO, B., REGEER, B., VAN AMSTEL, M., ARKESTEIJN, M., BEEKMAN, V., BUNDERS, J., DE COCK BUNING, T., ELZEN, B., HOES, A.-C. & LEEUWIS, C. 2010. Reflexive monitoring in action. A guide for monitoring system innovation projects. Communication and Innovation Studies, WUR; Athena Institute, VU.
- VAN ZELM, R., COECKELBERGHS, E., SERMEUS, W., WOLTHUIS, A., BRUYNEEL, L., PANELLA, M. & VANHAECHT, K. 2021. A mixed methods multiple case study to evaluate the implementation of a care pathway for colorectal cancer surgery using extended normalization process theory. *BMC health services research*, 21, 1-15.
- VERHAEGHE, S., DUPREZ, V., BEECKMAN, D., LEYS, J., VAN MEIJEL, B. & VAN HECKE, A. 2016. Mental Health Nurses' Attitudes and Perceived Self - Efficacy Toward Inpatient Aggression: A Cross - Sectional Study of Associations With Nurse - Related Characteristics. *Perspectives in psychiatric care*, 52, 12-24.
- VOSHAAR, M., VRIEZKOLK, J., VAN DULMEN, S., VAN DEN BEMT, B. & VAN DE LAAR, M. 2016. Barriers and facilitators to disease-modifying antirheumatic drug use in patients with inflammatory rheumatic diseases: a qualitative theory-based study. *BMC musculoskeletal disorders*, 17, 1-12.

- WARING, J. J. 2005. Beyond blame: cultural barriers to medical incident reporting. *Social science & medicine*, 60, 1927-1935.
- WARNER, G., HARROLD, J., ALLEN, M. & LYONS, R. 2010. Secondary stroke prevention best practice recommendations: exploring barriers for rural family physicians. *Can j rural med*, 15.
- WARNER, G., LAWSON, B., SAMPALLI, T., BURGE, F., GIBSON, R. & WOOD, S. 2018. Applying the consolidated framework for implementation research to identify barriers affecting implementation of an online frailty tool into primary health care: a qualitative study. *BMC health services research*, 18, 1-11.
- WATERS, E., HALL, B., ARMSTRONG, R., DOYLE, J., PETTMAN, T. & DE SILVA-SANIGORSKI, A. 2011. Essential components of public health evidence reviews: capturing intervention complexity, implementation, economics and equity. *Journal of public health*, 33, 462-465.
- WATSON, D. P., ADAMS, E. L., SHUE, S., COATES, H., MCGUIRE, A., CHESHER, J., JACKSON, J. & OMENKA, O. I. 2018. Defining the external implementation context: an integrative systematic literature review. *BMC Health Services Research*, 18, 1-14.
- WEDDLE, R. 2017. Positive and Safe Care Annual Report 2017. <https://www.ntw.nhs.uk/content/uploads/2017/08/Agenda-item-7-v-Positive-Safe-ANNUAL-REPORT-2017-V7-updated-16.06.17-9.pdf>.
- WEINER, B. J. 2009. A theory of organizational readiness for change. *Implementation science*, 4, 67.
- WEISS, C. H. 1997. Theory-based evaluation: past, present, and future. *New directions for evaluation*, 76, 41-55.
- WELLS, M., WILLIAMS, B., TREWEEK, S., COYLE, J. & TAYLOR, J. 2012. Intervention description is not enough: evidence from an in-depth multiple case study on the untold role and impact of context in randomised controlled trials of seven complex interventions. *Trials*, 13, 1-17.
- WESTFALL, J. M., MOLD, J. & FAGNAN, L. 2007. Practice-based research—"Blue Highways" on the NIH roadmap. *Jama*, 297, 403-406.
- WHITELAW, K., SEUBERT, L., LEE, K., ETHELTON-BEER, C., CLIFFORD, R., SHEERS, C., LOVENY, J. & BRAND, G. 2022. 'Listening from a Personal Perspective': Does Co-Designed Mental Health Education Shift Stigma? A Mixed Method Evaluation Study. *The British Journal of Social Work*.
- WHITMORE, C. 2017. Evaluation of Safewards in forensic mental health: a response. *Mental Health Practice (2014+)*, 20, 26.
- WHO 2020. Guidelines on mental health promotive and preventive interventions for adolescents: helping adolescents thrive.
- WICKREMSINHE, M. N. 2018. Emergency involuntary treatment law for people with mental disorders: A comparative analysis of legislation in LMICs. *International Journal of Law and Psychiatry*, 56, 1-9.
- WIEMAN, D. A., CAMACHO-GONSALVES, T., HUCKSHORN, K. A. & LEFF, S. 2014. Multisite study of an evidence-based practice to reduce seclusion and restraint in psychiatric inpatient facilities. *Psychiatric Services*, 65, 345-351.
- WIKSTRÖM, E., DELLENBORG, L., WALLIN, L., GILLESPIE, B. M. & ANDERSSON, A. E. 2019. The Safe Hands Study: Implementing aseptic techniques in the operating room: Facilitating mechanisms for contextual negotiation and collective action. *American Journal of Infection Control*, 47, 251-257.
- WILDEMUTH, B. M. 2016. *Applications of social research methods to questions in information and library science*, ABC-CLIO.
- WILSHAW, G. & TRODDEN, I. 2015. How do nurses experience reflective practice? *Nursing times*, 111, 25-27.
- WOOLF, S. H. 2008. The meaning of translational research and why it matters. *Jama*, 299, 211-213.

- WPA. 2020. *Implementing Alternatives to Coercion: A Key Component of Improving Mental Health Care* [Online]. Available: <https://www.wpanet.org/alternatives-to-coercion> [Accessed 15/08/2022].
- XANIDIS, N. & GUMLEY, A. 2020. Exploring the implementation of cognitive behaviour therapy for psychosis using the Normalization Process Theory framework. *Psychology and Psychotherapy: Theory, Research and Practice*, 93, 241-257.
- ZAHRA, S. A. & GEORGE, G. 2002. Absorptive capacity: A review, reconceptualization, and extension. *Academy of management review*, 27, 185-203.
- ZERHOUNI, E. 2003. The NIH roadmap. American Association for the Advancement of Science.
- ZERHOUNI, E. 2007. Translational research: moving discovery to practice. *Clinical Pharmacology & Therapeutics*, 81, 126-128.
- ZHANG, Y. 2009. Qualitative analysis of content In Wildemuth BM, editor.(Ed.), *Applications of social research methods to questions in information and library science* (pp. 308–319). Westport, CT: *Libraries Unlimited*. [Google Scholar].

APPENDICES

Appendix 1

Literature Search Strategy

Database: CINAHL		
Updated: June 2017		
#	Search Terms	Search Options
S1	mental n2 health OR mental* ill* OR psych*	Search modes - Boolean/Phrase
S2	innovati* OR practice n2 develop* OR practice n3 change* OR quality n3 improve* OR pdsa OR resistance n2 change OR change* practice OR adopt* OR culture change OR adapt* OR disseminat* OR policy change	Search modes - Boolean/Phrase
S3	change resistance OR change n2 policy OR audit* OR organi?ation* change	Search modes - Boolean/Phrase
S4	S2 OR S3	Search modes - Boolean/Phrase
S5	violen* n3 management OR coerc* intervention OR seclu* OR restrain* OR chemical restrain* OR contain* OR confine* OR rapid tranquil* OR force* medicat* OR restrict* intervention OR isolati* OR solitary confinement	Search modes - Boolean/Phrase
S6	prn OR aggress* n3 management OR conflict management OR conflict resolution OR de-escalat* OR deescalat* OR de escalat*	Search modes - Boolean/Phrase
S7	S5 OR S6	Search modes - Boolean/Phrase
S8	S1 AND S4 AND S7	Limiters - Published Date: 19830101- Search modes - Boolean/Phrase

Database: PsycINFO and Medline	
Updated: June 2017	
#	Search Terms
1	(mental adj2 health).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
2	mental* ill*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
3	psych*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
4	1 or 2 or 3
5	innovati*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
6	(practice adj2 develop*).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
7	(practice adj3 change*).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
8	(quality adj3 improve*).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
9	pdsa.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
10	(resistance adj2 change).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
11	change* practice.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
12	adopt*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
13	culture change.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
14	adapt*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]

Database: PsycINFO and Medline	
Updated: June 2017	
#	Search Terms
15	disseminat*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
16	policy change.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
17	change resistance.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
18	audit*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
19	(change adj2 policy).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
20	organization* change.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
21	5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20
22	(violent* adj3 management).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
23	coerc* intervention.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
24	seclu*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
25	restrain*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
26	chemical restrain*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
27	contain*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
28	confine*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
29	rapid tranquil*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
30	force* medicat*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
31	restrict* intervention.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
32	isolati*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
33	solitary confinement.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
34	prn.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
35	(aggress* adj3 management).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
36	conflict management.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
37	conflict resolution.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
38	de-escalat*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
39	deescalat*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
40	de escalat*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
41	22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 or 40
42	4 and 21 and 41
43	limit 42 to yr="1983 -Current"

Appendix 2

Study Characteristics

n	Author, Year	Country	Targeted Coercive Intervention	Reduction Intervention	Aim	Design	Setting	Length of Study
1	Friedman et al, 2012	USA	P.R.N. Medication	A performance improvement project (The PRN Tracker project)+Structured Clinical Feedback	To examine whether reductions in the use of pro re nata (p.r.n.) psychotropic medications could be achieved, without adverse behavioural consequences.	Quantitative Descriptive	166 patients	28 months
2	Thomas et al, 2006	Australia	P.R.N. Medication	nurse-led activity programme (movement to music, games/activities and relaxation session)	Introduce and evaluate a daily activity programme in a HDU by measuring the use of p.r.n. medication. (Decrease the use of p.r.n. medication)	Quantitative Quasi-Experimental crossover intervention study	two wards (228 patients)	6 month
3	Godfrey et al, 2014	USA	Restraint (mechanical)	deescalation techniques training + crisis response team + policy change for restraint	reduce use of mechanical restraints at a state psychiatric hospital	Quantitative Quasi-Experimental	acute adult unit + community transition unit (398 bed)	3 years
4	Guzman-Parra et al, 2016	Spain	Restraint (mechanical)	Multimodal Intervention Program based on the principles of six core strategies	evaluate the effectiveness of a multimodal intervention program based on the principles of six core strategies to reduce the frequency of use of mechanical restraint in an acute psychiatric ward	Quantitative retrospective analysis	acute psychiatric ward (42 beds)	2 years
5	Jonikas et al, 2004	USA	Restraint (physical not defined)	multilevel approach (advance crisis management for patients, nonviolent crisis intervention component for staff members, individual crisis management plan)	reduce the use of restraint	Quantitative Quasi-Experimental	three psychiatric units (one unit served youths aged 12 to 17 years, another served a general adult population, and the third served adults enrolled in clinical trials.	30 months
6	Lloyd et al, 2014	Australia	Seclusion	sensory modulation	First whether or not use of a SM environment reduced the level of distress experienced by patients in an acute psychiatric unit. Second whether availability of a SM room would reduce the use of seclusion as a response to patient disturbance	Multi Method first study repeated measures design, second study prospective quasi experimental design	2 wards (study group and control) both 20 bed facilities consisting of fourteen (14)Open Acute Care Beds and six (6) Psychiatric Intensive Care Unit (PICU) beds.	12-month period
7	Lee et al, 2010	Australia	Seclusion	Sensory assessment and therapy	a pilot implementation of the use of sensory assessment and modulation to reduce the use of seclusion.	Multi Method	30-bed acute psychiatry inpatient unit (42 Patients) included	six-month

n	Author, Year	Country	Targeted Coercive Intervention	Reduction Intervention	Aim	Design	Setting	Length of Study
8	Sullivan et al, 2004	Australia	Seclusion	patient-focused care	evaluate whether the introduction of patient-focused nursing care affected the number of seclusions and the length of time patients spent in seclusion, in an acute psychiatric unit. whether changes to the frequency of the use of pro re nata medication with a sedative effect, the length of stay. the number of physically violent incidents relating to staff, patients or property, changed after changes to nursing practice had been made.	Quantitative Quasi Experimental design	(8) bed unit. 79 patients included	
9	Cummings et al, 2010	USA	Seclusion & Restraint (not specified)	multisensory or comfort rooms	assess the effectiveness of a comfort room as a means to reduce the use of seclusion and restraint and to promote the use of positive coping skills.	multi method	238-bed, university-affiliated acute public psychiatric facility for children and adults. 105 patients participated in the evaluation process. Compared results with control unit	9-month
10	Fisher, 2003	USA	Seclusion & Restraint (mechanical)	Performance Improvement Project	reduce restraint and seclusion rates	Quantitative Descriptive	19 wards with a typical census of 26 recipients per ward	2 years
11	Forster et al, 1999	USA	Seclusion & Restraint (mechanical)	multidisciplinary quality improvement (mandatory staff training session on the management of assaultive behaviour, weekly discussion items during team meetings for each local ward, and hospital-wide publicity charting the ongoing progress of the effort)	examine the effect of the quality improvement effort on the rates of seclusion and restraint. reduce episodes of seclusion and restraint and reduce staff injuries	Quantitative Descriptive	83-bed acute-care county hospital	12-month periods
12	Hellerstein et al, 2007	USA	Seclusion & Restraint (mechanical)	Interventions included staff education, changes in policy and practice, and improved communication with patients.	a multimodal approach to decrease the use of restraint and seclusion without adverse outcomes and to maintain such a decrease for many years.	Quantitative Quasi Experimental design	3 inpatient units totalling 58 beds.	87 months
13	Donat, 1998 added study	USA	Seclusion & Restraint (mechanical)	formal behavioural consultation for difficult-to-manage cases	evaluated the impact of an administrative procedure to effect a behavioural consultation for cases of high seclusion and restraint utilization.	Quantitative Quasi Experimental design within subjects design with repeated measures	53 cases	1 year
14	Donat, 2002 (follow up to Donat, 1998)	USA	Seclusion & Restraint (mechanical) & PRN	Employing Behavioural Methods to Improve the Context of Care	organizational changes directed toward reducing seclusion/restraint reliance (follow up to Donat, 1998)	Quantitative Quasi Experimental design		3 years

n	Author, Year	Country	Targeted Coercive Intervention	Reduction Intervention	Aim	Design	Setting	Length of Study
15	Donat, 2003 A (follow up to Donat, 1998, Donat, 2002)	USA	Seclusion & Restraint (mechanical)	formal behavioural consultation for difficult-to-manage cases	reviews and evaluates a variety of interventions that were considered to have contributed to the successful reduction of reliance on the use of seclusion and restraint (follow up to Donat, 1998, Donat, 2002)	Quantitative Descriptive		5 years
16	Donat, 2003 B (follow up to Donat, 1998, Donat, 2002)	USA	Seclusion & Restraint (mechanical) & PRN	(follow up to Donat, 1998, Donat, 2002)	Value of Performance feedback to improve current behaviour or develop new behaviors. By providing an opportunity for self-assessment and self-reinforcement	Not Applicable Follow up Discussion to (Donat, 1998, Donat, 2002)	Not Applicable Follow up Discussion to (Donat, 2002)	Not Applicable Follow up Discussion to (Donat, 2002)
17	Donat, 2005 (follow up to Donat, 1998, Donat, 2002)	USA	Seclusion & Restraint (mechanical) & PRN	(follow up to Donat, 1998, Donat, 2002)	Details about training program	Not Applicable Follow up Discussion to (Donat, 1998, Donat, 2002)	Not Applicable Follow up Discussion to (Donat, 2002)	Not Applicable Follow up Discussion to (Donat, 2002)
18	Donat, 2006 (follow up to Donat, 2002)	USA	PRN	Clinical- Administrative Review Procedure	reviews and evaluates the impact of a clinical/administrative review procedure psychotropic PRN reliance (follow up to Donat, 2002)	Quantitative Quasi Experimental design		1year 6months
19	Ray et al, 2011	USA	Special Observations	practice changes: move from observation to engagement, decrease patient agitation related to intense observation	the development of alternatives to the standard levels of observation would result in an actual increase in safety on the units.	multi method		
20	Bowers et al, 2006 (City nurse) no implementation details	UK	Seclusion & Restraint (physical) & PRN & Special Observations	working model of conflict and containment generation (City nurse project)	reduce conflict and containment (Seclusion & Restraint & Sedation)	multi method	2 acute psychiatric wards (study ongoing paper reports results from 2 wards)	3 year
21	Brennan et al, 2006 (City nurse) no implementation details	UK	Seclusion & Restraint (physical) & PRN & Special Observations	working model of conflict and containment generation (City nurse project)	describe some of the structural and organizational constraints on change in acute psychiatry.	Qualitative (Thematic analysis)	Two generic acute admission wards with 18 beds	3 year
22	Flood et al, 2006 (City nurse)	UK	Seclusion & Restraint (physical) & PRN & Special Observations	working model of conflict and containment generation (City nurse project)	Discuss the process of therapeutic change	Not Applicable Follow up Discussion to (Bowers et al, 2006, Brennan et al, 2006)	Not Applicable Follow up Discussion to (Bowers et al, 2006, Brennan et al, 2006)	Not Applicable Follow up Discussion to (Bowers et al, 2006, Brennan et al, 2006)

n	Author, Year	Country	Targeted Coercive Intervention	Reduction Intervention	Aim	Design	Setting	Length of Study
23	Bowers et al, 2008	UK	Seclusion & Restraint (physical) & PRN & Special Observations	City nurse intervention: positive appreciation, emotional regulation and effective structure.	The aim of this study was to reduce conflict and containment on acute psychiatric wards.	Quantitative Quasi Experimental design non-randomized controlled trial incorporating elements of action research	3 acute psychiatric wards FROM TOTAL FIVE REST ARE CONTORL	1 year
24	Bowers et al, 2015	UK	Seclusion & Restraint (physical) & PRN & Special Observations	Safewards model	test the efficacy of these interventions in reducing conflict or containment	Quantitative pragmatic cluster randomised controlled trial	Staff and patients in 31 randomly chosen wards at 15 randomly chosen hospitals.	24 weeks
25	Taxis, 2002	USA	Seclusion & Restraint (physical)	comprehensive program revision was implemented in a psychiatric hospital that included numerous alternative strategies to the use of patient restraint and seclusion	The goal was to raise the consciousness about the incidents of restraint and seclusion and build a consensus to increase the implementation of appropriate, less restrictive alternatives.	Quantitative Quasi Experimental design with repeated measures	86-bed adult unit	3 years 6 months
26	Sullivan et al, 2005	USA	Restraint	violence safety program	reduce the use of restraints and seclusion, while providing a safe and therapeutic environment for patient recovery	Quantitative Quasi Experimental design with repeated measures	117 beds Adult Psychiatric inpatient service	5 years
27	Sivak, 2012	USA	Seclusion & Restraint	comfort room	provide an alternative tool in the mission to cease the use of seclusion and restraint in the institutionalized mental health patient population.	multi method		8 months
28	McCue et al, 2004	USA	Restraint	Six interventions that primarily involved changing staff behaviour (identification of restraint-prone patients, a stress/anger management group for patients, staff training on crisis intervention, development of a crisis response team, daily review of all restraints, and an incentive system for the staff.	reduce the use of restraint	Quantitative Quasi Experimental design	135-bed psychiatric inpatient service	5 years

Appendix 3

MMAT Methodological Quality Criteria

Studies	Methodological Quality Criteria																		Calculate Quality Rating %			
	Screening Questions		Qualitative				Quantitative Randomized Controlled		Quantitative Non- Randomized				Quantitative Descriptive				Mixed Methods					
	Clear research question	Collected data allow to address the research question	Sources of qualitative data relevant to address the research question	Process for analysing qualitative data relevant to address the research question	Appropriate consideration given to how findings relate to the context, in which the data were collected	Appropriate consideration given to how findings relate to researchers influence	A clear description of the randomization	A clear description of the allocation concealment	complete outcome data	Low withdrawal/drop-out	Participants recruited in a way that minimizes selection bias	Measurements appropriate regarding the exposure/intervention and outcomes	Groups being compared, participants are comparable, or the researchers take into account (control for) the difference between these groups	Complete outcome data, and, when applicable, an acceptable response rate or an acceptable follow-up rate for cohort studies.	Sampling strategy relevant to address the quantitative research question	Sample representative of the population under study	Measurements appropriate	Acceptable response rate		Mixed methods research design relevant to address the qualitative and quantitative research questions, or the qualitative and quantitative aspects of the mixed methods question	The integration of qualitative and quantitative data relevant to address the research question	Appropriate consideration given to the limitations associated with this integration
Forster et al, 1999	Y	Y								Y	Y	Y	Y									100%
Taxis, 2002	Y	Y								Y	Y	Y	Y									100%
Fisher, 2003	Y	Y												Y	Y	Y	Y					100%
Jonikas et al, 2004	Y	Y								Y	Y	Y	Y									100%
Sullivan D. et al, 2004	Y	Y								Y	Y	Y	Y									100%
McCue et al, 2004	Y	Y								Y	Y	Y	Y									100%
Sullivan A. et al, 2005	Y	Y								Y	Y	Y	Y									100%
Thomas et al, 2006	Y	Y								Y	Y	Y	Y									100%
Donat, 1998	Y	Y								Y	Y	Y	Y									100%
Donat, 2002	Y	Y								Y	Y	Y	N									75%
Donat, 2003 A	Y	Y												Y	Y	Y	Y					100%
Donat, 2003 B	Not Applicable Follow up Discussion to (Donat, 2002)																					
Donat 2005	Not Applicable Follow up Discussion to (Donat, 2002)																					

Studies	Methodological Quality Criteria																		Calculate Quality Rating %			
	Screening Questions		Qualitative				Quantitative Randomized Controlled				Quantitative Non- Randomized				Quantitative Descriptive					Mixed Methods		
	Clear research question	Collected data allow to address the research question	Sources of qualitative data relevant to address the research question	Process for analysing qualitative data relevant to address the research question	Appropriate consideration given to how findings relate to the context, in which the data were collected	Appropriate consideration given to how findings relate to researchers influence	A clear description of the randomization	A clear description of the allocation concealment	complete outcome data	Low withdrawal/drop-out	Participants recruited in a way that minimizes selection bias	Measurements appropriate regarding the exposure/intervention and outcomes	Groups being compared, participants are comparable, or the researchers take into account (control for) the difference between these groups	Complete outcome data, and, when applicable, an acceptable response rate or an acceptable follow-up rate for cohort studies.	Sampling strategy relevant to address the quantitative research question	Sample representative of the population under study	Measurements appropriate	Acceptable response rate		Mixed methods research design relevant to address the qualitative and quantitative research questions, or the qualitative and quantitative aspects of the mixed methods question	The integration of qualitative and quantitative data relevant to address the research question	Appropriate consideration given to the limitations associated with this integration
Donat, 2006	Y	Y								Y	Y	Y	Y									100%
Bowers et al, 2006	Y	Y	Y	Y	Y	Y				Y	Y	Y	N					Y	N	N		75% /25%
Brennan et al, 2006	Y	Y	Y	Y	Y	Y																100%
Flood et al, 2006	Not Applicable Follow up Discussion to (Bowers et al, 2006, Brennan et al, 2006)																					
Hellerstein et al, 2007	Y	Y								Y	Y	Y	Y									100%
Bowers et al, 2008	Y	Y								N	Y	Y	N									50%
Lee et al, 2010	Y	Y	Y	Y	N	N				Y	Y	Y	Y					Y	N	N		50% /25%
Cummings et al, 2010	Y	Y	Y	Y	N	N				Y	Y	Y	Y					Y	N	N		50% /25%
Ray et al, 2011	Y	Y	Y	Y	N	N				Y	Y	Y	Y					Y	N	N		50% /25%
Freidman et al 2012	Y	Y												Y	Y	Y	Y					100%
Sivak, 2012	Y	Y	Y	N	N	N				Y	N	Y	Y					Y	N	N		25% /25%
Godfrey et al, 2014	Y	Y								Y	Y	Y	Y									100%

Studies	Methodological Quality Criteria																		Calculate Quality Rating %				
	Screening Questions		Qualitative				Quantitative Randomized Controlled				Quantitative Non- Randomized				Quantitative Descriptive					Mixed Methods			
	Clear research question	Collected data allow to address the research question	Sources of qualitative data relevant to address the research question	Process for analysing qualitative data relevant to address the research question	Appropriate consideration given to how findings relate to the context, in which the data were collected	Appropriate consideration given to how findings relate to researchers influence	A clear description of the randomization	A clear description of the allocation concealment	complete outcome data	Low withdrawal/drop-out	Participants recruited in a way that minimizes selection bias	Measurements appropriate regarding the ,exposure/intervention and outcomes	Groups being compared, participants are comparable, or the researchers take into account (control for) the difference between these groups	Complete outcome data, and, when applicable, an acceptable response rate or an acceptable follow-up rate for cohort studies.	Sampling strategy relevant to address the quantitative research question	Sample representative of the population understudy	Measurements appropriate	Acceptable response rate		Mixed methods research design relevant to address the qualitative and quantitative research questions, or the qualitative and quantitative aspects of the mixed methods question	The integration of qualitative and quantitative data relevant to address the research question	Appropriate consideration given to the limitations associated with this integration	
Lloyd et al, 2014	Y	Y	Y	Y	Y					Y	Y	Y	Y					Y	N	N	100% /25%		
Guzman-Parra et al, 2016	Y	Y								Y	Y	Y	Y								100%		
Bowers et al, 2015	Y	Y					Y	Y	N	Y											75%		

Appendix 4

Recruitment Email

Hi xxxx,

I'm Sumayah Felemban, a PhD student at the School of Healthcare, University of Leeds.

I'm trying to reach out to participants with experience in implementing non-coercive aggression management or coercion reduction initiatives in inpatient mental health settings.

Taking part would involve one telephone interview at a time convenient to them. I have attached the Participant Information Sheet that provides full details of the study as well as the consent form. If anyone is interested in taking part, they can contact me directly on hcsafel@leeds.ac.uk

I am looking for as many viewpoints as possible to explore factors influencing the implementation of non-coercive aggression management or coercion reduction initiatives in inpatient mental health settings

- Academic implementation experts
- Clinical implementation experts
- Implementation experts by experience

Many thanks

Sumayah Felemban



Participant Information Sheet

Factors Influencing Implementation of Non-Coercive Aggression Management in Inpatient Mental Health Services: A Qualitative Study

You are being invited to take part in the above-named study but before you decide, please read the following information and ask questions.

What is the purpose of this study?

The purpose of the study is to explore factors influencing the implementation of non-coercive aggression management, from the perspective of implementation experts, in inpatient mental health settings. It is anticipated that the findings from this study will inform future research and ultimately lead to more effective implementation of interventions for the non-coercive aggression management in inpatient mental health settings.

Who is doing the study?

This study is being undertaken by Ms. Sumayah Felemban as part of her PhD and is supervised by Professor John Baker, Dr. Kathryn Berzins and Dr. Nicola Clibbens from the School of Healthcare, Faculty of Medicine and Health at the University of Leeds.

Who is being asked to participate?

You have been asked to take part because you are an implementation expert who has experience in implementing non-coercive aggression management in inpatient mental health services.

What will be involved if I take part in this study?

If you choose to participate in the study, you will be invited to participate in a one to one in depth interview which will last a maximum of one hour and will be audio-recorded. The interview aims to explore and identify factors influencing the implementation of non-coercive aggression management in inpatient mental health settings. The researcher will be flexible to your needs regarding interview's time and date.

What are the advantages and disadvantages of taking part?

There may not be a direct benefit to you for taking part in this study, but your views will help us gain insight into the process of implementation within the complex environment of the real-life health care setting.

Increased understanding of the implementation process will help inform future research and ultimately lead to more effective implementation of interventions for the non-coercive aggression management in inpatient mental health settings.

Do I have to take part?

It is up to you to decide whether or not to take part in this study. If you do decide to take part you will be given this information sheet and a consent form and will be asked to give verbal consent at the beginning of the interview

Can I withdraw from the study at any time?

You are free to withdraw at any time before or during the interview without giving a reason. If you decide to withdraw from the study during or after the interview, you will be offered to choose

whether you want to withdraw your data or not within a period of two weeks after the interview takes place. All your data will be deleted upon your withdrawal request.

Will the information obtained in the study be confidential?

All information obtained from you will be kept confidential, only the researcher team (Professor John Baker, Dr Kathryn Berzins, Dr Nicola Clibbens and Sumayah Felemban) may have access to the audio interview for verification of transcription and analysis. However, your name and all your personal identifiable details will be removed from the interview transcription before granting them access to your data.

Although, there is a potential risk that some participants, might be identifiable even after anonymisation, due to them being well known experts with known affiliation with specific projects within the field. Attempts will be made to minimise this risk through the careful selection of quotes.

However, the researcher has a duty to report if any of the disclosed information contained past incidents or error, that resulted in severe harm. In this research reporting will be given directly to the supervisors if intervention from the research team may reverse or limit the effects of that harm.

With your consent the digitalised record of your interview will be deleted after transcription and the transcript held in a password protected secure network of the University of Leeds data repository for a period of ten years, after which, it will be securely and irreversibly deleted from the device on which it is stored. Otherwise, if you don't consent to this, then your anonymised transcribed interviews will be stored in a restricted access folder on the School of Healthcare server for five years after the end of the study and then deleted.

What will happen to the results of the study?

Your responses and that of other participants will be analysed. Some quotes will be used from all participants' responses to illustrate the views of participants. However, these quotes will not be associated with your name. The results of this study will form part of my PhD thesis and will also be published in a scientific journal and be presented at a conference.

Who has reviewed this study?

Ethical approval has been granted by the School of Healthcare Research Ethics Committee. Reference number (HREC17-047), on 10/09/2018.

If you agree to take part, would like more information or have any questions or concerns about the study please contact

*Sumayah Felemban
PhD Student
University of Leeds
LS2 9UT, Leeds, UK.*

Tel: 0113 343 7366 Ext. 37366 or Email hcsafel@leeds.ac.uk

Thank you for taking the time to read this information sheet

For complaints please contact

*Professor John Baker
Chair of Mental Health Nursing
School of Healthcare University of Leeds,
LS2 9JT, Leeds, UK.*

Tel: 0113 343 1271 or email J.Baker@leeds.ac.uk

Interview Topic Guide:

Introduction:

Hello

Is it ok if I start recording

So my name is Sumayah Felemban and I'm a PhD at the school of Healthcare University of Leeds,

thank you for agreeing to let me interview you

if at any point my pronunciation is not that clear please let me know and I'll just repeat anything. Is everything clear? is the voice clear?

I previously sent you an email with the participants information sheet and consent form that included details about the project.

and that you have the right to refuse at any stage, in addition to how the data will be used and about the confidentiality aspects. So do you have any questions about the participants information sheet?

So can I take that as your formal consent please?

Thankyou....

So as mentioned in the information sheet I'm looking at the implementation process of interventions or initiatives aimed at establishing non coercive aggression management and to reduce coercive interventions in acute inpatient mental health wards or mental health settings.

1. Can you tell me a bit about what initiatives or interventions you were involved in and about your roles in them?

Details - Setting?

- Level of involvement?

Pre-Implementation Phase (preparation phase)

2. Prior to implementation were there any steps taken to prepare for change in practice did you need to take any steps before the implementation , just to prepare for the change?

Details - What, How

- Was there any information given to the clinical staff about the intervention (What, How).

- Did they need to be trained in new skill sets or any training needs that needed to be fulfilled

-

3. Was there any measures taken to encourage or sustain staff involvement?

Details (What, How)

4. Were there any key individuals involved to drive the implementation

Details - Criteria for choosing them (buy-in to it, willing, able)
- Roles, tasks

5. At this stage did they show any support or resistance?

Details how was it addressed or resolved

6. Anything else to add regarding the preparation phase.

Intervention Implementation Phase

7. Who was involved in implementing the interventions

Detail - Who was engaged or participated in the implementation phase of the intervention
- Any involvement from the wider clinical team
-

8. Was the intervention workable

Details - Issues, difficulties, challenges (how were they addressed)
- Were there any changes applied to make it more workable

9. Was there any significant change in the roles or their role in the ward or what they are supposed to do or increased tasks?

Details - What, How
- Difficulties, challenges (how were they addressed)

10. Were there any changes in team dynamics, relationships or interactions?

Details - What, How, challenges
- Shift in Authority, increased autonomy, added responsibility, empowerment and ownership
-

11. At this phase did clinical team or any other wider staff members show any support or resistance?

Details - how was it addressed or resolved

12. Were there any changes in required resources?

Details - What, How, challenges

13. Were there any change in required skills or knowledge ?

Details - What, How, challenges

14. Were there any changes in the rules that governs (Policy)?

Details - What, How, challenges

15. Were there any measures to monitor and evaluate the intervention?

Details – What (tangible), How, challenges
-What was that information used for?

16. Any action taken based on the feedback information?

Details - Changes, modifications.
- Challenges, resistances

17. Would you say those interventions or that strategy is driven by the engagement and commitment of individuals or would you need the engagement and commitment of teams or would you need both?

After implementation

18. So after implementation did they see any value in the change in practice?

Details - Support, resist, how it was addressed.
- Any conflicting opinions, challenges?

19. Is there anything else regarding the implementation or implementation process or challenges that we haven't covered that you would like to add or talk about?

20. Is there anything else you would to add?

I am looking for as many viewpoints as possible

- Academic implementation experts (National/ International)
- Clinical implementation experts (National/ International)
- Implementation experts by experience (National/ International)

I'm trying to reach the experts through personal reference and snowballing. Could you suggest anyone connected with either this intervention or other similar interventions that I can approach?

Following the interview I will be sending a recruitment email, to be forwarded to any possible potential participants.

Appendix 7

Coding Example in Nvivo

The screenshot displays the Nvivo interface with a transcript on the left and a list of code stripes on the right. The transcript contains four entries:

- I: Is there anything else regarding the implementation process or challenges that we haven't covered that you would like to add?
- R: No, I do just think that initially it was quite rushed and sometimes the organisation was pushing for it to be implemented without recognising that a lot of hard work is required to get the interventions in with the actual culture change. Because it could've been quite easy in [xxxx] to say, right, all 10 interventions are in but have no culture change, and actually recognising the amount of time that it takes to get everybody on board and then actually the time resource that's required. I think the real change came when they did the full day training days and that that maybe should've been considered a lot earlier. Yes, and we'd probably be a bit further along.
- I: Yes, and from the point that you're at now, do you think anything else could've been done? So, in the future that should be considered, looking back?
- R: Yes, I think a lot of responsibility was put upon the practice development nurse who was imposed at the time of the beginning of the implementation, to oversee the whole implementation process but also, responsibility of engagement with people. And with other conflicting priorities, it probably wasn't the best way of doing things and maybe there should've been somebody else in post with them, given to a large amount of people with equal responsibility of oversight and implementation. Or, as they're doing in [xxxx] , having somebody individually taking a lead on that. I think that it's really interesting what they've done in [xxx] and actually, when you look at the kind of positive work that they're advertising that's happening... Obviously, it's not down to one person, but I think when one person's got a focus, their engagement with teams can be a little more than somebody who's got maybe five or six different areas of focus.

The code stripes on the right are organized into a list under the heading "CODE STRIPES". The stripes are:

- variations in recording data
- value
- understanding different perspectives
- Understanding
- Training issues
- Training
- Top to bottom and bottom up
- team dynamics
- Support
- Staff feedback
- resources
- resistance
- reflection
- Preparation phase
- power dynamic
- positive & negative language
- ownership
- outcome
- monitoring
- managers
- Getting Workable
- Getting Engagement
- Getting Buy in
- flexibility
- Feedback
- Evaluation
- Engagement
- Data collection
- culture shifts
- acknowledgement & recognition
- change in workload
- Key individual & group drivers
- workable achievable

06B-190118

Edit Code Panel

R: So in the provider where I work, the approach we took there was...and we're talking of an organisation where there was lots of use of different types of restriction, and so it wasn't specifically just one type of restrictive practice. For example, we weren't just looking at restraint, we were looking at everything. Across the organisation, across the services, we held numerous sort of workshops and information-giving events so that, firstly, people need to know what it is that needs addressing. So actually, one of the issues is that perhaps staff don't always...frontline staff don't always get the opportunity to get exposed to the current issues.

And I think part of...because I worked in a strategic role there as well, but part of our job is to make sure that staff are informed and aware. So a lot around information-giving. Listening to them as well. So really important before you start implementing anything that you listen to what their issues are. And actually, one of the key things that we did was, rather than going for one approach across the board, we actually encouraged and enabled every team to make their own pledges based on the area they wanted to work on. So some of the acute wards wanted to look at restraint, some wanted to look at prone restraint, some wanted to look at seclusion.

And it really was down to the ward teams to take that information back, have the discussion and think about...with their patients as well, so we encouraged a lot of co-production, that they think about what was the area they wanted to look at, so it's actually doable. For me, it's about not overwhelming people.

I: Okay. So...

R: Prompt me if you want more because...yeah, I'm likely to say less than more, so keep asking more specific questions if you need to.

CODE STRIPES

Coding Density

- value
- understanding different perspectives
- Understanding
- Training
- team dynamics
- Support
- staff satisfaction & dissatisfaction
- Staff feedback
- risk & safety
- resources
- resistance
- reflection
- Preparation phase
- policy
- monitoring
- managers
- Leadership
- key individual & group drivers
- governance
- Getting Normalised
- Getting Engagement
- Getting Buy in
- from reactive to proactive
- flexibility
- Feedback from data
- Engagement
- culture shifts
- culture
- control and power over service user
- change in workload
- Buy in
- acknowledgement & recognition
- ownership
- Service user involvement
- Getting Workable
- workable achievable

04B-190116

Edit Code Panel

R: Yes, no, there wasn't really a change of role. If anything is going to change it's the culture, the change of the culture is the biggest thing. If you've just given staff restraint...teach them how to restrain people for years and years and years and then you turn round and say, right, I want you to try this, you'll get some staff who will be a bit wary of that saying, well, that wouldn't work, and that's a cultural thing but that is addressing supervision. That's why you need a psychologist as well. You need a manager who has got oversight of that to find out which staff are doing that.

I: How is that usually handled?

R: Well, you best to pick the most resistant staff to lead on that part of the project I always find because you usually find then that they really get it and understand it and then they drive it, rather than just pick all the motivated staff because they always lead it anyway. Especially for shifts as well, you don't want people who are all congregating on one shift with the same mindset. You try to mix staff up, make sure you've always got positive staff who are driving it on each shift and you have your regular night staff and that sort of thing going on. New staff coming in...that's the only thing I would say is new staff coming in, it's being mindful that people need to train them because that's what we didn't...we weren't able to do was keep doing update sessions because we didn't have the resource to do that so it was up to the staff to train them.

I: Were there any changes in team dynamics, relationships or interactions?

R: Yes, there was but in a positive way. Staff were actually talking about when you did x, y and z, I felt that you should have a, b and c, and quite open and honest conversations about that led by the psychologist into different ways of working. So it's healthy conversations to me. It's very positive. It's things that've been going for a long time. I've worked in wards and I know what it can be like.

CODESTRIPES

Coding Density

- value
- understanding different perspectives
- Understanding
- Support
- Service user involvement
- risk & safety
- resources
- outcome
- normalised
- managers
- Leadership
- governance
- Getting Engagement
- Getting Buy in
- Feedback from data
- Feedback
- external team
- culture shifts
- culture
- control and power over service user
- changing the training focus
- change in workload
- Buy in
- Coding Density
- Training Issues
- Training
- Team dynamics
- Key individual & group drivers