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# A Phenomenological Investigation into Theatre Nurses' Perceptions of their Work Environment in one National Health Service Operating Theatre

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A commentary submitted in partial fulfilment of the requirements of the University of West London for the degree of Doctor of Nursing

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# Abstract

This qualitative study explores theatre nurses' (TNs) perceptions of their work environment in a UK NHS Trust. The aim is to shed light on a speciality of nursing which works 'behind closed doors. To achieve this, the research adopts a phenomenological approach with semi-structured interviews with TNs, all of whom currently work in a theatre unit.

The aims for this thesis are to establish:

- 1. How do theatre nurses perceive their work environment?
  - **a.** To better understand the nature of TNs perceptions and disaggregate the various factors which are involved in their construction.
  - **b.** To identify and explore any organisational, cultural, or social issues that may facilitate or prevent an effective work environment.
  - **c.** To identify and explore strategies for addressing key challenges and barriers to improving the TN experience.

Social Identity Theory (SIT) is employed as the underpinning theoretical framework to analyse the barriers that TNs face in performing the duties attached to their respective roles, as well as for analysing the negative drivers they experience in the workplace.

The results illustrate that job satisfaction is a key concern for TNs, with influences from the effectiveness of teamwork, collaboration, and communication. The study identifies that TNs' roles are heavily dependent on effective communication and collaboration, given the necessity of working with other multidisciplinary teams.

The results of the study also highlight the difficulties in TN recruitment and the resultant dependency on international recruitment. These further accentuated issues over communication between TNs from different cultural backgrounds and operative contexts.

Drawing on the results, several solutions are proposed for improving TN perceptions of their work environment and role. Recommendations are also provided for future research and policy making, particularly in terms of the mediating role that managerial staff can employ in addressing TNs' key concerns, as well as in terms of broader issues across the NHS healthcare system. Further research is needed to establish if the experiences of the theatre nurses in this study are representative of what occurs in other operating departments.

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# Definitions and Abbreviations

AfPP	Association for Perioperative Practice			
ALQ	Authoritative Leadership Questionnaire			
AORN	Association of perioperative Nurses			
BFI-10	The Big Five Inventory-10			
BNI	British Nursing Index			
BSN	Bachelor of Science in Nursing			
CBB	Brief Burnout Questionnaire			
CINAHL	Cumulative Index of Nursing and Allied Health			
CPD	Continuing Professional Development			
CWEQ-II	Conditions for Work Effectiveness Questionnaire			
EMBASE	Excerpta Medica Database			
GDPR	General Data Protection Regulation			
HCA	Healthcare Assistant			
ICN	International College of Nursing			
IPA	Interpretative Phenomenological Analysis			
JCQ	Job Content Questionnaire			
JPP	Journal of Perioperative Practice			
MEDLINE	United States' National Library of Medicine			
NHS	National Health Service			
NMC	Nursing and Midwifery Council			
OD	Operating Department			
ODP	Operating Department Personnel			
JPP	Journal of Operating Department Practitioner			
OR	Operating Room			
OT	Operating Theatre			
OTJ	Operating Theatre Journal			
QDA	Qualitative Data Analysis			
RCN	Royal College of Nursing			
SIT	Social Identity Theory			
ТА	Thematic data Analysis			
TN	Theatre Nurse			
TU	Theatre Unit			
UWES	Utrecht Work Engagement Scale			

# Chapter 1 Introduction

## 1.1. Introduction

Despite the burgeoning interest and literature about healthcare environments within the National Health Service (NHS), including business plan strategies for the maintenance of healthcare environments, there is limited qualitative research on medical professionals' experiences in general, and particularly theatre nurses' (henceforth TNs) experiences. This study addresses this gap in the literature by providing an analysis of TNs' perceptions of their work environment, while also providing recommendations for the improvement of working conditions.

This introductory chapter provides an overview of TNs' work environment, and their roles within this, to contextualise the observations presented in later chapters. Specifically, Section 1.1 defines and describes the key skills and responsibilities demanded by perioperative nursing practices. Section 1.2 broadens this focus on key skills by examining the type of communication and collaboration required in this work environment, and Section 1.3 details the role leadership plays. Section 1.4 contextualises the mental health impacts resulting from stress and burnout associated with the skills and responsibilities highlighted in Sections 1.1 to 1.3. Section 1.5 concludes this chapter by outlining the research question and aims of the study.

### 1.1.1. Defining nursing practice

Definitions of 'nursing practice' have undergone numerous iterations, beginning with Florence Nightingale's environmental theory that encouraged nurses to draw on a patient's environment to assist in their recovery (Nightingale, 1860). More recently, the nursing literature suggests that expert nursing practice involves the integration of practical knowledge – including ongoing learning – with saliency (responding to verbal and non-verbal cues), knowledge of the patient, moral agency, and skilled know-how (Hardy et al., 2006). The International Council of Nurses (2010) defines nursing practice as:

Autonomous and collaborative care of individuals of all ages, families, groups, and communities, sick or well and in all settings. Nursing includes the promotion of health, prevention of illness, and the care of ill, disabled and dying people. Advocacy, promotion of a safe environment, research, participation in shaping health policy and in-patient and health systems management, and education are also key nursing roles (International Council of Nursing, 2002, p.1).

The Royal College of Nursing (RCN) provides a similar definition, but with added emphasis on leadership and empowerment as key aspects of the role (Royal College of Nursing, 2021). This emphasis on leadership and empowerment reflects research findings that highlight a positive

correlation between nurses' autonomy, improved patient outcomes (Walker et al., 2011; Van Bogaert et al., 2016; Minehart et al., 2020) and decreased rates of burnout (Nursalam et al., 2018). In this regard, these definitions highlight the overall scope of this dissertation, which is to elaborate on TNs' experiences and perceptions of their nursing roles and responsibilities and how these translate within their everyday work environments.

#### 1.1.2. Theatre nursing

A TN is a registered nurse who works in surgical operating theatres assisting surgeons with surgical procedures, providing perioperative and postoperative care to patients having a wide variety of surgical treatments, which is categorised as perioperative nursing (Association of Perioperative Practice, 2017). Perioperative nurses provide a range of essential, specialised care to assist with a patient's overall care when having surgery and these are the focus of the sections that follow. In this regard, the following sections will discuss the role perioperative nurses play in supporting the provision of essential, and sometimes lifesaving, specialised surgical treatments to people who access healthcare services in the NHS. In 2005, Blomberg et al., highlighted how nurses were initially recruited to work as perioperative nurses during the First World War (1914–18) and that they were essential in bolstering British capacity to provide emergency medical assistance via the Royal Army Medical Corps (Blomberg et al., 2015). It was during the Second World War (1939–45), with advanced surgery being performed in military field hospitals, that theatre nursing emerged as a technical specialisation. Thus, from a historical perspective, theatre nursing became the first recognised nursing specialism, thereby offering a model for other forms of nursing in complex, multidisciplinary healthcare systems (Blomberg et al., 2015).

While the ICN definition of nursing provides a concise yet broad definition of nursing and continues to underpin nursing codes and standards for practice in the UK today, it does not articulate the various specialisation of nursing that exist in current day nursing practice. For example, the specialisation of TN, oncology, paediatrics, psychiatrics, mental health, midwifery, and critical care nursing. With respect to the current practices of TNs, the ICM definition aligns to the principle of providing autonomous and collaborate care to individuals of all ages, the promotion of health and prevention of illness, advocacy, and the provision of a safe and caring environment within the NHS health care system. Thus, nursing is embedded within the broader system of health care services delivery as described by the ICN however, is distinct from other areas of nursing practice. Theatre nurses wear the same generic surgical garments/ scrubs, masks, and head coverings as all other medical and support staff in the theatre environment, making their presence, role, and designation not easily identifiable by patients. Despite the TN wearing a name badge, patients may not note this by a patient, given they are normally promptly anaesthetised upon entry to the operating room therefore, the

patient may never know the name or see the face of the TN who cared for them during their surgery. Other nursing specialities involve the development of a relationship between the patient and the nurse however, for individual TNs this relationship is one-way only: which is a duty-bound relationship to provide specialised physical care of the anaesthetised patient. From the patient's perspective, their relationships and trust are with the medical service provider or doctors to ensure all aspects of care and treatment occurs to enable their recovery.

Further, theatre nursing takes place behind closed doors. Most people don't normally know what their work environment look like or conditions that exist. TN is a very different style of nursing, requiring specialised skills and technical knowledge. The environment is designed to remain clean and as sterile as possible and this requires all nursing and medical staff to wear specific clothing and sterile garments that are changed between each patient and only authorized personnel may enter this environment, for infection control reasons thus promoting patient safety and wellbeing. Consequently, this can generate professional isolation and a lack of understanding for the critical and important role TN play in achieving optimal patient's health outcomes by both other nurse, allied health professionals and the wider public. A more informed understanding of theatre nursing is needed to demystify their work and provide theatre nurses with the recognition they deserve.

In addition to TNs, Operating Department Practitioners (ODP) are a relatively new profession who work in operating theatres. They achieved formal recognition and entry to a professionally registered status in 2004 in the UK. Their title is unique to the UK however, in the United States of America (USA) they are known as a 'surgical technician' and in other parts of the world 'anaesthetic technician' (Blomberg et al. 2018). I was unable to locate any information about the practical and legal status of ODPs in Europe. While this dissertation focuses on perioperative nurses and not ODPs, it is important to keep in mind that TNs do not work in isolation. They work collaboratively with other specialist trained medical and nursing staff such as surgeons, anaesthetists, ODPs and other support TN such as the scrub and runner Nurse.

From a personal perspective, I am a Head of Nursing in a theatre environment with thirteen years of perioperative experience of practisng as a TN. At the outset of this professional taught Doctorate, I had come to appreciate the everchanging complexity and unique specialisation of theatre nursing, Over the last thirty years alone, the speed, level and complexity of surgical technological advancements and treatments for patients have changed phenomenally thus, significantly impacted the role, working experiences and environments of TN. I wanted to better understand my own work environment, however, was surprised by the paucity of current, primary research, and literature about their role, work experiences and environment of TN and from the perspective of perioperative nurses.

With the everchanging advancements in surgical treatments and therefore TN practices, TNs can experience rising workloads and professional expectations. This research is timely and critical in understanding the work environment of TNs. I chose to focus on the surgical phase of theatre nursing for the following three reasons:

- I am a surgical nurse therefore my interest lies in establishing a deeper understanding of my own work environment so that I can better support colleagues and surgical teams.
- 2. There is a lack of current literature that articulates an accurate representation of the current work environments of TNs and how current work environments impact the performance and job satisfaction of TNs.
- 3. The experiences of pre and post-operative nurses may be substantially different from the experiences of surgical phase nurses. Future research should take this into consideration and explore the work environments of pre- and post-operative nurses.

#### 1.1.3. Responsibilities

The complexity of the perioperative nursing role can be divided into preoperative (pre-assessment), perioperative (surgical phase, TNs) and postoperative (recovery) practices (Association of Perioperative Practice, 2017). TNs can specialise in a specific area of perioperative care or rotate between areas. Prior to surgery, TNs can admit patients to the theatre unit, perform preoperative assessments to ensure the patient is informed about their pending surgery, have given their informed consent and that all legal documentation is to ensure continuity of care and safety for the patient (Timmons and Tanner, 2004). During surgery, TNs can perform the scrub nurse role, where they ensure work is carried out under sterilised conditions and oversee wound management and infection control. TNs work alongside surgeons and their duties involve preparing all necessary instruments and equipment ahead of surgery and ensuring these are accounted for throughout the procedure (Timmons and Tanner, 2004). A TN can work as a circulating nurse. This role carries a high degree of responsibility in supporting the surgical team. The TN must remain highly attentive to the needs of the surgical team ensuring all surgical required supplies are correct and promptly available (Health Times, 2021). They manage documentation, specimen collection, the availability of the correct surgical equipment and ensure an accurate count of swabs and instruments pre-and post-surgery prior to closure of the patient's surgical wound. Thus, they require highly developed communication and management skills to prepare the operating room (OR) or theatre unit (TU). TNs also assist the scrub nurse by acting as the interface between surgical and other teams within the theatre and hospital.

Post-operatively, when the patient is recovering from the anaesthetic, perioperative nurses receive, assess, and continuously monitor patient's health status on arrival at post-anaesthetic care units. They

provide critical care to the semi-conscious patient who is regaining consciousness, as well as respiratory and homeostats stabilisation. Thus, they monitor, treat, and care for patients until the patient's general health status has recovered from the effects of anaesthesia and/or surgery in readiness to be transferred back to a surgical ward for further convalescence (HealthTimes, 2021; Mitchell and Flin, 2008) In this phase, perioperative nurses are also responsible for evaluating the care provided throughout the perioperative process. TNs can work in all three areas of perioperative pathways. This study is concentrated on the TNs in the surgical phase.

#### 1.1.4. Required skills and training

In the UK, all nurses must complete a three-year undergraduate program of education to gain registration with the Nursing and Midwifery Council (NMC). Once registered, they have a professional duty to adhere to regulatory codes of conduct, standards of practice and the law to promote public safety (Timmons and Tanner, 2004; Nursing and Midwifery Council, 2018b; Nursing and Midwifery Council, 2018c). A TN is therefore a nurse who is registered with and regulated by the NMC. They can practise in public or private hospital settings, however there are no pre-requisites for TNs to work in a theatre setting (Timmons and Tanner, 2004). Many TN nurses undertake additional specialist training at some point during their career. There are several study institutions that offer further study in operating theatre/perioperative nursing in the UK. These are usually undertaken at the Diploma of Higher Education (DipHE) or master's level, and more usually on a part-time basis (Timmons and Tanner, 2004). Undertaking postgraduate study in perioperative care extends a nurses' evaluative, problem-solving, and critical thinking skills. The Association of Perioperative Practice is a UK-registered charity that was established in 1964. It offers online support to "enhance skills and knowledge within operating departments, associated areas and sterile services department" (Association of Perioperative Practice, 2009, p.1).

In accordance with the NMC regulatory standards, TNs are required to work within their scope of practice and maintain their professional nursing skills, competencies, and specialised technical skills to work in a surgical and/or recovery context (Nursing and Midwifery Council, 2018b; Nursing and Midwifery Council, 2018c; Gora, 2017). TNs must also possess non-technical skills (Mitchell and Flin, 2008). Non-technical skills refer to the management and organisation of the nursing environment and include skills such as task management, self-discipline, situational awareness, teamwork and highly effective communication, flexibility, foresight, and stress management (Mitchell and Flin, 2008). Having the ability to work effectively and collaboratively across multidisciplinary contexts, maintain concentration throughout their working shifts, and have a good level of physical fitness sufficient to cope with the physical demands of the role (for example, standing for long periods of time and manual

handling of unconscious patients) are additional key demands of the role (Timmons and Tanner, 2004; Mitchell and Flin, 2008).

Work experience is integral to a nurse's education and for registered nurses to consolidate their undergraduate education by working in their clinical areas of interest within the healthcare system. While the minimum qualification for becoming a TN include a Bachelor of Science in Nursing (BSN) and experience as a registered nurse, employers can expect potential employees to have prior experience of working in a surgical theatre and, preferably, to be undertaking or to have successfully completed a perioperative course (Corlett and Kassaman, 2019). This generates difficulties for nurses wanting to work as a TN, as undergraduate programs of education in the UK have stopped rotating students to a placement in theatre (McGarry, 2015). Wade, (2012) highlights that in Canada, TN training was removed from the nursing education curriculum as a result of an ongoing debate over whether it was a nursing specialisation or a nursing-specific skill set (Wade, 2012). Evidence highlights that a lack of exposure to operating theatre experiences for undergraduate nurses generates a difficult scenario where graduating nurses are unfamiliar with the important and critical role TNs provide to the continuum of care for patients (Sherman et al., 2014). Thus, they graduate with limited or no experience of theatre nursing, therefore they can be un-informed about perioperative nursing as a career choice (Ruth-Sahd, 2019). This lack of awareness may result in consequences for the role, including limited capacity and training to meet healthcare demands, contributing to poor and deteriorating working conditions and, consequently, resulting in lower rates of recruitment and retention (Wade, 2012). Beyond these consequences for the TN role, there may be additional farreaching implications for the provision of surgical services across the UK healthcare system.

#### 1.1.5. Recruitment

I was unable to locate literature regarding recruitment of theatre nurses in the UK, however, anecdotally, based on my own experiences in theatre nursing, there are always vacancies, and reports of recruitment pressure is felt by all nurses across the NHS however can be amplified in the operating theatre (Fedele, 2019, Timmons and Tanner, 2004). In 2019, a study undertaken in the United States of America (USA) found that 56% of TN managers reported difficulty in recruiting staff and, drawing on the age distribution of current staff, 68% anticipated further staffing problems over the next five years (Schmidt and Brown, 2019). TN managers face recruitment challenges due to multiple factors, many of which remain under-defined and largely unaddressed. Much of the available literature dealing with issues around TN recruitment points to TNs' work environments and conditions, particularly stress, and the type of training nursing graduates must undergo, as being significant factors affecting recruitment (Amdt, 1998; Blegeberg et al., 2008). I was not able to find any data regarding the demographics of theatre nurses in the UK, once again, a reflection of the lack of data

and information available about theatre nursing in the UK. This lack of data underscores the importance of my study in contributing to our knowledge of theatre nursing.

#### 1.1.6. Environmental factors impacting the TN role

The American Association of Critical Care Nurses identified six essential elements of the nursing work environment.: skilled communication, true collaboration, effective decision-making, appropriate staffing, meaningful recognition, and authentic leadership (American Association of Critical Care Nurses, 2016). These elements stretch across the entire nursing profession and are appropriate in the UK TN context as well as the American context. Work environments conducive to effective nursing performance can, in turn, enhance patient safety and healthcare outcomes (Halter et al., 2017). Conversely, poor work environments contribute significantly towards TN stress and loss of job satisfaction, resulting in medical errors and other failures of patient care (Vincent et al., 2001). Understanding how such environmental factors influence stress and burnout is of primary importance to healthcare systems. As discussed, the TN work environment is unique among other nursing specialities, and so this project will establish new knowledge about how the TN work environment is structured, and how it can either positively or negatively impact TN work performance, productivity, and satisfaction.

A supportive work environment allows nurses to learn on the job and is key to their continued training. Learning in the workplace provides opportunities for evidence-based knowledge and enhances patient safety and healthcare outcomes (Darvas and Hawkins, 2002). In this regard, fostering a supportive and cohesive work environment is conducive to higher job satisfaction among TNs, and thus enhances the quality of patient care.

The contemporary literature, on both theatre and general nursing work environments, suggests that collaboration and leadership are key factors that determine job satisfaction and a healthy workplace culture (Chapter 1 Introduction: Section 1.2). Such factors are central to the interdisciplinary role TNs perform, which involves collaboration with anaesthetists, surgeons, operating department practitioners, and administrators, as well as with non-registered personnel, such as theatre support workers or Healthcare Assistants (HCAs) (Mathews, 2017). TNs can work in Theatre Units (TUs) and outpatient departments. Consequently, they must be highly adaptive in their role and able to practise in diverse settings, drawing on their wide repertoire of skills to address the varying challenges that characterise their role. As a result of this versatility, TNs' roles are dependent on an organisational culture characterised by positive leadership, collaboration, and opportunities for both personal and collective development.

#### 1.2. Communication and Collaboration

Communication and collaboration between nursing teams, administrative staff, surgeons, and patients, among others, are essential in maintaining a cohesive work environment. One study in Norway revealed collaboration to be an important facet of interdisciplinary TN teams, noting that participants valued "…respect, valuing the other's profession, having an understanding of each other and communicating constructively with each other" (Kaidheim and Slettebø, 2016, p.63). Other studies suggest that communication issues are a common challenge within TN teams (Xiao and Zhu, 2019; Qvistgaard et al., 2019; Fung et al., 2017).

Economist and sociologist Lajos Héthy has written extensively about the potential for social dialogue to stimulate cooperation, trust, and innovation. Héthy (2001) suggested the need for social dialogue, understood as tripartite consultations (between employers, trade unions and government), and its role in mediating between vastly different goals and objectives (Héthy, 2001). He argues that social dialogue relies on the relationship between the different groups involved and this, in turn, facilitates further collaboration between the entities engaged in dialogue. In this regard, barriers to social dialogue, such as poor collaboration and lack of trust between employers, managers, and employees, are prevalent (Tang et al., 2013). Inadequate physician-nurse collaboration has been shown to cause job dissatisfaction, while competitive and defensive behaviour erodes trust, which can lead to verbal conflict between team members (Kożusznik and Polak, 2016). As noted earlier, poor working relationships can result in increased turnover with nurses seeking to leave such teams (Khan et al., 2019). Moore et al., (2019) explored collaboration between registered nurses when providing routine care to patients (changing dressings, observing patients' on-ward eating habits). They highlighted that key to collaboration was effective communication between nurse administrators, managers, and staff members (Moore et al., 2019). This included supporting staff and highlighting the benefits of collaborative practices.

Failures in collaboration and a lack of camaraderie contribute to stress and burnout and can lead to conflict between team members, causing devastating consequences across the healthcare system (Chang et al., 2017; Booij, 2007). For example, conflicts between surgeons and nurses threaten effective teamwork and positive peer support. Additional conflicts that can affect teamwork involve disagreements between nurses over the control of ward rounds, miscommunication between members in multidisciplinary teams resulting from differing communication styles, and conflicts arising from the complexity of organisational healthcare systems (Johnson and Kring, 2012).

### 1.3. Impacts of the TN Role on Mental Health

#### 1.3.1. Stress

Research has highlighted a multifactorial relationship between the prevalence of stress, burnout, and unsatisfactory work environments for nurses and other healthcare professionals (Mark and Smith, 2012; Farquharson et al., 2013). While a certain degree of stress and challenge can help keep staff motivated (Deng et al., 2019), the negative impacts of stress are more commonly reported. Consequently, in high-pressure nursing environments, stress has been defined as *"the inability to cope with a perceived or real threat to one's mental, physical, emotional, and spiritual well-being, which results in several physiological responses and adaptations"* (Seaward, 2006, p.6).

Stress "arises when individuals perceive that they cannot adequately cope with the demands made on them" and do not attempt to reduce their stress with other activities, such as engaging in exercise (Zhou and Gong, 2015, p.96) Occupational stress is experienced as "an exigency that people confront and their perceptions of that exigency as threatening or burdensome" (Pearlin, 1989, pp.241-242) Consequently, beyond the short-term effects of burnout, stress may also have longer-term impacts on healthcare professionals, even permeating into their home environments.

Occupational stress among healthcare professionals has been linked to the provision of patient care, workplace relationships, the demands for career progression, and the organisational/managerial climate (Hespanhol, 2005). Organisational factors contributing to stress include long working hours, a salary level which is arguably not reflective of the role's responsibilities, and a lack of autonomy – for example, exclusion from decision-making processes in relation to surgical procedures and management within the department (Santos and Cardosco, 2010; de Pires et al., 2012; Dominique-Ferreira, 2015; Lima, 2015; De Costa and Pinto, 2017). Stress contributes to less-effective patient care (Salyers et al., 2015; Chao et al., 2016), particularly through compassion fatigue (Schmidt and Haglund, 2017) and sometimes medication errors (Ajri-Khameslou et al., 2017).

#### 1.3.2. Burnout

The term "burnout" is referred to as a physiological or mental collapse caused by extended periods of working under excessive stress, which can lead to a loss of alertness (Swetz et al., 2009, p.773). Consequently, stressed nurses are less informed, lacking in motivation and more likely to leave the healthcare profession (Rudman and Gustavsson, 2012). A National Nursing Engagement Report in the UK, undertaken by professional research consultants, estimated burnout levels to be at 15.6% across nursing in general (King and Bradley, 2019). This suggests a better understanding of how to address burnout is required to keep TNs engaged in their role.

A key cause of burnout for TNs is regular subjection to patient suffering (Clegg, 2001; Hunsaker et al., 2015) and the fast-paced, intense nature of TNs' work (Kirkcaldy and Martin, 2000). The build-up of work-related stressors, resulting from TNs' work responsibilities, has a significant impact on their clinical performance and preparedness for the emotional and practical challenges of their role (Rudman and Gustavsson, 2012; Sonoda et al., 2018).

Across all healthcare professionals, nurses exhibit the highest rates of burnout (Adriaenssens et al., 2015; de la Fuente et al., 2013), along with a congruent rate of absenteeism, increased job rotation, and decreased work performance (Ferri et al., 2015; Henderson, 2015). Among the general nursing professional community in Spain (Albendín et al., 2016; Vargas et al., 2014; Guillermo et al., 2015; Kim et al., 2017) risk factors for stress and burnout include exposure to death and disease, number of years in employment, level of job satisfaction, personality traits (e.g., neuroticism), and varying socio-demographic factors ( age, gender, and marital status), indicating the parallelism of this phenomenon among nursing communities in non-UK contexts.

While some studies suggest that burnout decreases with age (Kanai-Pak et al., 2008; Alacacioglu et al., 2009), others contradict (Losa Iglesias et al., 2010), and/or question the association between burnout and age altogether (Gosseries et al., 2012). Gómez-Urquiza et al., (2017) explored the correlation between a nursing professional's age and experience of burnout. They found that younger nurses were more likely to suffer emotional exhaustion and depersonalisation, defined as a perceived disconnection from one's body and thoughts.

Similarly, the impact of an individual's marital status on burnout has also been the subject of debate (Maslach, 2003; Miaofen and Fang, 2017). Several studies concluded that married nurses are more likely to suffer from burnout and emotional exhaustion. Others suggest that this connection is dependent on the quality of the marriage, for example how supportive the relationship is, noting that supportive marriages are associated with a reduced rate of burnout among nursing staff (Ifeagwazi, 2006; Al-Turki, 2010; Lin et al., 2009; Morsiani et al., 2017). Burnout is reportedly higher among primary healthcare nurses (nurses who work in the community or general practice) when compared with nurses working in hospitals services (Guillermo et al., 2015).

Differences in experiences of burnout have been associated with gender. Literature highlights that "women seem to experience more emotional exhaustion, whereas men are more prone to depersonalization" (Guillermo et al., 2015, p. 241). A lack of breaks to promote recovery during working shifts, particularly demanding high-intensity shifts and/or shift combinations, contributes significantly to emotional exhaustion (de la Fuente et al., 2013; Drach-Zahavy and Marzuq, 2013; Naruse et al., 2012; Stimpfel et al., 2012). While rates for burnout and emotional exhaustion are

decreasing, healthcare workers who work in the same role for longer than a year remain at greater risk of burnout. This is particularly prevalent among nurses working in high-stress, fast-paced departments, which include TNs (Ayala and Carnero, 2013).

Individual personality traits can impact a nurse's experience of burnout and, in this regard, an individual's personal approach to stress, as well as their expectations of the role, thus impacting their level of work satisfaction. Consequently, dissatisfied nurses are more likely to experience emotional exhaustion and burnout (Ayala and Carnero, 2013; Alharbi et al., 2016). While concurring that job satisfaction appears to counteract burnout, Khamisa et al., (2015, p.252) concluded that personal stress was a better predictor of burnout and general health than participants' specific job or working conditions. Nurses with optimistic, flexible, sociable, and extroverted characteristics were found to have better coping strategies than colleagues displaying more neurotic personality types (Guillermo et al., 2015).

#### 1.3.3. Theatre nurses and mental health

Emergency nurses experience more stress and burnout than others in the nursing profession, owing to additional challenges such as overcrowding, time constraints, and aggressive patients (Hooper et al., 2010; Potter, 2006; Alexander and Klein, 2001; Gates et al., 2011). The similarity in TNs' experiences of work-induced stress (Kirkcaldy and Martin, 2000; Delgado et al., 2017; Khamisa et al., 2017) results from similar and regular exposure to patient suffering (Clegg, 2001; Hunsaker et al., 2015), emotional exhaustion and comparable physical strains from physical demands with manual handling and transportation of patients and equipment. These factors are compounded by mounting workloads that are a direct consequence of staff shortages and a breakdown in the collaborative organisational culture (Björn et al., 2016; Kirkcaldy and Martin, 2000).

Much of the contemporary literature has addressed varying causes of stress among TNs, ranging from conflicts with managers, co-workers or physicians (Li and Liu, 2000; Tyson et al., 2002) to dealing with patients' emotional needs (Kalichman et al., 2000), caring for dying patients (Mann and Cowburn, 2005), and the absence of benefits in a demanding job, such as a lack of organisational support (Xianyu and Lambert, 2006) lack of resources (Wu et al., 2010) the demanding shift work (Yau et al., 2012), and work overload (Xianyu and Lambert, 2006; Li and Lambert, 2008).

Poor management and teamwork further aggravate these stressors and, in the broader context of the NHS, contribute to tensions and a widening gulf between formalised noble nursing values (Royal College of Nursing, 2020) and daily practicalities, such as lowered attention to detail to cope with a burgeoning workload. Principles that guide the nursing profession, such as professional standards, codes, treatment of others with dignity and humanity, and assuming responsibility for the provision

of care, are considered of utmost importance. In this regard Luborsky and Rubinstein (1995) argue that "acting contrary to [these] values threaten [nurses'] sense of integrity and meaning" (p.412), which in turn contributes to burnout and a reduction in work satisfaction.

Despite significant international research on emergency room (ER) nursing in hospital emergency departments, stress, and burnout among TNs have not been thoroughly considered, particularly in the UK. The available literature focusing primarily on TNs addresses clinical competence and professional development (Baker et al., 2019; Blegeberg et al., 2008), the enhancement of patient safety (Ingvarsdottir and Halldorsdottir, 2018), and teamwork within nursing (Kaidheim and Slettebø, 2016; Sandelin et al., 2019).

A cross-sectional study of nurses in a perioperative care unit at a university hospital in Barcelona (n=136) showed that 43% experienced emotional exhaustion and 21% reported experiencing a degree of depersonalisation (Sillero and Zabalegui, 2018b). In this case, organisational factors were highlighted as contributing to burnout, among these "nurse manager ability, leadership, and support of nurses", "staffing and resources adequacy" and "nursing foundations of quality care" (Sillero and Zabalegui, 2018b, p.135). The study recommended the promotion of more positive styles of management that focus on increasing psycho-social well-being, while reducing the level of burnouts among TNs.

As noted earlier in this section, there are few studies focused specifically on the impact of environmental factors on job satisfaction, stress, and burnout among TNs in the UK. However, several niche journals, namely the *Journal of Perioperative Practice* (JPP), the *Journal of Operating Department Practitioner* (JODP), and the *Operating Theatre Journal* (OTJ), provide insights into TN experiences. The lack of investigation into the diverse factors affecting job satisfaction and the causes of occupational stress and burnout among TNs is linked to the wider absence of informed recommendations and preventative actions in this regard. Given the burgeoning demands on the NHS, the low rate of recruitment and the increasing dependency on international staff recruitment (Buchan et al., 2019), further studies are needed to identify informed solutions both at the national level and among nursing teams. This dissertation partially addresses this gap in the literature by providing an account of TNs' perceptions of their work environment, levels of job satisfaction and the key contributors to stress. One aim of this study is to improve understanding of TNs' work environment and inform actions to address TN recruitment and TN work relations. More broadly, further studies can address the knowledge gaps by conducting qualitative research investigating TN perceptions of their work environment.

## 1.4. Leadership

While effective teamwork requires equally effective management, conflicts most often arise over leadership styles and management practices that exclude affected staff from decision-making processes (Freedman, 2019). The latter conforms with the discussion in the previous section where TNs, and nurses in general, often suffer from work-induced stress or burnout, which then affects work performance and are often a direct consequence of leadership issues (Khamisa et al., 2017; Delgado et al., 2017; Kirkcaldy and Martin, 2000). A growing body of research (qualitative interviews, cross-sectional and longitudinal surveys) into best practices in nursing leadership demonstrates that a relational and interpersonal-oriented leadership style is particularly effective in both resolving conflicts and addressing issues surrounding mental health (Spence Laschinger and Roberta, 2015; Sandelin et al., 2019; Alzahrani and Hasan, 2019; Pishgooie et al., 2019).

## 1.5. Research Questions and Aims

Several issues remain unanswered in the current literature concerning the experience of TNs within the NHS. The primary aim of this research is to understand the work environments of TNs in detail, using the self-reported perceptions of TNs to gain insight into how these environments impact the daily experience of TNs in carrying out their role. The aims for this thesis are to establish:

- 1. How do theatre nurses perceive their work environment?
  - **a.** To better understand the nature of TNs perceptions and disaggregate the various factors which are involved in their construction.
  - **b.** To identify and explore any organisational, cultural, or social issues that may facilitate or prevent an effective work environment.
  - **c.** To identify and explore strategies for addressing key challenges and barriers to improving the TN experience.

The experiences of TNs were drawn upon through interviews to gain insight into their impact on daily patterns.

## 1.6. Outline of thesis

The first chapter of this thesis provides a background and context for this study.

Chapter 2 provides an overview of the literature related to TN in westernised countries.

Chapter 3 discusses the methodology and paradigm used to conduct this study. It describes the study design in detail, justifying the choice of a qualitative methodology, and includes a discussion about data collection, analysis, and subsequent reporting of the study's results.

Chapter 4 presents the findings from this study.

Chapter 5 presents a discussion of the findings and demonstrates how the individual parts of the study were integrated. The chapter concludes by examining the strengths and weaknesses of the study, recommendations for change and suggestions for future research.

Chapter 6 presents a discussion about my journey as a researcher utilising the Vitae Researcher Development Framework (2010), (Careers Advisory Centre, 2010). A portfolio of evidence demonstrating my development as a researcher throughout the study is presented.

## 1.7 Conclusion

This chapter has provided a brief overview for the context in which TNs work in the UK. It defined the role of a TN in relation to their responsibilities, required skills and training and issues associated with their recruitment and retention in the speciality of theatre nursing. The impact of stress on TN mental health was also discussed in relation to burnout and how effective leadership can support improved mental health of a TN. In the next chapter I discuss the published literature reporting on related areas of research to situate the current project in its full context.

# Chapter 2 Literature Review

# 2.1. Introduction

Chapter 1 provided a brief overview of the key issues related to TN work environments, detailed the cascading effects poor work environment conditions can have on work satisfaction, individual mental and physical well-being, the overall efficiency of healthcare provision, and the recruitment of new TNs more broadly. In the UK, there are shortages of registered nurses, particularly TN nurses, and this scenario is experienced by many other countries globally, making it challenging to recruit and retain TN nurses (Beitz, 2019; Plank, 2019). Given the dearth of UK research on TN recruitment and retention, understanding TNs' work experiences and their motivations for specialising is essential for further recruitment, including how to support and retain the existing workforce of registered TNs. The following discussion provides a critical overview of contemporary literature in this regard and provides a broad overview of the salient aspects of the TN experience.

The designation 'TN', as well as terminology used to describe this role, can cause some confusion, for example in some countries they can be referred to as an Operating Room (OR) or Operating Department (OD) nurse. While the speciality has been recognised by professional organisations for at least 50 years (Knoll, 2017), theatre nursing takes place within confined spaces and behind closed doors. Consequently, theatre nursing requires some demystification outside of the perioperative specialisation. TNs need to be identified as skilled practitioners and have their voices heard in research. This chapter is organised into six sections:

- Section 2.1 introduces the context, the search strategy and results and key themes found in this review of the literature.
- Section 2.2 discusses the themes of workplace culture and teamwork.
- Section 2.3 highlights literature that explored the characteristics of theatre teams.
- Section 2.4 discusses literature that explored becoming a theatre nurse.
- Section 2.5 discusses literature that explored the mental health and wellbeing of TNs.
- Section 2.6 discusses the literature in relation to management and leadership.

## 2.1.1 Search Strategy

Several search strategies were used to identify the relevant literature. This included an initial broad search of databases including the British Nursing Index (BNI), Cumulative Index of Nursing and Allied Health (CINAHL); *Excerpta Medica* Database (EMBASE), the United States' National Library of Medicine's (NLM) MEDLINE, ScienceDirect and an online search of the tables of contents of two journals published by the Association of perioperative Nurses (AORN): *The Journal of Perioperative* 

*Practice* and the *Journal of Advanced Nursing*. The Healthcare Management Information Consortium (HMIC) database was also searched for reports relevant to staffing. The following search terms were used: '('experience OR experiment\* OR understand OR phenom\*\*') AND '('theatre\* OR perioperative\* OR scrub\* OR operating room') AND '('nurse\* OR nursing\*') AND '('communicate\* OR team\* OR multicultural\* OR multidiscipline\* OR bully\* OR sexes\* OR races\* OR manage\* OR aggress\*').

My research question, "How do theatre nurses perceive their work environment?" was developed over years of working in clinical practice within a theatre environment, and this question guided this review of literature for this thesis. The search was limited to Title and Abstract fields only, and online-published research papers and texts with full-text availability in Australia, Canada, Europe, New Zealand, and the United States of America in the date range of 2010–2020. Studies where only an abstract was available were also included in the search. I chose to only focus on research from the last decade because there are no seminal studies from earlier decades. The nursing environment and culture have changed substantially from earlier decades, therefore recent research was more relevant to my research question, which involves how theatre nurses perceive their work environment. These filters were applied to focus the search to westernised health systems. Studies involving undergraduate or pre-registration nursing students were excluded. Studies including perioperative patient conditions and positioning were also excluded.

Although many countries are represented in the literature review, including the US, Canada, the Netherlands, Greece, Germany, Australia and New Zealand, studies from the US and the UK predominate. I understand that Scandinavian literature predominated in earlier decades, however, it is outside the scope of this literature review to understand why Scandinavian authors did not publish as much in the most recent decade. There is a possibility that the themes developed in section 2.1.3 reflect this US/UK dominance and lack of Scandinavian voices. If earlier Scandinavian literature had been included, it is possible that the themes developed would have included other elements such as safety, however, that did not appear in the more recent US/UK dominating literature. Additionally, there are many similarities between the US and UK operating theatre environments, making inclusion of US studies relevant to this review.

## 2.1.2. Search results

The initial search of the databases after removal of duplications returned 296 records for assessment against inclusion criteria. These records were reviewed and screened for their relevance to the research topic and against the inclusion criteria. This resulted in 196 records being excluded for a

range of reasons. The remaining 100 records were included in this review (n=100). This search process and its results are illustrated in Figure 2.1.

Categorisation of these records revealed that the greatest number were from the United States of America (n=30), United Kingdom (n=25), Sweden (n=8), Australia (n=13) and Canada (n=3). The remainder of countries had between one and two studies. The literature included consisted of primary research studies (Qualitative (n=27), Quantitative (n=32) and Mixed Methods (n=5)) and secondary research (Systematic Reviews (n=8), Literature reviews (n=5), Reports (n=4). Two discussion papers (n=14) and book chapters (n=5) were included representing seminal pieces of work that added value to this review. This categorisation is illustrated in Table 2.1.

Additionally, while many countries are represented in the literature review, including the US, Canada, The Netherlands, Greece, Germany, Australia and New Zealand, studies from the US and the UK predominate. I understand that Scandinavian literature predominated in earlier decades, however it is outside the scope of this literature review to understand why Scandinavian authors did not publish as much in the most recent decade. There is a possibility that the themes developed in section 2.1.3 reflect this US/UK dominance and lack of Scandinavian voices. If the earlier Scandinavian literature had been included, it is possible that the themes developed would have included other elements such as safety, that did not appear in the US/UK dominating literature. Also, there are many similarities between the US and UK operating theatre environments, making inclusion of US studies relevant to this review.



Figure 2-1 PRISMA identification of literature sourced and adapted from (Page et al., 2021)

	Qualitative (n=27)	Quantitative (n=32)	Systematic reviews (n=8)	Literature reviews (n=5)	Mixed Methods	Discussion Papers	Reports (n=4)	Books (n=5)	Total sources (n=100)
					(n=5)	(n=14)			
United	7	7	3	1		2	3	2	25
Kingdom									
United	4	8	3	1	2	9	1	2	30
States of America									
Canada	2	1							3
Amsterdam	1								1
Greece	1	2							3
Germany	1			1	1				3
Italy		1		1		1			3
Netherlands		2							2
Spain		3	1			1			5
Sweden	5	3							8
Norway	1	1							2
Australia	4	4	1		2	1		1	13
New Zealand	1			1					2

Table 2-1 Categorisation of Literature

### 2.1.3. Key Thematic Findings

All sources included in this review (n=100) were read several times to gain familiarity and to identify what is known 20about TN in the contemporary literature. Pdf copies of all records were downloaded from the library databases, attached to the record in Endnote, and a secondary copy was stored in a file on a computer for easy access. The Critical Appraisal Skills Programme (CASP) tool was used to evaluate the research literature. CASP was used to critique the articles and to determine which articles were included for intensive review. CASP is a qualitative appraisal checklist and can be used to ensure research quality and rigour. This tool was chosen as I was familiar with it, and it is designed for use in research literature reviews. It is widely used in nursing (CASP, Systematic Review, 2018a; CASP, Qualitative Research, 2018b). Subsequently, a thematic analysis of the key findings in each record were identified by hand and collated. The thematic analysis of literature involved categorisation and grouping of articles together into similar topics and themes. Journal articles were read several times to establish understanding and identification of their relevant to my research question. I examined what was reoccurring in the articles, where themes were developing, and grouped articles with reoccurring elements together. The resulting themes became Table 2.2. There were five central themes found: Workplace culture and frameworks; Character of theatre teams; Becoming a theatre nurse; Mental health and wellbeing; and Management and leadership (n=5). Within each of these an additional twelve (n=12) sub-themes were embedded. The central themes and their associated sub-theme are illustrated in Table 2.2. The following sections explore these themes and sub-themes in more detail.

Key Themes	Sub-themes
2.2 Workplace culture and teamwork	2.2.1 Peer Relationships
	2.2.2 Communications and teamwork
2.3 Character of theatre teams	2.3.1 Staffing levels and teamwork
	2.3.2 Effects of time constraints on patient care
	2.3.3 Medication errors- effects on TN wellbeing and patient safety
2.4 Becoming a theatre nurse	2.4.1 Motivation
	2.4.2 Training and skills acquisition
2.5 Mental health and wellbeing	2.5.1 Stress
	2.5.2 Burnout
	2.5.3 Bullying
2.6 Management and leadership	2.6.1 Discrimination
	2.6.2 Migrant nurses and discrimination

#### Table 2-2 Key themes and sub-themes found in the literature

## 2.2. Workplace culture and teamwork

Scholarly interest in workplace culture among TNs has gained considerable attention. As a result of its marked effect on communication, workplace culture is defined as "shared structures, routines, rules, and norms that serve to guide and constrain behaviour in work communities" (Eskola et al., 2016, p.2). This notion of workplace culture bears similarity to wider conceptions of culture outside of the work environment, in that it is characterised by shared notions of the world, shared principles, and shared goals (Sahlins, 2011). Workplace culture, in this regard, may differ from one context to another, or from one nursing team to another. A qualitative cross-sectional study by Eskola (2016) investigated workplace culture through the construct of stress. While operating theatre workspaces can be stressful, hurried environments, they found respondents were not particularly stressed by their work environment. They postulated this may be related to respondents perceiving their environment as highly stimulating, exciting, and presenting a positive challenge. The most significant finding that informed respondents' negative perceptions of their work culture was shortages in staffing, generating high workloads and thus creating a stressful work environment in which to work. Others have found that workplace culture and service pressure resulting from NHS budget cuts, as well as the availability of time for Continuing Professional Development (CPD), heavily impact TN experiences and perceptions of their work environment (Radford and Fois, 2018). As Eskola (2016) highlighted, workplace culture often relates to "the way things are done here" (p.2). This impacts context and affects the way communication and collaboration operates among NT staff.

Matveev and Nelson (2004) investigated cross cultural communication competence and multicultural team performance among American and Russian managers. They suggested that increasing reliance on multi-cultural teams in the operating theatre workplace required novel approaches to communication to ensure effective on-the-job performance (Matveev and Nelson, 2004). In 2017, Refai, et al. undertook a survey of 81 health professionals who worked in a thoracic and operating unit in an Italian hospital. They aimed to evaluate the organisational climate and quality of work within these departments for the purpose of developing strategies to improve organisational climate. They found that staff were unhappy (n=25%) and viewed their work environment and culture negatively, considering it an unsafe place to work (Refai et al., 2017). While this was associated with limited opportunity for career progression, they highlighted the important need for managers to foster good relationships between staff and recommended collaborative educational professional development with both staff and managers to improve organisational culture and the feeling of safety among staff to voice opinions (Refai et al., 2017). Teamwork is particularly emphasised in operating theatre nursing, given the need to coordinate between the diverse skills of other health professionals such as TNs, surgeons, and other specialised staff (for example, biomedical or radiology technicians). It has been highlighted as a central tenet of the

TN role. McFarlane (2018) explored the literature to establish the impact of standardised perioperative handover protocols. She highlighted that the TN team is the epitome of teamwork within the health care system. In addition, their use of handover protocols reduced the risk of potential errors thus positively impacting on patients' vulnerability and health outcomes (McFarlane, 2018). Teamwork dynamics have a significant impact on TNs, and poor teamwork often contributes to stress arising from interpersonal conflict. However, providing support to team members may help in reducing stress (Smith et al., 2018).

A meaningful and supportive collaborative team culture is, therefore, a central driver in TNs' perception of a good work environment and of their place within it. Using an interpretative phenomenological analysis (IPA), Radford and Fotis (2018) identified that individual TNs' experiences were heavily influenced by their relationship with their teams. Of particular significance are the roles of mentors and managers, and how they engaged with individual team members (Radford and Fois, 2018).

#### 2.2.1. Peer relationships

TN relationships with management have been highlighted as a significant factor in determining work environment perceptions (Trajano et al., 2017; Purpora and Blegen, 2015). Trajano, et al. (2017) investigated how nurses perceive interpersonal relationships established when working within a multiprofessional team in a surgical centre. They identified factors that can strengthen or weaken relationships, for example education on technical and communicative work and collective decisionmaking are key to strengthening interpersonal relationships (Trajano et al., 2017). In addition, peer relationships improved when regular meetings were organised to address service problems. A study by Purpora and Belgen, (2015) highlighted peer relationships as having a mediating function. They found that workplace incidents were minimised when clear and engaged communication and discourse occurred between colleagues. Regardless of the composition of the team, there is no discernible effect from gender, ethnicity, nurse education level, hospital size, or clinical department (Purpora and Blegen, 2015). Given the multi-cultural and multilingual diversity in backgrounds among both patients and nurses, communication is important for effective teamwork and the prevention of misunderstandings between colleagues and patients. Collectively these literatures highlight that peer relationships are mediated through the quality of communication and collegial teamwork.

#### 2.2.3 Communication and teamwork

The importance of good communication within perioperative teams is a central theme found in several of the studies reviewed. The studies consistently identified communication as being vital for improving safety in care practices within perioperative settings (Gillespie and Hamlin, 2009; Gillespie et al., 2010; Bezemer et al., 2015; Clayton et al., 2016). Case study research by Berzemer et al. (2015) explored the effects of increased mobility of nurses, surgeons and other health professions on communication and

learning in operating theatres. They examined instances where instrument requests prompted clarification and found that when surgeons provided elaborate responses to the TN this served to maximise learning and improved teamwork efficiency. Minimal responses and clarification enabled completion of the immediate task; however, they did not promote depth of learning or positive relationships. Additionally, Clayton et al., (2016) undertook a qualitative study to explore the lived experiences of TNs working in a multicultural operating theatre. They found that TNs experienced difficulties with communication, which often affected the working environment and patient care. Respondents suggested social integration as a mechanism to improve working and communication, and thus patient safety (Clayton et al., 2016). The authors acknowledged the responsibility for theatre managers to implement measures to improve communication and foster camaraderie, but also the duty of TNs to work towards these goals, particularly if patient care is being negatively affected. A synthesis of the literature by Gillespie and Hamlin (2009) aimed to identify the underlying concepts associated with competent perioperative nursing practice and to confirm their belief "that competence is necessary for safe surgical patient outcomes" (Gillespie and Hamlin, 2019, p.256). They identified two broad concepts: "specialised knowledge" which was characterised by TNs' "familiarity with perioperative practice guidelines and standards of care" and "human factors" such as interpersonal and social aspects of team interaction (Gillespie and Hamlin, 2009, p.256). They concluded that while specialised knowledge is important for safety in the care of surgical patients, human factors as they relate to perioperative competence remains not well understood (Gillespie and Hamlin, 2009). They proposed further research and the development of a self-assessment tool to measure TNs' perceived competence development. Another study by Gillespie et al., (2010) investigated the impact of organisational and individual factors on team communication in surgery. They aimed to better understand how these factors influence and shape interdisciplinary team communication in surgery. They interviewed surgeons, anaesthetists, and nurses (n=16) from a hospital in Queensland, Australia. Three themes emerged as key to effective communication and team cohesion. "Interdisciplinary diversity in teams contributes to complex interpersonal relations" (Gillespie et al., 2010, p.735) related to historical differences between the professions (nurses and doctors) in relation to authority, gender, and patient care responsibilities, thus separate professional identification. This led to a disconnected type of communication. The second theme "The pervasive influence of the organisation on team cohesion" (Gillespie et al. 2010, p.735), related to the impact the organisational context (OC) had on teams' communication practices. Respondents tended to lack confidence in the OC with respect to resource allocation and patient safety initiatives introduced to improve team communication. This was thought to be due to a disconnect between bureaucratic decision-making for resource allocation, which teams perceived as being removed from practical realities (Gillespie et al., 2010). The last theme, "education

is the panacea to improving team communications" (Gillespie et al., 2010, p.735), was viewed as central to changing culture and increasing understanding among the multidisciplinary teams.

Sanderlin et al., (2019) interviewed TNs to establish and describe their experiences of pre-conditions for safe intraoperative nursing care and teamwork. They found that inefficient hospital computer systems negatively impacted a TN's ability to access essential information required to perform their role (Sandelin et al., 2019). This necessitated consultation with surgical teams to gain the information they needed to provide comprehensive and safe care. TNs viewed patient safety as a priority requiring professional collegial teamwork and committed leadership to enhance patient safety. Sanderlin et al., (2019) concluded that preoperative dialogue is the most fundamental feature of high-quality and safe care. Matziou, et al., (2014) surveyed physicians and nurses to establish their perceptions of communication, collaboration and factors that influence these activities. They found significant discrepancies between nurses' and physicians' views regarding communication and collaboration. While most nurses (n=80.2%) felt their work was recognised and respected by physicians, and that the quality of physician-nurse relationships impacted collaboration, almost half (n=49.8%) believed physicians did not evaluate their work fairly (Matziou et al., 2014). Many believed physicians did not collaborate with them during therapeutic or decision-making processes (60.4%). Conversely, physicians reported they respected and accepted nurses' contributions and responsibilities to patient care. They believed the professional relationship between a nurse and physician determined cooperation (95.4%). Physicians early in their career tended to acknowledge nurses' contribution to administrative roles and were more accepting of their involvement in decision making. More senior physicians acknowledged they did not approve of nurses' involvement in decision-making regarding patient treatment, suggesting that some physicians did not fully understand nurses' professional roles, with significant impacts on patient outcomes. Matziou et al. (2014) recommended future research to examine nurses' perceptions of roles and where they would like to see improvements.

In an analysis of nurses' views on ways in which communication in the theatre could be improved, Işık et al. (2020) aimed to establish the "reasons for and consequences of perioperative communication failures and to seek recommendations for improvement" (p. 1). They found "institutional, individual and specific factors relating to the perioperative environment" impacted communication failures in surgical units (Isik et al., 2020, p.4). Institutional factors included non-compliance with hospital policies/procedures and relying on verbal communication instead of following policy to document patient treatments in the patient record. There was a lack of understanding by physicians of the role of the TN nurse, leading to communication failures. Individual practitioner factors related to disruptive behaviour and anger management and specific factors related to the "rapid and dynamic structure of the perioperative environment" (Işık et al., 2020, p.5). They recommended enforcing institutional regulations should not only be

present, but actively enforced. Moreover, strengthening employees' interpersonal skills was highlighted as being essential to preventing communication issues (Işık et al., 2020). Similar findings of violent abusive communication from physicians towards TNs has been highlighted in the literature. A qualitative study by Higgins and Macintosh (2010) explored OR nurses' perceptions of the effects of physicianperpetrated abuse on their health and their ability to provide safe care to patients. They found three factors that led to physician-perpetrated abuse. The culture of ORs was influenced by physician patriarchy and hierarchy leading to a "catalyst of abuse" by other nurses in more senior positions (Işık et al., 2020, p.323). This was compounded by resource availability and interpersonal relationships among physicians (Higgins and MacIntosh, 2010). Lastly, 'perceived effects' related to physical, social, and psychological consequences on TNs' health. These scenarios ultimately impacted on patients' access to safe care. Power imbalances within an OR environment that causes TNs to feel unable to speak up about issues regarding patient safety is an example of oppression and ultimately highlights the serious and devastating consequences of ineffective communication on both patients and staff.

Weldon et al., (2013) conducted a systematic review of observational studies of communication in operating theatres. They aimed to establish actual communication practices, rather than relying on reports derived from recollections or interviews. Of the 1,174 citations reviewed, only 26 were included in their review (Weldon et al., 2013). Concepts identified included "signs of effective communication, signs of communication problems, effects on teamwork, conditions for communication, effects on patient safety and understanding collaborative work" (Weldon et al., 2013, p.1667). They found that communication affected the operating theatre practices across all the studies reviewed and highlighted the need for more detailed observational research to gain a better understanding of how to improve working environments in operating theatres.

Collectively, these studies highlight the fact that communication is fundamental to the creation of safe and effective working environments for all stakeholders, patients and staff who work in these spaces. On the negative end of the continuum, a lack of or breakdown in effective communication can generate very negative outcomes for patients and staff, which is unacceptable and a breach of professional standards of care in all the countries in which these studies were undertaken. On the opposite end of the continuum, good, effective, and respectful communication promotes respectful, quality relationships, highly effective multidisciplinary teamwork and, above all, the best possible health outcomes for patients and staff.

## 2.3 Character of theatre teams

The benefits associated with adopting a multidisciplinary approach in the OR are highlighted in the literature (Bender et al., 2015; Mercedes et al., 2016; Kaldheim and Slettebø, 2016). Bender et al. (2015)

investigated a hospital system's operating room efficiency using Six Sigma methodology, which is a mixed methods approach to research. They aimed to establish improved capabilities of the OR (Bender et al., 2015). The evaluation was overseen by a theatre governance committee. They concluded that "an interprofessional approach to optimising OR performance led to significant improvements in patient access, volume, efficiency, staff satisfaction and financial performance of the OR" (Bender et al., 2015, p.446). A systematic review undertaken by Mercedes et al. (2016) involved eight studies to evaluate the effectiveness of structured medical daily rounds (MDR, a daily early morning assessment of patients conducted by departmental staff) using a structured communication tool (SCT) in intensive care units on length of stay (LOS) and both patient and staff satisfaction levels. They defined a 'SCT' as a systematic approach used to enhance effective communication within and between disciplines. They found including all care professionals involved in a patient's care, thus creating a multidisciplinary team approach in MDR, led to improvements in multidisciplinary communication, staff and patient satisfaction, and a reduction in a patient's LOS in hospital, reduced costs, and increased efficiency. Central to achieving these results was the inclusion of a SCT (Mercedes et al., 2016). This incorporated both 'process orientated tools' such as flow charts, daily goal sheets, door communication cards and documentation tools such as 'situation, background, assessment, and recommendation (SBAR) charts. This included daily goal sheets and safety checks that were shown to improve communication and teamwork, enhance safety, staff satisfaction and retention. They concluded that the multidisciplinary nature of nursing teams provides an opportunity for improvement in internal and cross-team communications and learning.

Kaldheim and Slettebø (2016) conducted a qualitative study across four Norwegian hospitals to establish what TNs working in multidisciplinary teams viewed as important factors in collaboration. They interviewed eight TNs and conducted a thematic analysis of the data. They found that co-operation and respect were powerful inter-human processes that "required the presence of multiple factors in the relations between professionals" (Kaldheim and Slettebø 2016, p.2). They highlighted how strengthening teamwork can pose challenges and how organisational factors can play a part in this process. However, the need for respect was considered the most significant factor in terms of members feeling valued, while failure to communicate, and/or uncooperative behaviour such as being impatient, can result in TNs feeling undervalued (Kaldheim and Slettebø, 2016).

Collectively, the findings of these studies suggest that the adoption of collaborative approaches can promote respect for the unique skills, services and practices that multidisciplinary professionals can bring to a team. Demonstrating respectful communication and behaviour strengthens teamwork. The benefits of adopting a multidisciplinary approach in TN include improved communication, teamwork, job and patient satisfaction and economic benefits in terms of cost-effective care that reduces patients'
lengths of stay in hospital. These benefits produce increased patient care and job satisfaction for TN teams, thus inspiring multidisciplinary teams to strive for continued best outcomes for all stakeholders.

## 2.3.1 Staffing levels within teamwork

The impact of staffing levels on the health of TNs is highlighted in the literature (Kalisch et al., 2013). This can have a positive or negative effect and can present as either over staffing or understaffing units (Buchan et al., 2019; Robertson et al., 2017)

Qualitative research by Kalisch et al. (2013) explored nursing teamwork and unit size across 53 medicalsurgical, intensive care and rehabilitation units in four hospitals across the Midwestern regions of the United States of America. They aimed to establish the relationship between teamwork and unit size and the level of nursing teamwork. They found a significant relationship between the size of a unit and the cohesiveness of teamwork. Larger working spaces promoted less physical contact between co-workers, which negatively impacted cohesiveness and teamwork. Smaller nursing teams were more cohesive and worked together more efficiently due to the reduced physical distance between co-workers, thus stimulating frequent, effective communication and cohesiveness (Kalisch et al., 2013). Further, the skillmix in teams impacts cohesiveness and teamwork. Kalisch et al., (2013) found that nursing teams consisting of higher numbers of unlicensed practitioners, such as nursing assistants (NAs), were less cohesive than teams with higher numbers of licensed practitioners. This is a surprising finding given the legal and professional responsibilities of RNs with respect to supervision of care duties delegated to NAs, thus one would expect high cohesiveness and communication in this scenario.

Understaffing of surgical units can have differing effects for staff and patients. A recent study titled "Understanding the NHS financial pressures: How are they affecting patient care?" was undertaken by Robertson et al., (2011) in the UK. They interviewed key stakeholders to establish the impact a reduction in NHS funding since 2010/11 had on patients' access to high-quality care and whether financial pressures were affecting different parts of the health system (Robertson et al., 2017, p.1). The study focused on four different areas of the health service: genito-urinary medicine (GUM), district nursing, elective hip replacement and neonatal services. They found that GUM and district nursing services were under tremendous strain, "Both access to services and quality of patient care have been affected in ways that are difficult to detect with currently available metrics" (Robertson et al., 2017, p.2). They highlighted that severe financial constraints within the NHS forced nurses to work with significantly reduced staffing levels that negatively impacted their ability to fulfil their roles and responsibilities. Workforce reviews in the UK have highlighted chronic staff shortages in nursing specialities, including theatres (Robertson et al., 2017), and issues with recruitment and retention continue to worsen (Buchan et al., 2019).

An annual report conducted by Buchan et al. (2019) for the Heart Foundation reviewed NHS workforce trends. They demonstrated ongoing deterioration in workforce shortages, particularly with nurses in

primary health care. They found that many staff leave their job due to low job satisfaction and applications for vacant positions has fallen. Some 24% of students starting a nursing degree do not complete it and more than 1 in 10 registered nurse positions in the NHS remain vacant (Buchan et al., 2019). A qualitative study undertaken by van Oostveen et al. (2015) investigated nurse staffing issues to establish nurses' perceptions on current staffing levels in the Netherlands and the use of nurse-topatient ratios and patient satisfaction systems. They conducted focus groups with four groups of nurses (n=44) and interviewed head nurses, nursing directors (n=27) and quality advisors (n=3) (van Oostveen et al., 2014). They found that nurse staffing issues were just "the tip of the iceberg" of underlying issues associated with a nurse's ability to work autonomously and with authority. These issues often prevented them advocating for more staff to achieve the quality of patient care required (van Oostveen et al. 2014, p.1300). Nurses in this study sought "a validated nursing care intensity score as interdisciplinary and objective communication tool that makes nursing care visible and creates possibilities for a better positioning of nurses in hospitals and a further professionalization in terms of enhanced authority and autonomy" (van Oostveen et al. 2014, p.1300). The authors concluded that they were doubtful if this would resolve their feelings of 'oppression' or not being heard by other medical management professionals.

## 2.3.2. Effects of time-constraints on patient care

Balancing patient care within tight work schedules and time constraints is a challenging aspect of the TN role (McGarry et al., 2018; Bruckenthal and Simpson, 2016; Källberg et al., 2017). A qualitative study undertaken by Fallatah and Laschinger (2016). was titled "The influence of authentic leadership and supportive professional practice environments on new graduate nurses' job satisfaction". They aimed to test theoretical models for the purpose of linking authentic leadership to a new graduate's job satisfaction and effects of supportive practice environments. McGarry et al. 2018 found that TNs prioritise patient care and maintain the flow of patients, equipment, and resource management of equipment to promote and ensure patient safety. This causes tension between TNs' responsibility of attending to the individual needs of patients while also attending to as many patients as possible (McGarry et al., 2018). Other literature has highlighted that facilitating surgical and recovery processes, as well as maximising patient satisfaction, are a fundamental responsibility for TNs. Bruckenthal and Simpson (2016) clarify the role of perioperative nurses as complex with diverse responsibilities. Meeting these responsibilities entails performing post-surgical pain assessments, facilitating the patient's anaesthetic recovery following surgery, providing patient education regarding pain management, documenting in-patients' medical needs to promote continuity of quality care and being empathetic throughout (Bruckenthal and Simpson, 2016).

Källberg et al., (2017) undertook a qualitative study that explored physicians' and nurses' perceptions of patient safety risks in the emergency department, with the aim of "describing emergency department

clinicians experiences with regard to patient safety risks" (p.14). Respondents reported that high workloads generated reductions in the amount of time available to attend to tasks. Consequently, this resulted in inadequate nurse-patient communication and reductions in staff motivation (Källberg et al., 2017). These scenarios have been identified as root causes for burnout, poor job performance, absenteeism, resignations, dismissals, and a higher turnover in manpower, which, in turn, adversely affect the quality of patient care. Another study by Silerro and Zabalegui (2018) undertook a cross-sectional, multi-level correlational study of nurses (n=105) and patients (n=150) in a surgical unit. They aimed to determine the safety and satisfaction of patients and their relationship with nurses' care in the perioperative period. They found job satisfaction, professional commitment and participation in hospital politics were not good predictors for patient safety (Sillero and Zabalegui, 2018a). Nurses who were unhappy with their work were less committed to the profession and had low inclination to participle in unit matters, which increased the risk of adverse events for patients.

Nurses can transition from general nursing to perioperative nursing. The study by Støren and Hanssen (2011) discussed earlier found that nurses often leave their former positions due to high patient workloads making it difficult to provide the care they feel their patients need (Støren and Hansen, 2011). This scenario can be further aggravated by time constraints due to staff shortages due to absenteeism creating an environment where errors in care provision can be made.

## 2.3.3. Medication errors – effects on TN wellbeing and patient safety

Medication errors are a key issue in patient safety. On a global scale, such errors affect up to 16% of patients admitted to hospital (Classen et al., 2011; Keers et al., 2015; Seys et al., 2013). Keers et al., (2015) undertook a qualitative study to explore causes of intravenous medication administration errors in hospitals. They wanted to establish the underlying causes of intravenous medication administration errors (MAEs) in National Health Service (NHS) hospitals. They recruited 20 nurses across two NHS hospitals in Northwest England who were willing to be interviewed to discuss perceived intravenous MEAs. Some 21-individual intravenous MEAs were reported (Keers et al., 2015). Errors were frequently due to knowledge and rule-based mistakes, equipment design (such as similar packaging), and distractions usually through interruptions with questions from colleagues. All errors are largely attributable to organisational factors and workload. Issues of patient safety associated with errors in medical treatment in the operating theatre can also arise for a variety of reasons, for example the wrong-site surgery, retained foreign objects, and insertion of the wrong implant or prosthesis. Clinicians' reactions to medication and/or medical errors have been explored in the literature (Seys et al., 2013; Chard andTovin, 2018).

Seys et al., (2013) conducted a systematic review and found that clinicians' reactions to medical errors can be emotional, cognitive, and behavioural. They suggested this can generate psychological distress,

burnout, and depression. A hermeneutic phenomenological study by Chard and Tovin (2018) conducted focus group interviews with 10 perioperative nurses with the aim of describing and interpreting the experiences of perioperative nurses related to intraoperative errors. A thematic analysis of the data revealed three major themes: environment, being human, and moving forward representing the overarching experience of respondents as TNs (Chard and Tovin, 2018). Each theme was acknowledged as having interrelating factors. Human nature can be susceptible to the effects of the environment impacting cognition and a focus on the patient and task at hand. Equally, human nature, emotions and frustrations can contribute to a chaotic, tense and sometimes hostile environment. While humanness and the environment can contribute to errors in OR, being human allows for meaningful reflection on errors to improve practice for the prevention of future errors. Supportive colleagues and environments are critical to facilitating acceptance and processes for improvement and change.

A systematic review conducted by Serou et al. (2017) explored the effects of surgical incidents affecting operating staff and their consequences. Eight of the 21 articles included related to surgical incidents with medical practitioners (surgeons and anaesthetists) and two with TN and theatre technicians (Serou et al., 2017). They found five themes: "the emotional impact on health professionals, organization culture and support, individual coping strategies, learning from surgical complications and recommended changes to practice" (Serou et al., 2017, p.107). They concluded that health professionals suffered emotional distress, which led to a loss of confidence among surgical clinical staff, contributing to increased stress, burnout, and job dissatisfaction. Peer support from organisations and individual clinicians in the form of supportive open discussion and private reflection on incidents helped both to reduce the negative effects in those involved and increased the implementation of changes in their practice. Pratt et al., (2012) discuss the development of a "Second Victim Support Program" (p.237) – a downloadable online program of educational resources and tutorials designed specifically for health care organisations to enable the development a program of support for their staff "who have suffered emotionally when the care they provided led to patient harm" (Pratt et al., 2012, p.237). The term 'second' refers to the clinician as the second victim. The toolkit was launched in 2010 and within weeks people within more than 38 countries had viewed the toolkit. By the end of the first year 6,226 people had visited the toolkit and 756 had download it (Pratt et al., 2012).

More recently, a systematic review of qualitative studies conducted by Cabilan and Kynoch, (2017) in Australia, aimed to explore what is known about the experiences of nurses as second victims and their experience of the support they receive and need. The review included all studies that sought to investigate the second victim phenomenon in all health care settings globally (Cabilian and Kynoch., 2017, p.2345). Of the 1,628 citations identified, only five were included in the review. The authors found that nurses as second victims can experience a range of psychological torment and poor treatment from colleagues and management in the aftermath of an adverse error. This can affect them for long periods

of time and manifest similar symptoms to grief – "shock, disbelief, guilt, loss of confidence and worry" (Cabilian and Kynoch., 2017, p.2345) Consequently, TNs can often be hesitant to report errors due to fears of potential ramifications, such as blame and even dismissal. The evidence from these studies demonstrates an acknowledgement for the health needs of clinicians when a medication/medical error occurs but also the significance and severity of its impact on clinicians when it occurs (Cabilan and Kynoch, 2017). This highlights another unmet need and demand for support.

## 2.4. Becoming a theatre nurse

Key themes in the literature pertaining to the role of a theatre nurse revolve around motivations for becoming a theatre nurse, training and skills acquisition, mental health and wellbeing relating to effects of medication and medical errors, stress, burnout, and bullying. The literature relating to these concepts will be discussed in the following sub-sections.

## 2.4.1. Motivation

Nurses tend to enrol in their respective specialities motivated by a desire to deliver quality patient care. The TN role has been described a more complex role to that of other nursing roles. All nurses must demonstrate a high standard of interpersonal skills, however a nurse working in the speciality of theatre nursing demands a host of technical expertise (Rudolfsson et al., 2007; Chambers et al., 2009; Eley et al., 2012; Arakelian et al., 2020). Støren and Hanssen (2011) surveyed nursing graduates to establish why nurses choose to work as perioperative nursing. They found that nurses are motivated to become perioperative nurses due to a strong interest in perioperative nursing which they find challenging, and the desire have a positive influence on others and focus care on one patient at a time (Støren and Hanssen, 2011).

Karanikola et al., (2018) conducted a phenomenological study that explored the living experience of professional nurses working in critical care and emergency departments, to establish the interplay between their perceptions, feelings, and personal and professional self-concept. They found respondents experienced positive feelings about the self and this was associated with a sense of wellbeing (Karanikola et al., 2018). Participants reported self-perceptions of clinical effectiveness and adequacy in professional skills, a passion driven by a 'mission' to provide high quality patient care and, through self-improvement, to belong to an in-group that is collectively stronger. These attributes suggest professional maturity, making them suitable employees to work in the perioperative field. A significant factor that is often neglected is the impact of TNs' self-perceptions of their efficiency, or perceived efficiency. Social Identity Theory (SIT) (Stets and Burke, 2000; Willetts and Clarke, 2014; Hogg, 2018) and Role Theory (RT) (McGarvey et al., 2004) are central ideas on the social construction of the TN role, providing a means of understanding TN self-perception and the influence context has on their

perceptions. SIT's premise is that groups thrive on self-improvement, while RT considers everyday activities to be reflective of socially defined categories, such as that of a nurse (Stets and Burke, 2000).

## 2.4.2 Training and skills acquisition

Research highlights the problematic nature of gaining access to and acquiring the required training and skills to work in an operating theatre (Beitz, 2019; Ball et al., 2015; Plank, 2019; Beydler, 2017; Jowsey et al., 2019; Cope et al., 2019). During the mid-1980s in westernised systems of health care, hospital-based nurse training transitioned to tertiary settings with practical clinical experience components undertaken in hospitals (Beitz, 2019). This move has resulted in the loss of close clinical relationships and a willing clinical affiliation. Currently in many westernised service systems of care few undergraduate nursing programs typically offer nursing students a clinical placement in an operating theatre. Further, there are limited opportunities for access to post-graduate perioperative training programs (Ball et al., 2015; Beitz, 2019). This generates difficult scenarios in terms of perioperative nurse workforce shortages and a decline in new graduates' interest in, as well as awareness of, employment opportunities in the theatre environment (Ball et al., 2015).

A study by Beitz, (2019) evaluated a perioperative course developed as a joint initiative between a university and hospital to create an undergraduate nursing course that better prepared nurses for the surgical operating setting. They assessed the current and future staffing patterns and leadership challenges in perioperative nursing and identified innovate solutions to an emerging workforce shortage and crisis in perioperative nursing. They also aimed to strategise possible solutions to increase perioperative nursing supply (Beitz, 2019). They found that while the program was welcomed and generated positive learning experiences, students needed to undertake an OR elective and enter the speciality early in their career. However, OR directors reported a requirement for nurses wanting to take up a career in TN needing to have 1-2 years prior medical and nursing experience before being considered to work in an OR, thus demonstrating a barrier to successful recruitment of graduate nurses to the speciality. These concerns for lack of training opportunities and resultant workforce shortages are echoed in other studies (Bacon and Stewart, 2019). Another study by Bacon and Stewart (2019) undertook an annual compensation survey of perioperative nurses to explore how several variables (job title, training, experience, geographic region) affected perioperative nurse compensation. They found disparities in how TNs are renumerated between large hospitals in cities compared with OR in small community settings. They noted that respondents expressed concern that perioperative nursing is not sufficiently covered in nursing curricula during undergraduate training (Bacon and Stewart, 2019).

In New Zealand, Jowsey et al., (2019) explored the use of a newly developed multi-disciplinary team training program called 'NetworkZ' introduced across New Zealand in 2017 for OT health professionals.

The training program was designed to improve patient safety by improving communication and teamwork in OTs. They aimed to explore the experiences of staff and challenges experienced implementing the program into hospitals for the purposes of quality improvement. They found that respondents felt the multidisciplinary simulation-based approach to team training was an essential and fundamental program for learning (Jowsey et al., 2019). It generated positive changes in the OT culture and this finding stimulated other service providers to implement the program rapidly with a resultant rapid cultural change toward teamwork and communication in OT environments. The acronyms "OT" (Operating Theatre) and "OR" (Operating Room") are local acronyms that vary across cultures and countries but mean the same thing. "OR" is most commonly used in the US, whereas "OT" is used in countries that utilise British English.

Radford and Fotis, (2018) employed a qualitative study utilising phenomenology to interpret findings. They explored the lived experiences of operating theatre scrub nurses (OTSNs) working in the UK NHS using semi-structured interviews. OTSNs reported varied experiences of learning technical skills via a variety of learning and teaching methods. These experiences were influenced by on-the-job work experience with other team members in the OT department. They found that team support was essential to supporting OTSNs acquire technical skills, however surgeons and managers were viewed as gatekeepers who control, facilitate and influence learning (Radford and Fois, 2018). Varied learning strategies used to support the acquisition of technical scrub nurse skills included observing, repeated practice, mentoring during double scrubbing and formal tuition with workbooks, viewing photographs of instruments and structured tutorials. The authors concluded that, while participants experienced a variety of varied learning experiences on the job to gain technical skills, there remains a training gap for the speciality of perioperative nurses in undergraduate programs of study and a need for postgraduate programs to support nurses entering the speciality.

Cope et al., (2019) discuss theoretical perspectives on appropriate teaching methods for TNs and the content for teaching in operating theatres. They suggest a range of approaches from a constructivist approach that is flexible and learner-centred that acknowledges learners' past experiences (Cope et al., 2019). Others suggest motor skills theory combining theoretical with interactive simulation and autonomous practice under supervision, or postgraduate training specifically tailored to the individual's explicit learning objectives. They highlight the value of on-the-job learning despite some not recognising this as learning unless it is the direct result of formal teaching strategies. They suggest a careful selection of surgical cases under direct supervision and modelling followed by a debriefing to reflection learning. Poor mentorship has been associated with negative learning experiences for nurses. Crafoord and Fagerdahl (2018) evaluated newly graduated TNs, drawing a direct relationship between clinical learning environments and their supervisors' ability to oversee the workspace effectively. They found that TNs

experienced the operating theatre environment itself an effective learning environment (Crafoord et al., 2018).

Pupkiewicz et al. (2015) investigated factors within perioperative environments that influence the training of a scrub nurse. They aimed to establish the factors that influence the acclimatisation of novice scrub nurses. They used qualitative approaches (a focus group and interviews) with novice (n=6) and senior scrub nurses (n=7) from a large tertiary teaching hospital in Australia. Themes identified related to nurses' perceptions of training within a perioperative climate, all of which centred on challenges regarding proficiency, fear, expectations, support, and adaptation in this environment (Pupkiewicz et al., 2015). These observations highlighted TNs' dependence on senior staff's ability to effectively mentor junior nurses. They highlighted the need for further research to understand the varying and shifting contexts of practice and experience in the TN environment, as well as to identify what would make this environment more conducive to learning.

Mitchell and Finn (2008) aimed to identity the non-technical (cognitive and social) skills used by scrub nurses and in accordance with "an existing non-technical skills framework" using the categories of "communication, teamwork, leadership and situation awareness and decision-making" (Mitchell and Finn, 2008, p.15). The analysis found that communication, teamwork, and situational awareness were the key themes found in the 13 articles they included in the review. These concepts were seen as fundamental to the role of a TN working as a scrub nurse and acquired on the job. Identifying the non-technical skills that scrub nurses need to perform their role highlights important considerations for inclusion in TN training programs and thus competency assessment (Mitchell and Finn, 2008).

This literature highlights a gap in TN skills training that is impacting workforce shortages. More specified training programs for TNs and the inclusion of TN curriculum and experiences is needed. While a pre-requisite of 1-2 years post-graduate clinical practice in medical and surgical care may consolidate foundational nursing skills, it delays the enticement of graduates into the perioperative nursing speciality. In the main, TNs utilise their undergraduate training to enter the profession of nursing. Acquiring specialised skills occurs on the job and in post-graduate study, if available. Effective methods of training TN are via multidisciplinary skills development programs focused on skills acquisition.

## 2.5 Mental well-being

The mental health and well-being of a TN has a significant impact on their perceptions of their workplace (Hunsaker et al., 2015; Sonoda et al., 2018; Björn et al., 2016; Gao et al., 2017). Hunsaker et al., (2015) highlight how nurses of all specialisms can be at risk of burnout and/or stress-related mental health issues, resulting from regular exposure to patient suffering. This risk is compounded by the fast-paced, intense nature of their work (Björn et al., 2016) and the build-up of work-related stressors, which provoke a range of stress-related symptoms among a large segment of the general and theatre nursing

population. Additional stressors can be unique to a nursing specialisation, particularly in the context of organ donation or scenarios that are rooted in ethical controversy (Gao et al., 2017; Smith et al., 2018). The following sections detail some of the key contributors to stress and a deterioration in mental health well-being, as well as highlighting the context-specific causes/origins of these contributors.

#### 2.5.1. Stress

From a physiological perspective, stress increases the likelihood of adverse effects to brain functions, including memory and learning, decision-making, attention, and judgement (Yaribeygi et al., 2017; Sandi, 2013). Moreover, stress can cause increased rates of cardiovascular disease (Rozanski and Berman, 2016). The nursing literature features a host of studies that explore the relationship between job satisfaction and stress, noting that healthcare professionals in general, and TNs, suffer from work-induced stress (Delgado et al., 2017). Southwick et al. (2016) note several factors affecting sensitivity to stress. They write:

Responses to trauma and significant stressors are determined by multiple dynamic, interacting individual-level systems (e.g., genetic, epigenetic, developmental, neurobiological), which are embedded in larger social systems (e.g., family, cultural, economic, and political systems) (Southwick et al., 2016, p.77).

Psychosocial domains encompass both social and psychological factors that make up an individual. How the individual interacts with society and their environment becomes inscribed on the individual and in the way they behave and communicate with others (Southwick et al., 2016). Psychosocial factors include personality traits, demographics and working conditions, among others. Despite the prominence of significant stressors inherent to nursing, others have found lower levels of work-related stress than were expected in operating room nurses (Eskola et al., 2016). This echoes the findings of others, where this variance was explained by linking a nurse's personality type to the perioperative specialism they ultimately chose (Chiron et al., 2010). The suggestion here is that such professionals would conform to a personality type that views the stress of working in a theatre as an exciting personal challenge (Rydenfält et al., 2012). Thus, the potential benefits of stress in such contexts centre on its potential to motivate the ongoing development of skills, fostering an ability to adapt to situations in constant flux. Despite the connections drawn in some studies between personality types and stress, much of the literature also acknowledges that individual TNs respond differently to stressors in their work environments as working contexts and communication between members also vary considerably.

In Finland, Eskola et al., (2016) undertook a quantitative cross-sectional study to explore workplace culture among OR teams through the construct of stress and the factors that impact this. Respondents in this study did not report high levels of stress. The primary factors influencing work culture and job stress were nurses having a designated primary role which they perceived as them becoming a highly valued team member, thus leading to job satisfaction, and working in the unit for some time resulting

in staff feeling experienced and comfortable with their role, promoting a positive work culture (Eskola et al., 2016). RNs working in small local surgeries with good staffing and resources had lower rates of job-related stress and a healthier work-life balance compared to nurses in larger surgeries with higher staffing levels and resources.

#### 2.5.2. Burnout

Burnout is defined as mental collapse resulting from prolonged periods of psychological and physical strain (Jennings, 2008). As noted in Chapter 1, (section 1.2) burnout is common among healthcare workers and this significantly impacts nurses' work performance, challenging their ability to cope with the emotional and practical challenges of their specialism (Rudman and Gustavsson, 2012). Nurses who experience burnout may be more inclined to leave their jobs (Sillero-Sillero and Zabalegui, 2019) due to a breakdown in communication and an inability to process information that leaves them demotivated and isolated. This nursing literature identifies an increasing demand for TNs (Ruth-Sahd, 2017) an ageing workforce (Elley, 2016) and high attrition rates as the main factors contributing to a heightened risk of burnout among theatre nurses (Association of Perioperative Practice, 2020). In this regard, personality traits have been identified as playing a mediating role in avoiding burnout. Specifically, extraversion, agreeableness, conscientiousness, and openness to experience are all qualities that have been shown to buffer against burnout (Perez-Fuentes et al., 2019).

Perez-Fuentes et al., (2019) conducted a quantitative study using a questionnaire drawing on three surveys with hospital nurses (n=1,236). The study utilised several methods: The Brief Burnout Questionnaire (CBB); the Utrecht Work Engagement Scale – which determines vigour, dedication and absorption levels in terms of workers' engagement with their role; and The Big Five Inventory-10 (BFI-10). This is a single minute test measuring extroversion, agreeableness, openness, neuroticism, and conscientiousness (Rammstedt and John, 2007). The highest levels of burnout were characterised by above-mean neuroticism in terms of the group's score, while below-mean correlated with the lowest levels of burnout experienced. Brown et al., (2019) found that neuroticism was a significant contributor to burnout among physicians. Neuroticism is defined in psychiatry as "the trait disposition to experience negative effects, including anger, anxiety, self - consciousness, irritability, emotional instability, and depression" (Oltmanns et al., 2018, p.144). Individuals displaying neurosis also display "tendencies toward depression and anxiety, and, depending on the measurement tool, often irritability and anger, as well" (Brandes and Tackett, 2019, p. 235).

In a study by Vaillancourt and Wasylkiw (2020), US nurses (n=158) completed an online survey that explored their perceived levels of burnout, self-compassion, outcomes of satisfaction, and sleep (p.3). They found self-compassion to be positively associated with satisfaction and sleep quality (Vaillancourt and Wasylkiw, 2020). As noted in the study, "self-compassionate people hold things in perspective with

resultant less stress and emotional impact" (Vaillancourt and Wasylkiw, 2020, p.1). In other words, such individuals are prone to caring for their well-being prior to reaching a stage of burnout.

Manomenidis et al., (2017) conducted a cross-sectional study that surveyed nurses in a Greek hospital (n=183) through means of a self-reporting questionnaire. They found that high self-esteem led to lower instances of reported burnout. The researchers in the study concluded that improved self-esteem led to an improvement in work attitudes, allowing individuals, in turn, to deal more effectively with stress (Manomenidis et al., 2017). Burnout has been associated with staffing levels. Casalicchio et al., (2017) investigated non-linear associations between a nurses' work environment, nurse staffing levels and burnout across six Finnish hospitals using an online survey. They found that when nursing staff perceived their staffing levels to be sufficient to meet the demands of work, the rates for nurse-reported burnout were less (Casalicchio et al., 2017).

The following sections detail some of the key contributors to stress and a deterioration in mental health well-being, as well as highlighting the context-specific causes/origins of these contributors.

#### 2 5.3 Bullying

Bullying is a serious issue that impacts numerous workplaces but can have especially detrimental effects on staff in a theatre. A survey undertaken by the Association for Perioperative Practice (AfPP) (2020) found that over 85% of respondents revealed directly experiencing or witnessing staff bullying in theatre. In a study investigating burnout and bullying, Allen et al. (2015) interviewed 762 Australian RNs. Where bullying was identified, irrespective of the coping approaches adopted by nurses, the rates of burnout and psychological detachment were higher. Mistreatment had a lasting effect on nurses' ability to engage with work effectively (Allen et al., 2015). Consequently, it is vital that TN teams, and particularly management staff, identify ways to tackle bullying and other forms of discrimination, while also mediating in conflicts that may arise as a result. A study by Ralph et al. (2013) highlights the "presence of conflict as an inherent factor in human interactions", suggesting it has to be, "recognised, qualified and dealt with appropriately" (p.741). They expressed concern that team dynamics in operating departments included the level of inter-professional conflict and aggression.

Further, Bezemer et al. (2016) undertook an ethnographic case study in the operating theatre department of a large teaching hospital in London. They video recorded theatre staff during operations (n=20), then transcribed, coded, and undertook a detailed interactional analysis of instances where difficulties arose in the communications between the scrub nurse and surgeons. They found disagreements centred around requests for clarification during surgeries sometimes resulted in the scrub nurse being perceived as being a disruptive distraction by surgeons, which the researchers described as "illustrative of the unsettling effects of diffused, unpredictable professional experience and the creation of transient teams on nurse-surgeon collaboration at the operating table" (Bezemer et al.,

2016, p.20). Other members of staff perceived conflict as an opportunity for skill acquisition and building shared knowledge (Bezemer et al., 2016). They highlighted that a breakdown in peer relationships can be seen in situations where a member of staff is the victim of bullying by another.

## 2.6 Management and Leadership

Effective nursing management and leadership is important for staff wellbeing, job satisfaction and improved patient outcomes (Fallatah and Laschinger, 2016; Holland et al., 2013; Morsiani et al., 2017; Bawafaa et al., 2015; Boamah et al., 2018) Clinical leaders and managers can play several roles from preceptor and/or mentor to mediator. Fallatah and Laschinger (2016) investigated the influence of authentic leadership (AL) and supportive professional practice environments on new graduate job satisfaction. They aimed to examine the relationship between new graduates' perceptions of their managers' authentic leadership, supportive practice environment and job satisfaction. Using qualitative approaches, they found that AL influenced graduates work attitudes and behaviours (Fallatah and Laschinger, 2016). Creating a supportive work environment required managers to engage in authentic leadership approaches as this positively influenced job satisfaction. Nurses interpreted this as supportive of their autonomy and collaborative practices. In a nursing context, resonant leaders create improved work conditions by utilising relational leadership skills, such as team building and mentorship, assessing employee perceptions of transformational leadership, organisational commitment, and organisational trust.

One Australian study undertaken by Holland et al., (2013) explored the significance of an employee voice survey, a strategy that enables staff and management to provide feedback to each other on a range of company performance indicators. Some 762 nurses responded to the survey. Findings indicated that both employee voice and managerial responsiveness were negatively related. Almost one third of the staff reported that no voice survey was undertaken, and if it did occur, most staff reported the communication was a one-way channel, thus staff did not feel supported or listened to which negatively impacted feelings of burnout (Holland et al., 2013). They highlighted the important need for management to develop mechanisms that enable the voice of staff to be heard by management, as improved responsiveness was met with reduced amounts of burnout among staff.

Price et al., (2018) used a descriptive qualitative approach to investigate the role of management on nurses' career satisfaction across different career stages. They conducted 18 focus groups across eight Canadian provinces with graduates, early and mid to late career nurse practitioners (n=185) (Price et al., 2018). They found respondents across all career cohorts articulated the important need for positive management relations and work environments on job satisfaction and provision of quality patient care. Graduates expected management to provide a supportive practice environment that enabled them to transition to practice. Mid-career nurses were dissatisfied with leadership and management for falling short of their expectations for effective management at unit level, good communication and the

promotion of positive relationships to promote best patient outcomes. Late career nurses were dissatisfied with management interactions and relationships (Price et al., 2018). This was related to a feeling of disrespect by management not involving them in decision-making and excluding them from discussions. These findings highlight the need for management to include nurses, irrespective of where they are in their career journey, in decision-making processes. This can be fostered through regular team meetings where the voices of all team members are heard and acknowledged, as this is fundamental to TNs job satisfaction, motivation, efficiency.

In Italy, Morsaiani et al., (2017) undertook a mixed methods study to explore how nursing staff perceive nurse managers' leadership style in terms of job satisfaction. They aimed to describe RNs' perceptions of leadership styles and to identify which leadership style both positively and negatively impacted on nurse job satisfaction. They administered a "multi-factor Leadership Questionnaire and focus groups" (n=3) (Morsaiani et al., 2017, p. 121). They found that ward managers utilise a transactional leadership style focused on monitoring for problems, intervening to make corrections of errors and administering disciplinary action. This style of management negatively impacted nurses' job satisfaction (Morsiani et al., 2017). Conversely, an empowerment or 'transformative leadership style (TL)' which was perceived as a respectful, caring, and appreciative of nurses, was rarely experienced by respondents. The authors concluded that the Italian nurse managers in this study had limited skills in TL. They recommended professional development TL strategies as this is known to improve job satisfaction and patient safety and health outcomes. This recommendation is further evidenced by a Canadian study that explored the effect of nurse managers' use of TL on job satisfaction and patient safety outcomes (Boamah et al., 2018). In this cross-sectional qualitative study, acute care nurses (n=378) were surveyed using a survey tool. Their findings demonstrated TL produced a very positive influence on workplace empowerment, which positively impacted nurses' job satisfaction and reduced rates of adverse patient outcomes. This evidence further supports the case for the use of TL approaches in management.

In 2015, Bawafaa et al., conducted a secondary analysis of data from a cross-sectional survey 2013 by Laschinger et al. (Bawafaa et al., 2015, p.660). They aimed to explore the influence of managers' resonant leadership on nurses, structural empowerment, and job satisfaction. Survey data were analysed from RNs (n=1216) from across numerous Canadian provinces (n=9) and the researchers found that structural empowerment (SE) mediated the relationship between resonant leadership (Bawafaa et al., 2015). SE refers to a dimension of Kanter's (1993) empowerment theory that relates to the mechanisms within an organisation employed to empower nurses to practice autonomously and professionally to achieve best outcomes (policies and procedures) (Kanter, 1993). Resonant leadership refers to the act of utilising emotional intelligence (EI) to communicate feelings/ideas that help guide a group to meet its goals and thus attain job satisfaction (Bawafaa et al., 2015). They found a moderate degree of resonant leadership and structural empowerment. Access to opportunity was highly valued

(mean 4.00, SD 0.86) while access to information was less important (mean 2.66, SD 0.97). Job satisfaction was moderately valued (mean 3.18, SD 0.92).

El is the ability to relate to and influence others and is linked to higher performance in the workplace, higher job satisfaction and lower burnout and turnover of staff (Beydler, 2017). According to Beydler (2017), it can be learned 'on the job' and honed over time. This represents the acquisition of a broader skillset for nurses while working within the theatre environment. The development of El in TN managers is an essential skill to support and build stronger teams, attuned to the humanity of the patient and individual needs. This represents the foundation of holistic care (Jowsey et al., 2019). El and interpersonal skills are fundamental to effective management styles, communication, relationship building and the prevention of discrimination (Bawafaa et al., 2015; Beydler, 2017).

## 2.6.1. Discrimination

The UK healthcare system (NHS) represents one of the most ethnically diverse workforces in the public sector, yet it has experienced longstanding racial discrimination issues, including a lack of representation of ethnic staff at senior levels (Ross et al., 2020). Higher rates of discrimination in relation to equal opportunity for career progression are experienced and reported by staff from different cultural backgrounds when compared against Caucasian staff (Ross et al., 2020). Discrimination can be direct (unfair treatment due to a protected characteristic: age, sex, gender, disability, marriage, pregnancy, race, religion/belief, sexual orientation) or indirectly (rules/arrangements that normally apply to groups of employees/applicants are less fairly applied to individuals with protected characteristics) and includes unpleasant behaviours such as bullying, harassment and victimisation (Government of United Kindgom, 2010).

Seminal work undertaken by Rubin and Hewstone (1998) applied SIT to explore in-group identification leading to discriminatory behaviour and conflict (Rubin and Hewstone, 1998). Minor group members discriminate in favour of their in-group through a desire to maintain or establish a positive social identity, otherwise known as the *'self-esteem hypothesis'* (Rubin and Hewstone, 1998, p.40). A thesis study undertaken by Yu (2013) titled "Talking about Gossip" confirms the term 'gossip' can be categorised into one of two groups: gossip as "value-laden and negative evaluative talk rooted in malice, or gossip as a mechanism of social learning" (Yue, 2013, p. 9). Within the context of discrimination, gossip is viewed as a form of bullying and harassment, therefore is a behaviour that is normally discouraged in the clinical practice setting. Cost cutting within the NHS has led to an increase in the recruitment of overseas trained TNs to address staff shortages, thus contributing to the creation of a diverse multicultural workforce (Chrishollm et al., 2019). This development has afforded theatre units the opportunity to become adaptable and efficient multicultural teams. However, in the absence of appropriate managerial

intervention, an unguided multicultural theatre can lead to a breakdown in relationships and feelings of being treated unfairly (Parvis, 2003).

A recent case study undertaken by Ross et al., (2020) explored how three NHS providers sought to address race inequalities and develop positive, inclusive working environments that addressed discrimination. They describe this type of change as difficult and multi-faceted and found that interventions had been implemented at all three sites with some success (Ross et al., 2020). Improvements included an increased focus on race and inclusive practices were positively impacting work environments. However, there remains a need for continued improvements in policy and practices to foster inclusivity. A systematic review by Bambi et al., (2017) aimed to summarise international evidence to determine what is known about "the prevention of individual and collective reactions towards workplace incivility and lateral violence and bullying between nurses" (Bambi et al., 2017, p.39). They found only seven articles that met their inclusion criteria for their review. Findings suggested that limited contributions to the prevention or resolution of discrimination were offered. They highlighted problematic factors with nursing workplace environments including "unicity, complexity, dynamicity" (Bambi et al., 2017, p.45) and how these are not conducive to the standardisation of practices. They did not believe discrimination could be eradicated, thus highlighting the need for a great deal more work to be done in this space to address the problem (Bambi et al., 2017). Recommendations included an immediate "cultural change" involving all nursing teams and at every level, including students, to educate them on communication skills that deal with abuse. While the need for collaborative and respectful work environments was recommended, no strategies on how to achieve this were offered. Collectively this literature highlights the need for a system-wide zero tolerance policy on discrimination that is authentically enforced throughout the NHS. It requires a multistakeholder approach commencing with the UK government, health care professionals, hospital administrators and the public.

## 2.6.2. Migrant Nurses and discrimination

Batnitzky and McDowell, (2011) utilised qualitative research to interview migrant nurses of Caribbean and Asian origin (n=58) who had migrated to the UK in the post war era 1945-2007. They found that nurses of colour were subjected to interpellation – an internal process of rationalising a hierarchy of inferiority between nurses. Ethnic minorities were restricted from entering RN training and instead forced to undertake a lower level of training within nursing – enrolled nursing. Consequently, a perpetual stratification of labour placed limitations on foreign-born nurses, who were stereotyped as being unable or unqualified to carry out specialist tasks (Batnitzky and McDowell, 2011). It has been noted that internationally educated nurses experienced discrimination as a direct obstacle to career advancement and professional recognition (Baptiste, 2015). These experiences negatively impacted the psychological and physical well-being of internationally trained nurses and nurses of a different race and colour, and their ability to provide the level of care they were qualified to provide. Longer lasting negative effects included socio economic, limited access to career progression and/or involvement in decision-making within their workplace.

Clayton et al., (2016) utilised a qualitative phenomenological analysis to establish TNs' experiences focusing specifically on communication within a multicultural operating theatre. They found that English speaking nurses found it difficult to understand nurses who spoke English as their second language (ESL). Respondents described a difficulty in effective communication which impacted the work environment and, on many occasions, affected patient care when patients did not understand the nurse with ESL (Clayton et al., 2016). This led to a deterioration in working relationships and the work environment. However, negative impacts could be addressed by emphasising ESL nurses' social integration in work culture via social gatherings. Schilgen et al., (2019) investigated work-related barriers to migrant nurses in Germany. They found the main stressor for migrant nurses was language barriers, which impeded collaboration with colleagues. Researchers observed that migrant nurses obtained support from other minorities in similar positions, building a sense of community through shared commonalities (Schilgen et al., 2019). Others suggest educational interventions could assist staff in developing cultural competence (Oikarainen et al., 2019).

Encouraging a nurturing and supportive work environment is thus integral to multicultural contexts, given the dependency on communication for effective patient care. Embracing complex relationships and challenges experienced within international nursing teams and effects on well-being requires further investigation of multicultural communication and discrimination, which may take the form of latent or overt bullying. This study explores the lived experiences of a multicultural TN team in a major teaching hospital in London to establish how they perceive their work environment.

## 2.7. Conclusion

This literature review has provided an overview of the literature pertaining to key concepts associated with perioperative nursing. There are many gaps in the literature regarding the efficiency of theatre teams, and the direct experiences of UK Theatre Nurses within their work environment within the NHS. Many studies that address TN work environment take place in other healthcare settings, such as the private system in the US, therefore, information relating specifically to experiences within the UK context are critical. This dissertation fills these gaps by focusing exclusively on NHS theatre nurses in the UK, and by focusing on the perception of the theatre work environment by TN. There is no literature about TNs perception of work environment in the UK, therefore, this dissertation fills this gap.

Global shortages, particularly in the UK, exist for both registered nurses and TNs with appropriate experience. This is compounded by limited access to clinical placements in theatre nursing when undertaking undergraduate nursing programs. There are limited post-graduate specialised perioperative nursing courses available, which impacts career pathways. To improve understanding for the context of TN well-being and identify preventative measures to prevent burnout and to maximise nurses' skills

acquisition, more TN-focused studies need to be conducted. The following chapter provides a discussion about the methods and methodology undertaken for this study.

## Chapter 3 Methods and Methodology

## 3.1. Introduction

This phenomenological study utilised qualitative methods to explore the views and experiences of eight TNs to answer the overarching research how do theatre nurses perceive their work environment? However, before this research could be conducted it was important for me to gain an in-depth understanding of research methods to ensure the methods chosen were appropriate to achieve the research aim and objectives. This chapter discusses the methods used in this study including the underpinning theory that guided this study.

This chapter is structured as follows:

- Section 3.1 provides an introduction and brief outline for how the chapter is structured
- Section 3.2 provides a discussion of the methods and theoretical frameworks that that informed the study commencing with a summary
- Section 3.3 provides a discussion pertaining to the justification for the research.
- Section 3.4 outlines the underpinning data analysis frameworks used in this study.
- Section 3.5 outlines and discusses the study design and methods used to recruit, collect, and analyse the data.
- Section 3.6 discusses the writing up of the findings.
- Section 3.7 concludes this chapter.

## 3.2 Summary of methods and methodologies

Qualitative methods in the form of interviews were used to collect data from eight TN who working in surgical peri-operative areas of a large operating department in a small NHS hospital in the UK. Participants were Interviews at a time convenient to them and later transcribed verbatim, entered the software package NVivo to support a thematic analysis of the data.: 'Ontological and epistemological stances that supported this study were: Relativism, epistemology, social constructivism and antipositivism. The following sections of this chapter will discuss each of these methods and methodologies in more depth.

## 3.3. Ontology and Epistemology

## 3.3.1. Relativism

Relativism denies objectivity (Baghramian and Carter, 2015), asserting that facts are relative to the perspective of an observer – or the context in which they are assessed. However, multiple relativist philosophies exist to interpret the way people perceive the world around them and the moral, cultural, and social influences that structure these perceptions (Geertz, 1973). For example, moral relativism is the perception that, because moral issues differ between cultures, morality is characterised by amoral

plasticity, rather than being concretely fixed. In other words, morality is dependent on the social acceptability of norms (Gori and Stellino, 2018). In epistemic relativism, there are no hard facts, while in alethic relativism there are no truths, which is relative to a reference frame – for example, language or culture (cultural relativism). Consequently, social scientists avoid investigating individuals as if they were transcendent entities operating in a vacuum outside of social, cultural, historical, and ideational forces and factors.

As part of this study, I was fascinated by the everyday 'reality' of theatre nursing work. The realist approach would imply that a TN's workplace is reducible to the built environment of the theatre and the measurable physical actions of the nurses with their team members and patients. In contrast, this study takes a relativist approach, focusing on participants acted-out and lived-in meanings, evaluations, and attitudes – forming and constructing a personal reality of *in situ* theatre work. Relativism is a view that reality is subjective and differs from person to person and *there is no objective truth to be known* – the epistemological equivalent is constructivism.

## 3.3.2. Epistemological grounding: social constructivism

Epistemology is a set of propositions asserting what can be known, and how humans come to know what is knowable (Goldman, 2009; Goertz and Mahoney, 2012). Constructivists argue that epistemology is the basis for understanding the processes by which constructs are created, reinforced, and reified in social terms. For example, according to (Weber, 1978):

# The human mind is driven to reflect on ethical and religious questions, not by material need but by an inner compulsion to understand the world as a meaningful cosmos to [thus] take a position towards it (p.499).

Factors of human consciousness and nature direct a social researcher's attention towards motive and perspective, which places epistemic emphasis on ascertaining how work environments give meaning to an individual's role within them, and how they are perceived by TNs; for example by exploring how meanings and perceptions are negotiated and defined through inter-subjective dialogues, as opposed to perceptions being objectively dependant on the numerically quantifiable units of the theatre environment. An epistemic emphasis, complemented by a phenomenological description and analysis of how participants experience the work environment (Savage-Austin, 2011), does not rely on presuppositions or implied meaning but describes the occurring experience as 'phenomena appearing'.

A constructivist approach suggests knowledge and truth are generated via the inter-subjective creation of meanings and ideas, rather than being revealed by discovery as in the physical sciences (Schwandt, 2000). It is instead affirmed through developing communication. For the epistemological constructivist, there is a tri-polar interplay between human subjectivity, the object world – what positivists see as 'real' – and social agents' ideas and value (Schwandt, 2000). This study has adopted this methodological standpoint and approach given its reliance on individuals' (TNs) personal views and perceptions.

This study uses Social Identity Theory (Hogg, 2018; Stets and Burke, 2000) to identify and understand TNs' self-perceptions. Social Identity Theory (SIT) is an interactionist, social psychological theory, which is focused on the role of self-conception, associated cognitive processes, and social beliefs, with reference to in-group and inter-group relations and dynamics (Hogg, 2018). Willetts and Clarke (2014) examine the construction of nurses' professional identity, acknowledging the contextual nature of the profession as a social activity within a work environment. McGarvey et al. (2004) also examine the way TNs' role behaviours are influenced by context, emphasising in the process the importance of support availability in negotiating stressful environments. This study's social constructive perspective describes the influence of stressors and support on TNs' perceptions of their role.

A notable study by Lee, Lee & Armour (2016), uses Social Identity Theory and phenomenology to study the lived experiences of nursing home social workers. Following in their footsteps, the present study finds no conflicts by using SIT and phenomenology together and used hermeneutic phenomenology to study lived experiences of social workers in nursing homes. The authors write, "Social identity theory was used to explain the distress of social workers and the psychological process of social workers' coping. Social workers who participated in this study revealed that by focusing on the positive meaning of their job (e.g., advocating for the vulnerable clients, changing others' lives) they maintain their commitment to the job in the face of the challenge. Through this process, social workers are reaffirmed about the worth of the work they do (Lee, Lee &Armour, 2016)." In my research of theatre nurses, I found that SIT can be used to explain TN's coping mechanisms, in much the same way Lee, Lee & Armour (2016) do for social workers. Phenomenological approaches such as SIT do not attempt to reveal "reality," instead, they reveal the subjects own subjective experiences.

## 3.3.3. Ontological stance

In the social sciences, anti-positivism, interpretivism (Macionis and Gerber, 2011), negativism, or antinaturalism are various terms for a theoretical perspective that argues the social realm demands a different epistemological approach to the scientific method of investigation. Fundamental to this perspective is the belief that the language and concepts applied and adopted by researchers, in turn, shape and influence their own perceptions of the social context they are investigating.

This paradigm is in opposition to a positivist approach, where factual knowledge is gathered through observation. An example of the latter includes drawing from empirical data to generate numeric and statistically quantifiable and generalisable findings. As Wendt (1992) argues "...a fundamental principle of [this] social theory is that people act toward objects, including other actors, based on the meanings that the objects have for them" (Wendt, 1992, p.396-7). An analysis that considers TNs' perspectives of

their work environment is important here, since TNs form relationships in the perioperative setting that influence their perception of their environment. The field of nursing shares numerous underlying beliefs and values with the phenomenological school of philosophical thought. Phenomenology is defined as:

The study of 'phenomena': appearances of things, or things as they appear in our experience, or the ways we experience things, thus the meanings things have in our experience" (Smith, 2018, p.1).

Consequently, research methods derived from phenomenology suggest that the true meaning of phenomena is revealed through the experiences of the individual (Jaspar, 1994). This approach and view remain popular in nursing, despite cautionary discussions about the use of qualitative methods lacking in experimental rigour and validity (Crotty, 1996; Maggs-Rapport, 2001). Paley (2005) resists this criticism of phenomenology, arguing that the nursing literature is driven by a range of ontological and epistemological considerations that distance it from conventional scientific approaches (Parley, 2005). In other words, nursing requires an interpretative approach. This study is not concerned with an objective portrayal of the hospital environment, but rather with TNs' subjective perceptions of their work environment and how these perceptions shape their, and others', experiences of this environment. Phenomenology as a research method aligns with constructivism as each are concerned with the research subject's subjective experience of their world. Constructivism, as an epistemology, is concerned with how individuals construct meaning from their world, environment and lived experience. It also asserts that "reality" is constructed through intersubjective relationships between two or more people, and phenomenology is the research method that can be used to uncover this intersubjectivity. Additionally, with phenomenology, a researcher can explore individuals lived experiences, and constructs their understanding through the development of a narrative.

I interviewed 8 theatre nurses and uses constructivism to reconstruct TNs lived experience of their work environment for the purpose of establishing a deep understanding for theatre nurse's interpretation of their working environment. I planned to use this knowledge to enact positive change within the operating theatre work environments and ultimately work force retention and TN job satisfaction. Phenomenology is frequently used in nursing research for these purposes, and, as such, was appropriate for my research question.

## 3.3.4. Reflexivity and subjectivity

Reflexivity is the process by which researchers are involved in an explicit, self-aware analysis of their position vis-à-vis their research participants and context. As a form of 'self-monitoring', it involves being aware of the interaction between the participants, the researcher, and the research (Fung et al., 2017). Flexibility of design and sampling strategies in qualitative research allow focus changes during progress,

which increases the influence of ontological and epistemological assumptions while accounting for participants' perspectives (Whitley and Crawford, 2005).

As a senior manager in perioperative care, I was aware of the potential for bias and the possibility of imposing my personal views on the data collected. This issue was resolved by 'dwelling' on the results; a process Finlay (2002) describes as "...examining them and then progressively deepening understandings as meanings come to light" (p.186), which is also the basis for the interpretative approach in the social sciences. NVivo12, the qualitative data analysis (QDA) computer software package, was employed for the analysis, given its ability to organise, analyse, and detect patterns in unstructured or qualitative data, such as interview transcriptions (QSR International, 1999; Richards, 2002). The NVivo notes feature allowed the researcher to capture evolving thoughts while coding, evoking a sense of 'being there' feeling during the data collection process.

This outlined methodological approach acknowledges reality as being contextually situated and socially constructed, rather than as representing 'truth'. Thus, research is an interactive process between researcher and subject(s), with the resultant analysis being a negotiated construction of the participants' and interpreter's accounts (Mays and Pope, 2000). The phenomenological methodology selected here focuses on the appearance of phenomena and participants' descriptions of their experiences of them. However, as a researcher and professional healthcare provider in practice, efforts were taken to remove presuppositions and biases from the analysis, thus the participants' language was analysed in the context of the information provided. Bias was further guarded against through explanation and discussion within the supervisory team, involving the defence of interpretations and conclusions on the part of the researcher. This process helped develop confidence in coding the data appropriately and, more importantly, development of transferable insights to address the research aims and objectives. Once the interviews were completed, initial thoughts were discussed with supervisors, relating to self-managed action learning, whereby critical reflection of the learning experience occurs in a group (Bourner et al., 2002; O'Hara et al., 2004).

Additionally, a though I was no longer an employee at the study site, at the time of undertaking this study, some of the participants knew me having worked with when I was a manager in their unit. This meant, these participants may have considered me as an insider due to my prior knowledge of the unit. I acted with integrity, followed research principles, and gained the appropriate ethics review. However, I wasn't known to all participants.

Researcher's "insider and outsider" knowledge is an area where unconscious bias can occur and this is influenced by social differences (Suwankhong and Liamputtong, 2015). Others highlight how researcher's transverse complex, multi-faceted inside-outsider issues (Delyser, 2001) and only insider researchers can properly represent the experiences of their participants due to their understanding of that community (Charlton, 1998). Conversly, others suggest insider knowledge can influence participant

responses during an interview and, further, the researcher's relationship with a setting – such as a TN who is a co-employee working in the same department as the participants being interviewed – can influence how they percieve and approach the research (Denscombe, 2007). In addition, an outsider researcher can experience difficulties with gaining a participant's trust to disclose experiences (Borrill et al., 2012). Insider researchers can find it difficult to ignore their personal experiences and provide a neutral balanced view (Chawla-Duggan, 2007), thus demonstrating the importance of incorporating effective reflexive strategies.

Although I was no longer an employee at the study site, at the time of undertaking this study, some of the participants knew me having worked with when I was a manager in their unit. This meant, these participants may have considered me as an insider due to my prior knowledge of the unit. I acted with integrity, followed research principles, and gained the appropriate ethics review. However, I wasn't known to all participants.

## 3.3.5. Researcher context and influence

Doing a work-based professional doctorate, with a two-year taught component, offered opportunities for continuation in a professional role as the research was being conducted. The researcher's clinical experience of ten years as a TN, and currently as Head of Nursing, provided access to important insights in the field of perioperative practice. The practical side of the doctorate was focused on identifying theatre teams' perceptions, while the theoretical underpinnings were explored within a classroom setting where concepts were explored and discussed, and continuous action learning was made possible with doctorate peers. This engagement enabled me to critically reflect on my role and profession, given the direct applicability to organisational healthcare.

As an experienced TN the depth and breadth of my specialised experience brought with it a unique perspective to the interpretation and analysis, allowing engagement with new discourses relating to a familiar setting. For example, I was able to relate to participants' honest sharing of their experiences, having been through similar experiences myself, and the shared language of the group was familiar to me as an insider, as well as the everyday practices of patient care.

## 3.4. Justification of Approach

## 3.4.1. Qualitative and inductive

This study took a qualitative and inductive approach, surveying the available landscape of experiential, empirical evidence and generating themed findings and explanations from those observations. A flexible approach is suited to investigating under-explored areas at the beginning of a data-led process (Gasson, 2004). Rather than applying a theory to the data, the Interpretative Phenomenology Approach (IPA) framework operates in reverse, allowing for phenomena to be described and analysed as they appear and determining the researcher's interpretative role. Although the aim of qualitative research is to study individuals' understanding of their own social reality, it uses non-probability sampling, which limits the possibilities of achieving a statistically representative sample or of using statistics to infer causation. There is no formal sample size calculation when undertaking qualitative research (Holloway and Wheeler, 1996; Luborsky and Rubinstein, 1995), because the object is to identify qualities in terms of participants' perceptivity. Such an approach also favours the collection of in-depth data from individual participants.

Researchers embark on research with their own preconceived ideas and assumptions. Thus, critically reflecting on the way data is collected, evidence is interpreted, and which beliefs are held. One's own intuitions are important in identifying one's own biases – particularly when the researcher is an 'insider' to the group being investigated. Supporting the researcher's strategy of analytic induction (Bryman, 2004) is the belief that qualitative data is subject to hypothesis testing and generation. However, the purpose is to summarise and organise data to test hypotheses (Avis, 2005), and the "…interpretation of data is a reflexive exercise through which meanings are made rather than found" (Silverman, 2011, p.357).

This approach to analysing qualitative data is associated with this research study's epistemological and methodological position, and these are reflected in the research question(s) and aim(s) (Green and Thorogood, 2018). Reflecting on the emergent and iterative nature of many qualitative studies, the researcher opted to use a flexible analytical process.

## 3.5. Study Design

This was a qualitative study that used a phenomenology methodology to inform the development of semi-structured yet in-depth interviews that were supported by an interview guide, to explore the lived experiences of TNs working in TUs. Phenomenology is a powerful approach for inquiry and is a form of qualitative research that is well suited to exploring challenging problems for healthcare professionals in practice. It supports researchers to focus on the lived experiences of individuals.

## 3.5.1. Context of research

The study took place within a medium-sized OR suite consisting of five theatres, in an urban hospital providing specialist tertiary level services in the UK. As this was a professional doctorate, it was a requirement to study in one's own areas of work and clinical field to develop recommendations and strategies that would improve that workplace. For this reason, only the unit where the researcher worked and has experience in was studied.

## 3.5.2. Ethics

Ethical approval was gained prior to commencing the study. This involved gaining approvals from four separate ethical clearances departments as follows:

- University Research Ethics Committee, risk assessment approval (Appendix E)
- NHS Health Research Authority approval (Appendix F)
- Research and Development approval from the local NHS department

As a Registered Nurse and researcher, I was aware of the National Code of Conduct for Research, the ERSC research framework and the Code of Professional standards of practice and behaviour for nurses and midwives (Nursing and Midwifery Council, 2018a; Department of Health, 2005). These frameworks stipulate my professional responsibilities as a health professional and researcher, which are to always act professionally, in the best interests of the people whom I may have responsibility for in terms of care provision. Thus, to act with integrity, honesty, and respect of patients and participants, respecting their rights, culture, and health and safety. With respect to the research participants, informed decision-making was supported by providing a participant flyer and information sheet, and participant questions were responded to with honesty, so they could make an informed decision about their involvement in this research. Maintaining participant privacy and confidentiality was supported by de-identifying all data, only sharing this data with my supervisors, and providing safe, secure storage of this data, in a password protected file that only the researcher had access to. This was in line with my University and NHS authority data protection policies.

#### 3.5.3. Recruitment

Recruitment of the research site involved an initial email to the Director of Nursing (DON) for the study hospital expressing an interest to undertake the research. A follow up in-person meeting resulted in the DONs approval and agreement to circulate a recruitment flyer to staff in the perioperative department via the internal email system and to inform them when the primary research would be on site. Thus, participants were recruited to this study using a recruitment flyer distributed via an internal staff email system at the study site. The primary research also made personal invitations to potential participants within the operating theatre, including management staff, as this person was also an employee at the study site. Potential participants who expressed an interest in the study were emailed a participant information sheet and consent form.

The participant information sheet provided detailed information about the research, its purpose and what participation involved (Appendix C Participant Information Sheet). This included the consent process, rights with respect to privacy, approaches that would be taken to de-identify and protect participants confidentially during the research process or in any publications that may be produced upon conclusion of the research (Appendix D Consent Form). These processes further fulfilled the basic requirement for the use of data as outlined in the UK's Data Protection Act (2018), (United Kingdom Government, 2018). No financial or other material benefits were used to entice participants to participate in this research.

Participation was voluntary and withdrawal could occur at any time without consequence to participants. Only participants who returned a signed consent form to the primary researcher, indicating their agreement to participate, were recruited to the study. It was explained to participants that their participation may not provide them with an immediate direct benefit, apart from personal satisfaction related to their active contribution to knowledge creation in perioperative nursing, including awareness for the potential benefits the findings from this research may bring. This may include: an influence on policymaker's decision-making with respect to improved policies that impact perioperative work environments, perioperative nurses, managers, and ultimately more efficient and safer patient care, thus positively impacting outcomes for all stakeholders. Further, to maximise convenience for participants and successful recruitment, all participants were offered the choice for where they wanted to be interviewed and all chose to be interviewed at their workplace, access to which was provided by the hospital. Thus, the interviews were planned to take place at participants' practice site, in a private room provided by the hospital and at times convenient to them (providing it did not disrupt patient care, safety or negatively impact the daily working schedules of the theatres). All but one of the interviews were conducted with native English speakers. One interviewee used English as a second language, however, this participant was fluent in English, and I do not believe this influenced the end results of the study at all.

All ward managers were informed about the research via the DON and primary researcher and provided with a copy of the study flyer and participant information sheet. In accordance with the UK Data Protection Act (2018), all participants were informed of their rights to request a copy of any published findings and offered access to this upon completion of the thesis (United Kingdom Government, 2018).

## 3.5.4 Sampling and sample

A purposive sampling approach was used to recruit participants to the study. This method is also referred to as judgment, selective, or subjective sampling, whereby the researcher relies on their judgement when recruiting participants, particularly in research contexts where the researcher already has some familiarity with the field, which was the case for this study (Hansen, 2020).

The inclusion criteria for the study required participants to be working in or have experience of working in the TU environment, have an ability to speak English and a minimum of one year of work experience. The initial target for sample size was approximately 8-10 participants. This was in recognition of the need for flexibility, however, in consultation with the supervisory team a final sample size of eight (n=8) participants were recruited to the study. This number was deemed practical and, by comparison to other studies (Sandelowski, 1985), adequate to yield sufficient data to accommodate the overall scope of the study. As Vasileiou et al., (2018) highlights, sample sizes in qualitative research can typically be small, reflecting the complexity of data volume, as well as its association with the primacy of the research

theory and hypothesis generation (Vasileiou et al., 2018). A more detailed description of the characteristics of this sample size will be presented in Chapter 4.

## 3.5.5 Consent process

In qualitative research, informed consent is underpinned by human rights, including dignity of the human person. It draws on the research ethical principles of beneficence, maleficence, and respect for the human person's right to self-determination and autonomy (UKRI, 2021; Kerridge et al., 2013).

In this study, participation was voluntary, and all volunteers were provided with the participant information sheet, which detailed what participation involved and included the potential benefits and risks, such as feelings of distress if concepts discussed during interviews generated any feelings of upset. In this regard, the primary researcher practised with kindness, sensitivity, honestly and integrity, thus creating a safe and private environment for participants to share their experiences. Participants were provided with the necessary time and space to peruse the information and make an informed decision about their participation. Prior to signing the consent forms, the researcher was available to explain all the information on the participant information sheet and the consent form. This was to ensure the participant had understood the study's objectives and what their consent entailed.

## 3.5.6 Data Collection – semi-structured interviews

Data were collected via semi-structured, in-depth interviews and were recorded using an MP3 digital recording device (Dictaphone) to support accurate transcription and elaboration on points that required clarification. The researcher documented brief field notes during the interview to record his initial contextual thoughts and feelings as they arose. The interview was guided by an interview guide to stimulate open dialogue regarding the experiences of perioperative nurses working in a theatre environment and in line with the overarching research question for this study (Table 3.1). The eight interviews (one interview per TN) were conducted over a four-month period, with each interview lasting approximately an hour. However, the length of each interview was determined by the participant. Following some interviews, the researcher clarified some of the participants' responses to ensure clarity of understanding. Only the researcher and participant were present during the interview.

	Interview Guide Questions							
Q1	Why did you choose to become a theatre nurse?							
Q2	What does the role of a theatre nurse mean to you?							
Q3	What aspects of your role do you enjoy?							
Probes								
Q4	What aspect What makes you most satisfied at work, and what least?							
Q5	Do you feel supported in your job, if not why?							
Q6	What factors in your working environment do you most value and why?							
Q7	What affects your ability to do your job effectively							
Probes								
Q9	Does the physical environment influence your perceptions of your overall working environment? How so?							
Q10	In what ways do peers, colleagues and managers influence your ability to cope with and enjoy the working environment?							
Probes								
Q11	What do you perceive the role of teamwork to be in influencing your working environment?							
	Does teamwork influence your experiences? How?							
Q12	What does burnout mean to you?							
Q13	Is there anything else you would like to contribute that is not covered?							

#### Table 3-1 Interview guide

As some topics to be discussed during the interview may have been perceived as sensitive by participants (for example, reporting negative feedback about management and/or other colleagues in the theatre department) the researcher exercised sensitivity by reminding participants prior to commencing the interview that the research interview space was confidential, and that any data provided would be de-identified to protect their privacy. In addition, if participants became uncomfortable at any point, they were advised they could either stop the interview, request a different line of discussion and/or withdraw from the study at any point without consequence. At the end of each interview, the data file for each participant was allocated a unique ID code and stored in a password protected file on the primary researcher's computer.

#### 3.5.7 Rational for semi-structured interviews

Interviewing is an effective method for data collection in the healthcare field and is routinely employed in research involving nurses (Whiting, 2008; Sorrell and Redmond, 1995). The rationale for conducting semi-structured interviews was to capture the richness of the reality of practice from a TN's perspective. Questions that yield data about TNs' perceptions, thoughts, values, ideas, and feelings about their work environment were significant, as they revealed information that is normally obscure, hidden, and context-specific (Geertz, 1973). Semi-structured interviews allow for flexibility and the use of a research guide (Table 3.1) promotes a discussion that adopts a conversational flow. The interview guide prompts topics for discussion, which serve to build a researcher-participant rapport, putting the interviewee at ease and establishing the basis for a meaningful and sincere conversation (Marshall and Rosssman, 2006). Rather than being a rigid list of questions, a semi-structured interview allows the researcher to maintain a natural conversational flow, encouraging participants to speak freely. Additionally, the nature of the research questions and small sample size was small, other research methods such as ethnography were not deemed appropriate therefore, were not used. Interviews allow the researcher to gain the participant's perspective of the situation- which is what the research question asks. Ethnography does not allow for the participant's own perspective, instead it is the researcher's perspective therefore, conducting a semi-structured interview alleviates this problem. Interviews allow the researcher to gain the participant's own perspective of the situation- which is what the researcher's perspective therefore, conducting a semi-structured interview alleviates this problem. Interviews allow the researcher to gain the participant's own perspective of the situation- which is what the research question asks- an ethnography does not allow for the participant's own perspective of the situation- which is what the research question asks- an ethnography does not allow for the participant's own perspective alleviates this problem. Semi-structured interviews alleviates the researcher's perspective. Semi-structured interviews alleviate that problem.

#### 3.5.8 Data analysis

## 3.4.2. Thematic analysis

Thematic Analysis (TA) is a method of analysing qualitative data such as interviews and written text. It involves analysing and reporting patterns identified within and across such data sets (Boyatzis, 1998). TA aligns with a constructivist paradigm, providing a central benefit of flexibility in applied analysis and the range of potential findings. A constructivist perspective was applied in analysing data, where patterns of data demonstrating experience and meaning were regarded as being socially constructed and reproduced, rather than being inherent (Burr et al., 2014). Braun and Clarke (2006) describe TA as a six-step framework involving: familiarisation, coding, generating themes, reviewing themes, defining, and naming and writing up. TA was deployed to extract key messages from data, until no new themes continued to be revealed. In this study, an inductive reasoning approach supported the identification of themes that bore limited relation to the questions posed to participants (Braun and Clarke, 2014; Boyatzis, 1998). Braun & Clarke describe TA (2006, p.78) as a "flexible and useful research tool, which can potentially provide a rich and detailed, yet complex, account of data." Thematic analysis can be described as a method for identifying, analysing, and reporting patterns within data that 'can help to organise and describe data, and assist in interpreting' (Braun & Clarke, 2006, p. 79). This led to a datadriven process of coding categorising and labelling of emerging concepts. As part of the TA process, I consulted with my supervisors and fellow students who had greater experience of TA to cross- check my interpretations. The process was iterative requiring me to check and refining the analysis, check again and continue refining my analysis, until my interpretations matched that of what my peers and colleagues offered. The following sections discuss and present the study design and research processes undertaken to establish the findings.

A thematic analysis was conducted on the transcribed interview data. Initially, all the eight MP3 data files were saved to a password protected computer to promote securing and privacy. Listening to the recorded interviews prior to transcription enabled the researcher to commence the process of familiarisation with the raw data. While transcription of the interviews was time-consuming, this process supported in-depth immersion and additional familiarisation and auditing of the data. Each interview transcript file was given a unique ID code to de-identify the participants, before being uploaded to the NVivo 12 software package for further interrogation and analysis. Field notes were also code in NVivo and were used as part of the overall analysis. The field notes reminded me of what I was thinking during certain points during the interview, and this guided my analysis.

Once all de-identified data files (transcriptions) were imported into NVivo, a more in-depth level of familiarisation with the data commenced. The transcriptions were read line-by-line to enable a coding (Appendix G. NVivo Code Book). This initially involved highlighting phrases and/or sentences which supported a re-familiarisation with the data, and the development of a deeper connection and awareness of the respondents' experiences. Emerging themes were then categorised into thematic nodes. Annotations were recorded within node dialogue boxes to describe the concept recorded. Nodes containing overarching ideas/themes were then grouped and related concepts were merged with overarching ideas as sub-themes. Themes identified included: 'difficulties in communications', 'teamwork', 'support', 'gossip', 'finance'. A sample of the initial data coding and linkage to themes are provided in Table 3.2. These codes provided an insight into the context of the conversations, and more general ideas expressed within the interview content. Synthesis of the data was undertaken at a later stage in the analysis to define more specific themes

Participant (P)Codes								
PA	PB	PC	PD	PE	PF	PG	PH	theme & code
PAC: "If you don't talk to each other or don't like each other, that will impact the patient care, that will affect the whole team."	PBC: "We communicate very well as a team and that I really value."	PCC "They have authority, and they can talk to you in anyway because they are above you and I found that really sarcastic."	PDC: "It improves the communication among it makes you improve your communication amongst the healthcare personnel."	PEC: "There is usually a breakdown in communicatio n between the anaesthetic team,"	PFC: "Communication, I have to say that it was not the best."	PGC: "All the persons should speak in English because all of us are here and we understand English. That is the language we communicate with."	PHC: "Probably try and have like a one to one with them and tell them how you feel and hopefully things can be rectified."	Communicatio n difficulties (CD) Any reference implied or implicit to difficulties with communication
PAT: "The teamwork is excellent in my department I think comparing with other departments."	PBT: "I think there is a divide; (xxx) work hard, they have got their hands tied, I think they have got good intension, but they're limited".	PCT "I don't find this good teamwork, if you are not having a good team, you can be miserable they are making your life difficult so that is the big issue	PDT: "It is coherent, but it depends on who you are working with. Some people make it not possible.	PET: "I think it is hit and miss, again I think it depends on who you are working with,	PFT: "There are some difficult personalities, and I cannot ignore that so at the end of the day we have to deal with all of them. Sometimes it is very difficult."	PGT: "It can affect teamwork if people come to work with an attitude. If all of us come with one spirit, I think it can make much difference especially in teamwork."	PHT: "I think the department is all about teamwork but then you can't enforce that on certain people."	Teamwork (T) Any reference implied or implicit to difficulties with teamwork
PAS: "They did a really good job finding nurses from overseas and then they recruited more staff from overseas Yeah we get supported."	PBS: "It feels like they are interested in making changes, but those changes benefit themselvesI don't think that we are supported, actually now that I am really thinking about it."	PCS: "Depending on the team I could feel very supported or very less supported"	PDS: "If you don't have anybody to support you who does not come from your place then you will not be supported"	PES: "When you don't feel supported, you don't really want to come to workI see more support in the community.	PFS: "Not always I have to call for help maybe from another department. I just feel sometimes as if I am not getting enough support from my own department."	PGS: "Especially let's say if the managers they allow juniors to come and speak to them and I find that it ends up being like, they are really supporting that gossiping."	PHS: "Yes and no. I think the support is a lot more from colleagues rather than management."	Support (S) Any reference implied or implicit to the need for or appreciation of support

Table 3-2 Example of data coding and linkage to themes

#### 3.5.9 Theme organisation

Following the initial coding of the datasets, all collated coded themes were reviewed for further interpretation. Overarching coded themes were grouped to form categories of emerging themes. For example, an initial theme titled 'Challenges' was grouped with "Factors Positively or Negatively Influencing Perceptions". All coded themes were then reviewed by my supervisors, thus representing researcher triangulation, which is a research method that supports a reduction in the risk of bias. Collectively, in negotiation with the study's supervisors, themes and sub-themes were expressed.

Using the functionality of the NVivo 12 software, codes were organised into hierarchical 'coding trees' to categorise overarching themes and sub-themes as emerging concepts and in accordance with their relationship to one another. The main themes and sub-themes are organised in a visual way; as branches and sub-branches of a tree, to illustrate their relationships to one another and the possible thematic overlaps. Colours were added to indicate emerging relationships between concepts and themes. This process clarified specific theme areas which were being repeated. Overarching themes of 'communication', 'culture', and 'teamwork', which were expressed as areas of difficulty for respondents, for example, were consistently represented at this stage.

## 3.5.10 Reviewing and refining themes

All themes were reviewed critically to synthesise the concepts into overarching ideas and were refined into sub-themes. This involved returning to the dataset to cross check that the initial main themes and sub-themes were an accurate representation of the data. This reviewing process resulted in coded data being refined. Any repeated ideas were deleted if they repeated an already described phenomenon or situation. Coded data that were similar were merged into inclusive categories (themes) and sub-categories (sub-themes), which formed the basis for reviewing theme construction. Reviewing the theme construction revealed overarching themes, as well as sub-themes, in the data. This process involved deductive and inductive reasoning to synthesise previously coded data with interpreted meaning into several divisions of sub-themes. Several themed areas such as 'Teamwork/communication' required a deeper synthesis by recognising a connected range of factors linking them to the overarching theme.

All themes were reviewed critically to synthesise the concepts into overarching ideas and were refined into sub-themes'. This resulted in the development of an overall thematic map which will be discussed in Chapter 4. Naming the final themes was an important element of the TA process, as this connected the researcher's deeper understanding of the meaning behind each theme and sub-themes to the lived experience and reality for the participants. The theme 'Communications and teamwork' was finally re-named 'Factors Affecting Effective teamwork: When Teamwork Breaks Down'. This more closely reflected the findings and illustrated both the problems in communication and the responses the participants related to. The sub-themes were defined to reflect specific cultural, grouping, and organisational factors which were distinguished as sub-themes and named 'the negative impact of gossip culture'; 'the negative impact of non-English communication', 'difficulties in escalating concerns' and 'time pressure due to mismatched skillsets.

Additionally, to enhance rigor and reduce bias, I cross-checked my interpretations with fellow students and my supervisor. It was an iterative process involving checking, refining the analysis, checking again, refining, until my interpretations matched that of what my colleagues offered.

## 3.6 Writing up the findings

The process of analysis following data collection lasted seven months. This allowed sufficient time for reflection and re-evaluation of the data, thus enabling the researcher to become fully immersed in the context and questions being investigated. The written findings were organised according to the defined themes. The NVivo 12 software enabled the development of a map illustrating the overarching themes with sub-themes, which outlined evidential and definitional bases for thematic analysis (QSR International, 1999). This revealed the character of participants' perceptions and experiences of their role. Chapter 4 sets out the analytic basis for theoretical interpretation and draws on the TA evidence to provide recommendations for further research in this area.

## 3.7. Conclusion

This chapter has provided an in-depth discussion about the methods used to undertake this study and the underpinning theoretical frameworks and methodologies that have informed the study design. The nature of this research, and the nature of nursing as a profession, has led to the decision to conduct this project through a social constructivist lens, as this will although for an examination of the subjective thoughts and experiences of theatre nurses. The overarching research question (how do theatre nurses perceive their work environment?) calls for an interpretive approach to the research, allowing for relevant stressors to be identified and allowing for an exploration of how TNs' perceptions shape their experience of the work environment. To answer this research question, a qualitative methodology is most suitable, which will use phenomenology to inform the development of semi-structured, in-depth interviews with theatre nurses currently working in a theatre environment. The nature of qualitative research allows for flexibility in chasing up promising strands of investigation and

offers an opportunity to delve deeply into the themes and concepts that emerge during the research process. The next chapter presents the findings of this research.

# Chapter 4 Findings

## 4.1. Introduction

This phenomenology study used qualitative approaches in the form of semi-structured, in-depth interviews, to explore the experiences of theatre nurses working in an operating theatre environment. It aimed to establish how TNs perceived their work environment to better understand the nature of TNs' perspectives. It also aimed to explore key challenges and barriers to improving TN experiences and identify strategies that may improve TNs' experiences of working in an operating theatre. This chapter presents the findings of a thematic analysis that was undertaken on the data derived from the semi-structured interviews. This chapter is structured as follows:

- Section 4.1 introduces this chapter, presenting the demographic findings and an overview of the findings derived from the thematic analysis.
- Section 4.2 presents the first overarching theme (work satisfaction: caring for patients in a well-skilled team) and three sub-themes found in the thematic analysis of the interview data.
- Section 4.3 presents the second overarching theme (factors affecting effective teamworking when teamwork breaks down) and its four sub-themes found during the analysis of interview data.
- Section 4.5 presents the third overarching theme (constraints on job performance leading to job dissatisfaction) and its five sub-themes found during the analysis of interview data.
- Section 4.6 provides a brief overview of the findings and concludes this chapter.

## 4.2 Demographic data

## 4.2.1 Participants

Demographic data were collected from eight female theatre nurses who worked within a mediumsized theatre in a UK hospital that had five theatres (n=8). The median age of the TNs was 45 years, and most (75%) were overseas trained nurses who had migrated to the United Kingdom to take up work in the NHS (n=6). The remainder of the nurses were UK citizens (n=2) (Table 4.1). All the TNs were experienced registered nurses with between 4- and 30-years' experience of providing nursing services to the public. The mean number of years for providing nursing services within the UK NHS among this cohort was 13 years (n=13.56) and the mean number of years of having worked as a TN in the NHS was 13 years (n=13) (Table 4.2). It is important to note that this sample is not representative of other nursing theatres in the UK, or of TN in general. The sample size was only eight, and respondents self-selected to be in the study. Even though the results are not representative, the results give one picture of TN in the UK. Also of note is the lack of male nurses. Currently, only 11.4% of Registered Nurses in the UK are male (Clifton, Crooks & HIgman, 2020), and it would be expected that an even fewer number are theatre nurses. In this regard, the breakdown of sex in my sample is probably representative of other theatres, as male nurses are very rare. Men and women have different experiences in the workplace, and if there were male nurses in my sample, I almost certainly would have different data.
#### **Table 4-1 Demographics**

Characteristics	Total Number (n=8)	Characteristics	Total Number (n=8)
Gender		Country of training	
Females	8 (100%)	United Kingdom	2(25%)
Males	0 (0%)	India	3(37.5%)
Ages ranges in years		Kenya	1(12.5%
31-41	3(37.5%)	Spain	1(12.5%
42-52	2(25%)	Zimbabwe	1(12.5%
53-54	3(37.5%)	Ethnicity	
Mean age in years	45	Caucasian	1(12.5%)
Country of birth		Asian	3(37.5%)
United Kingdom	2(25%)	Hispanic	1(12.5%)
Overseas trained nurses (India (3); Kenya (1); Spain (1); Zimbabwe (1))	6(75%)	Black African	2(25%)
		Mixed race	1(12.5%)

#### Table 4-2 Service history for cohort

-													

Service type	PA	PB	PC	PD	PE	PF	PG	PH	Mean in years
Years worked in NHS	15	35	6	16	11	14	4	7.5	13.56
Years worked as theatre nurse	16	25	5	22	2	30	4	75	13
Years working as a nurse	20	35	16	27	11	30	9	15	20.37

# 4.3 Overview of thematic analysis findings

As discussed in chapter 3, a thematic analysis was conducted on the qualitative data (interview transcriptions) derived from the semi-structured, in-depth interviews using the qualitative data analysis tool NVivo 12. The analysis found three overarching themes and twelve sub-themes:

Theme 1: Work satisfaction: caring for patients in a well-skilled team

- philanthropic motivation to joining the profession
- satisfaction gained from ongoing learning,
- Working effectively in a team.

Theme 2: Factors affecting effective teamworking when teamwork breaks down

- the negative impact of non-English communication
- the negative impact of gossip culture
- difficulties in escalating concerns
- time pressures due to mismatched skills.

**Theme 3:** Constraints on job performance leading to job dissatisfaction

- lack of recognition for efforts
- monetary remuneration
- frustrations with a lack of funding for appropriate resources
- limited opportunities of training and further pressures of low staffing levels.

Collectively, these themes and sub-themes represented the key drivers influencing respondents' perceptions of their work environment, some of which created instances where challenges and barriers affected their ability to effectively undertake their role, generating work satisfaction and on other occasions work dissatisfaction. Each of these themes and associated sub-themes will be discussed in more detail in the following sections.

#### 4.3.1 Work Satisfaction: Caring for Patients in a well-skilled team

The first overarching theme "Work Satisfaction: Caring for Patients in a well-skilled team" represented what TNs identified as an important perception that affected their overall experiences of working in a theatre environment and perceptions of work satisfaction. This was moderated by three sub-themes whereby TNs had opportunities to help people ("Philanthropic motivations for job satisfaction"), feeling adequately skilled with ongoing development opportunities ("Satisfaction gained from ongoing learning"), and working in an effective team delivering essential patient care ("Working efficiently in a team").

#### 4.3.2 Philanthropic motivations for work satisfaction

The sub-theme "Philanthropic motivation for work satisfaction" represented the TNs' primary perceptions and motivations for working as a nurse in the theatre environment. In this usage, 'philanthropic" means "giving back to others" selflessly, without regard to reward or compensation.

Several respondents reported that their motivation and source of work satisfaction was the ability to provide much-needed care to patients, as evidenced by the following statements:

First, it is the care that you give the patient (PD),

When you see them [patients] fixed and they wake up in recovery, you think, there is a good chance they will be okay (PE),

*Of course, it is the outcome of the patients (PA).* 

Using field notes recorded at the time of the interviews that reflected the context and non-verbal communication expressed through facial and emotional intonation of the participants' voice, the use of the phrase 'of course' was interpreted as suggesting the participant perceived quality patient care as an implicit part of the TN role and integral to work satisfaction.

Another respondent articulated motivations that had influenced her choice of profession and specialisation as a TN. She articulated that helping people was what motivated her to keep coming to work for an arduous working schedule every day, thus evidencing philanthropic motivations to pursuing a nursing career:

I think that I am helping people ...because that was the main reason to become a nurse, for me, in the past, and I'm still doing it (PC).

The phrase "and I'm still doing it" was interpreted as suggesting continued fulfilment, and an underlying reason for maintaining ambition and work satisfaction. Conversely, some participants reported how their role could be "frustrating" (PB). This related to factors beyond the TNs' control that negatively impacted the patient experience and thus "make the patient experience poor" (PB). This emotive response to poor patient care emphasised the altruistic motives that drive TNs' work. This demonstrated an ethical and professional commitment to quality, safe patient care, and motivated her to advocate on the patients' behalf despite the risk of appearing 'obstructive' to superiors.

[A patient was] ... required to stay in recovery for a long period of time, with no bed allocated to them; and I had to go and speak to all of the surgeons, and I had to speak to the coordinator; and in the end I really felt like saying, 'Why do you think I don't want this to impact on the service, the patient?' Because it kind of felt a little bit like I was being difficult, but I wasn't being difficult. I was just trying to make sure that the environment was safe, and the patient had the best experience possible (PB).

This scenario indicates the level of personal discomfort that TNs are willing to endure for the benefit of quality patient care. Given the potential for negative consequences for the TN's employment and work experience in challenging senior staff, the rights of the patient to have access to quality care were clear and were a powerful motivator for this participant.

#### 4.3.3 Satisfaction gained from ongoing learning

It was clear from the experiences expressed by the TNs that a key benefit they derived from their role was the opportunity to acquire new skills and knowledge of different areas of nursing. The novelty of these new experiences provided participants with a sense of satisfaction in their role. One respondent described theatre nursing as a:

'New challenge', to 'know a new field within nursing', and '[I can] ... learn new things', and 'when I manage to scrub or to do things that I couldn't do... [or didn't] know before' (PA).

This demonstrated satisfaction derived from learning new concepts and skills. For this participant, theatre nursing represented an opportunity to gain new understandings and knowledge pertaining to the human condition she had long been interested in achieving:

I was always interested in anatomy when I was a student nurse, so I think in theatre I can learn more about [the] anatomy of human being[s] (PA).

Similarly, learning new skills, and being aware of emerging research and technologies, was perceived as nurses being good at their job, as highlighted by the following respondent:

I like being good at what I do... and I take a lot of pride in constantly updating my skills, and staying on top of new preferences, or new research and new technology available (PA).

One respondent highlighted how learning new skills in practice increased her sense of competence in a TN. She reported the nature of a theatre environment as unpredictable, thus novel scenarios can sometimes arise unexpectedly. This then stimulated new learning and the development of competence in anticipatory problem-solving skills:

I am enjoying it, and I am getting more and more new... experiences.... Yes, it was difficult in the beginning, but it got better and better, and I realised that, yes, I have that potential in me; that I can see the problems in advance, and I can anticipate it (PF).

Another respondent highlighted how she had experienced the operating theatre environment as a high-quality learning environment. She articulated how care of the patient in operating theatres occurred within multidisciplinary team approaches, thus necessitating the development of highly effective communication skills. This was described as a two-way learning process mediated through junior staff learning from senior staff and vice versa. This is evidenced in the following statements

People look after a patient as a team. It is not one person per patient and so it improves the communication among... it makes you improve your communication amongst the healthcare personnel, and you learn from each other, every day you are learning from each other. It is the multidisciplinary team, you learn...there is upward learning and downward learning (PD).

#### 4.3.4. Working effectively as a team

The sub-theme "working effectively as a team" represented an important factor in generating a positive work environment and greater overall work satisfaction. This was highlighted by several respondents:

What makes me satisfied is that I have a brilliant team around me, and the junior nurses are really hard-working; they want to succeed and put their very best into the environment they work in (PB).

'Looking forward to coming to work,' was partly contingent on the fact that '... this was a good team' (PG). Positive teamwork experiences were directly related to feelings of respect and support: Teamwork in my area is very good; I should say really ... I enjoy that respect that we get from each other ... like when you call for help, you can get it ... I enjoy that (PG),

We work very well as a team; we communicate very well as a team, and that I really value (PB).

Effective teamwork was essential in maintaining job satisfaction and, by default, maintaining effective patient care. Although effective patient care was not dependent on TN's job satisfaction:

Whoever comes to your team; if you are welcoming and you are friendly, that will make a... huge difference in patient care (PA).

The interdependent nature of the high dependency nursing care work environment highlighted the need for effective teamwork due to its effect on patient care:

The team that I work in is very important to me; we work in a high dependency area and we need to rely on each other (PB).

I think that [breakdowns in teamwork] impact on patient care, [and] when people don't feel good about their work environment, they are not as compassionate towards patients; and... not passionate about their work (PB).

The integral role a TN played by helping surgeons perform surgery was viewed as integral to supporting surgeons with surgical procedures being carried out on patients. Thus, indirectly the TNs were playing an important part in helping patients in their journey to wellness. Thus, the effects of effective teamwork were not limited to the patients, it was also significant to enabling 'other people' (health professionals) to perform their role:

Well, I feel I am an important part because you know we are basically helping the surgeons leading the surgery, it is quite important. I mean for them to performance their job, so I feel good about that then having a good role and I am helping people (PC).

As some of the participants enrolled in this study were managers within the operating department, they perceived the latter as particularly useful as it provided an indication that high job satisfaction was intimately tied to, and reflected through, successful teamwork. Some TNs perceived that the value of their contributions was not always rewarded or recognised by managers.

### 4.4 Factors affecting effective teamwork: when teamwork breaks down

The theme "Factors affecting effective teamwork: when teamwork breaks down" represented concepts that negatively impacted on TNs' perception of their work environment. There were four 68

sub-themes within this overarching theme titled: "The negative impact of non-English communication"; "The negative impact of gossip culture"; "Difficulties in escalating concerns" and "Time pressures due to mismatched skills". These sub-themes symbolised the contextual forces that played a significant role in prohibiting effective teamwork for the TNs in this study.

While TNs highlighted the importance of effective teamwork in meeting their main objective of providing quality and safe patient care, ineffective communication in the workplace generated issues that sometimes-caused conflict within the theatre teams. Workplace communications included verbal and non-verbal interactions between employees and formal communications required to meet work objectives, as well as informal communication. The type and effectiveness of communication influenced TNs' perception of their ability to fulfil their role requirements, as well as their overall perception of their work environment. This is highlighted by the following respondent who felt that good communication was at a premium within her team:

Don't talk to each other ... that will impact [on] the patient care or ... the whole team (PA).

Participants spoke about their personal values relating to their work environment and how they perceived this in relation to the fulfilment of their daily tasks and/or personal comfort. Communication was highly valued and viewed as essential to a good working environment and personal comfort:

Communication: we work very well [and] communicate very well as a team, and that I really value (PE).

There was equal value placed on forming a good team spirit and having good workplace communication, in terms of maintaining the ability to care for patients effectively:

There are certain individuals that I work with, and I work with extremely well, because we are very transparent; we are all on the same page, and we are all there ultimately for the patient (PE).

#### 4.4.1. The negative impact of non-English communication

The sub-theme "The negative impact of non-English communication" related to participants acknowledging issues associated with team members communicating about the patient, or possibly other staff, in their native language. This preluded English-speaking staff from understanding what was being said and this practice generated negative feelings within TNs and the theatre department/environment.

Respondents reported that some theatre staff often expressed their cultural identity by communicating with other team members who shared their cultural identity and language in their native tongue. This was reported as having a significant negative influence on social dynamics within theatre teams. There was a shared perception among respondents that the theatre department was divided along linguistic and ethnic lines. They perceived this as the formation of culturally homogenous and separate social groups. This was generated when international staff utilised non-English languages, thus excluding English-speaking colleagues from understanding what was being discussed as they communicated solely among themselves. Thus, cultural identity was a key determinant of good workplace communication and teamwork, as highlighted in the following statement:

# *I think that people should just respect one another. When we are in the tea bar, or even in recovery, or inside theatres: people should not speak in their language (PG).*

Several participants cited personal experiences of workplace communication that generated negative feelings about the quality of teamwork in the TN environment. This was associated with team members (nursing and medical professionals) using non-English communication between team members, which could often lead to a prevalence of gossip and communication difficulties with managerial staff. Speaking in a non-English language around colleagues was perceived as disrespectful and led to the formation of an in-group. This activity was perceived as an obstacle as it generated an insider and outsider group dynamic to interactions, which then led to feelings of alienation. This concept is highlighted by the following statement:

We have different cultures in NHS, and sometimes you find ... a majority of people that end up talking in their language, and ... you are like, 'What is going on?' You feel, like, left out (PG).

Cultural differences were perceived as a factor for creating a potential for the formation of division within the workplace and in communication. The following statement highlights circumstances by which *cultures* groups formed and the consequences of this within the respondent's work environment:

We have nurses from many different races and cultures, but we do have the standard and we do have a rule; ... we are not supposed to speak in our own languages and... lunchtime should be a social thing where everyone talks about everything apart from work. But you obviously have groups of people that would gang up and sit together for lunch, speak in their own language (PH).

Here, this respondent has emphasised the division that existed between colleagues in informal settings. The use of the term 'gang up' denotes a perception of hostility from the 'in-group' and towards others who were deemed to be 'outsiders' by the in-group. In-groups were perceived as exclusive for interacting and communicating with specific individuals outside of formal, work-oriented exchanges, while simultaneously excluding others. The use of the non-English language was not confined to social communication. It was also used during patient care episodes, during operations in the operating room setting, and during the handover of patient care from one team to another. These concepts are evidenced in the following dialogue:

Somebody will just switch to a language that [only] some people understand ... and when you intervene, [they reply] 'Oh no; we are just used to this language'; but then you miss out on important issues When the patients are on the table... things that should be discussed about the patient are discussed in a different language that you don't understand (PD).

Misunderstandings were the result of a loss of information being passed on to the next team member. This demonstrated a lack of effective communication between team members, which had a potential for a detrimental effect on patient care, as follows:

There are some communication issues when, talking about a patient, discussing a patient, people change into a language that you don't understand ... it [means] the team really doesn't work well (PD).

It does impact on patient care because like for example ... you miss out on important issues about patient care (PD).

Ultimately, a lack of effective communication across culturally diverse social groups at work was perceived by TNs as having a direct negative impact on the team's work objectives. Potential negative impacts resulting from the use of non-English languages were not restricted to those who perceived themselves as members of the 'in-group'.

Conversely, one respondent who spoke English as a second language identified as a member of the 'in-group' (an overseas trained nurse who sometimes spoke in her native tongue when at work providing care). She suggested that communicating in her own language was an inadvertent consequence of a multicultural team, yet acknowledged it was not an ideal occurrence:

I came from a different place... so I feel better when... we communicate in our language. But I try not to do that in front of anyone, so I think that happens without

any real recognition of that. So, some people get a bit offended with that; but... sometimes, you can't avoid it (PF).

Several of the respondents spoke about cultural 'in and out-group' concepts and practices within theatre teams and the consistently negative effects this type of cultural grouping had on team members, irrespective of whether it had been unintentional.

#### 4.4.2. The negative impact of gossip culture

The sub-theme "The negative impact of gossip culture" related to respondents having a lack of trust in management who had betrayed their trust by sharing their confidential information with other team members. This resulted in the creation of a 'gossiping culture' in the theatre environment. One respondent experienced a 'gossip culture' when senior management betrayed her trust by sharing confidential information with other team members without the respondent's permission or knowledge. The respondent then became the object of unkind discussion. This behaviour was perceived as a lack of professionalism on the part of managers and is evidenced by the following statements:

Certain individuals don't take their role as line manager as seriously as they should, and they don't treat it with the utmost confidentiality (PD).

A lot of gossip within the department; a lot of gossip. People will be sitting down discussing others. There are some personal issues that you tell the senior ones; but you get to be asked about your personal issues that you discussed, and you thought it was confidential ... and you wonder, 'How did it just get out?' That is really demoralising (PD).

Bullying, as well as ineffective communication between staff and management, formed a core concern among respondents. In particular, the perception that management was not doing enough to dissuade workplace gossip generated considerable dissatisfaction and distrust of superiors. Participants indicated that gossip was largely perceived as unhealthy and detrimental to work performance. Specifically, gossip was perceived to affect TNs' ability to concentrate on their patients, and/or the task being undertaken. This finding is reflected in the following statements:

Instead of thinking and concentrating on the patient, you are thinking, 'Oh, so everybody is discussing' (PD).

I felt like, it is like being bullied at work (PG).

Gossiping affected relationships between participants:

It makes me feel like I constantly have to defend myself, all of the time, and that makes it very difficult to have sound working relationships with your peers (PE).

Several respondents reported an overall culture of gossiping that was perceived as a form of bullying:

You find that, sometimes, if gossiping starts, then there is a way of bullying you at the same time; because people are talking about you, and you don't know exactly what they are talking about you; and you are trying your best (PG).

I think there is an underlying bullying culture especially in the theatre department. I think theatres get forgotten about because it is just kind of under the radar, insular type of environment, they don't tend to like to escalate things outside of the department (PE).

Gossip was also perceived to circulate among the non-English speaking staff, and this increased division between the 'in-group' and the 'out-group'. Such actions made co-workers feel uncomfortable and fostered a sense of alienation and hostility between members of a team, in a context where they needed to be able to function cohesively as a dynamic medical unit:

It is irrelevant, whether they are talking about anyone in the department or not, but it's still gossip, nonetheless; because it is lower tones, whispering, and it sometimes not only makes other staff, who don't speak the language, uncomfortable, it makes students feel uncomfortable... and not feel welcome, or feel like maybe staff are talking about them (PH).

They don't treat it with the utmost confidentiality, so it puts you in a hostile environment because, instead of them dealing with it in a neutral manner and remaining objective, they will call that person into the office and say, "oh so and so said this about you and I don't think this is true but blah blah blah" and that's just making the situation worse not making the situation better (PE).

As a result of the language divide, it was often not clear to participants who or what was being whispered about in lowered tones. Nonetheless, the mere perception of gossip was sufficient to cause discomfort for those excluded from the 'in-group'. Gossip culture was often perceived as being reinforced by management, who encouraged the sharing of information that was not for public discussion. Management also often treated genuinely informative material as gossip, a fact that was unpalatable to respondents:

There are certain members of staff that I know if I escalated it to them, it would either not get acknowledged, not be addressed, or it would be treated as gossip (PE). The perception of gossip as a negative form of communication impacted effective communication between TNs and senior staff. One respondent mentioned that she had her legitimate concerns dismissed as gossip and was perceived as failing in her role by management:

Another time there was also some issue that was discussed in the tearoom by other members of staff when I approached the person who was senior, "do you have a minute for me to discuss something personal that is bothering me, that people are talking in the department", instead of listening the answer was "the surgeons are complaining about you" so a different topic (PD).

One respondent reported that her personal and private information had been shared, following what had been understood to be a confidential communication with a manager. She reported the misuse of her personal information, resulting in a loss of trust in management:

I had personal issues to sort out when I came back in the department everyone was discussing it so I went to confront whoever I had requested for permission because I had to tell the person exactly what's happening, but she said "no" she never discussed it (PE).

This had the potential to lead to confrontation and a breakdown in relationships. PG expressed concerns about the role of management in sustaining a culture of gossip in the workplace:

You think that you know the people that you are around; the people they keep on talking about things they don't know, and that creates bad relationships. Especially, let's say if the managers allow juniors to come and speak to them, and I find that it ends up being like they are really supporting that gossiping (PG).

Unsupportive communication with management staff was a common experience among participants.

As nurses self-selected into the study, it is possible that nurses who were more unhappy with the working conditions selected to participate in an interview as a means of airing their grievances, thus within these circumstances the finding of a 'gossip culture" was not entirely surprising. Equally, however, it is possible that nurses that were more satisfied with their jobs did not self-select into the study. To remove this potential confounded from future studies, it is recommended that all, or most, theatre nurses in the theatre are interviewed, eliminating the self-select bias.

#### 4.4.3. Difficulties in escalating concerns

Seven of the eight participants (86%) expressed negative perceptions of their communication with line and department managers. These were expressed as difficulties in passing information up the organisational hierarchy and in receiving appropriate support. For example, a failure to provide TNs with adequate acknowledgment over a grievance was one such factor cited by participants.

Whenever you report... any kind of incident, [you should] be more listened to... because sometimes you [report something] and you are ignored (PC).

TNs in this study did not feel supported by the management team. They highlighted how management tended to reframe complaints as a problem with the staff member, rather than listening supportively to resolving issues and facilitating productive change. Participants noted this occurred so that the smooth running of the hospital was not impeded:

The senior staff then put it back on to you saying, "Why are you failing in your role, why can't you manage, and why can't you support the team?" Rather than trying to resolve the situation by offering more training, or more support to you (PB).

This reflects a negative perception of management's willingness to consider their staff's concerns for more support and training. Further, if a staff member were to report an issue to senior staff, the reporting staff member often had to put in their own extra time to resolve it:

You are the one to report to [senior staff] ... normally it is you to run around (PD).

One participant acknowledged that:

some... senior staff are supportive, the most senior nurse in the department isn't supportive.

Senior nurses [were] very middle management (PB).

This was interpreted to mean that senior staff were under high pressure to report positively to senior management, who did not understand *"the nuances of working in [theatres]"* (PB).

Participants felt management staff were not in the work environment long enough to be able to provide the best support. TNs perceived immediate managers to be disinclined to address concerns since they too had to report to senior staff in the hospital hierarchy. A lack of training among new and agency staff was notable, since lower-middle management experienced pressure and upper management questioned TNs' abilities. This resulted in further questions as to the capability of lower-middle managers. This approach resulted in stagnation rather than providing workable solutions and is evidenced by the following:

The same thing that they have pushed down onto myself and my colleagues (PB).

In a more serious case, one respondent reported she had needed to 'whistle blow' on another staff member's work practice. This represented a time when the need for support was at its highest. However, instead, the respondent was ostracised by their management team:

*My life was made extremely difficult because I was a whistle-blower on someone's practice; and I was ostracised as a result (PE).* 

This finding indicated a loss of trust towards management, resulting from an unpleasant experience, and this lack of support was perceived to extend further up the hospital hierarchy when she sought redress:

I whistle-blowed to my line managers...in this case. If I don't feel like it has been... dealt with appropriately, then I escalated it..., and if they have not handled it properly, I then escalate it to the head of theatres department... and after that I am at a loss really (PE).

Not all participants reported lack of support from their immediate managers. Some described supportive line managers who tried to absolve a participant of an unnecessary additional obligation imposed by a matron, however, this type of receptivity was not replicated by management:

Even though my line manager was my support to say, "No, why can't you just leave there?" But she ended up without a choice; because the matron was like, "I want her to do it". But even if she was asked, "But why do you want her to do it; if you have got about 48 staff nurses, who can do both". What difference will she make? (PG).

Conversely, one participant had a different experience when communicating with management staff. She reported feeling comfortable when communicating concerns to managers as well as being satisfied with management's response. When asked if she felt supported in dealing with equipment shortages, she responded positively: *"Yes, absolutely"* (PA).

However, there remained perceptions of unsupportive practices from management with respect to difficulties experienced completing theatre prep 'lists' on time to avoid unpredictable delays:

Yes, and then our managers are trying to stop this practice: doing the theatre planning a week ahead, or a month ahead, and then reviewing the theatre plan (PA).

Further, negative impacts were reported due to an excessive number of agency nurses in the theatre unit. This was associated with escalating issues resulting from their lack of familiarity with the environment, as evidenced by the following participant: Did a really good job finding nurses from overseas... recruited more staff (PA).

When concerns about this scenario were raised to management this resulted in a change in recruitment practices, placing team performance as a priority on this occasion. Retaining of the staff is much better now (PA).

This represented a positive experience of communicating with management for this participant, which contrasted with other participants' experiences. It appeared, in this scenario, that the issues reported to management were of a less personal nature, which contrasted with the issues other participants had experienced. It was clear from this sub-theme that TNs' communication experiences with managers were mixed and unpredictable, suggesting the need for further research.

#### 4.4.4. Team pressure due to mismatched skillsets

The sub-theme "Team pressure due to mismatched skillsets" related to participants' perceived obligations, or responsibilities, imposed on the nursing team in theatre not aligning with their respective skillsets. The multidisciplinary and multi-skilled character of the nursing team in theatre was a source of professional satisfaction for some TNs; they viewed this characteristic as being intrinsic to the role:

In our department, we are not one specialty ... we all learn to do everything. PH emphasised that they, "know how each area works", if one person is lacking in a skill or hasn't done "that particular thing" for a long time, you do get other people who can show you (PA).

A mismatch in abilities and responsibilities was viewed as detrimental to team effectiveness and individuals' professional/job satisfaction. Pressure and stress were generated for team members when an inadequate or misaligned skill mix existed. This resulted in a negative impact on work performance.

*Skill mix affects my job and my ability to do the job; so, if I haven't got the right members of the team present, it puts a lot of pressure on and it can be very stressful (PB).* 

Further, a mismatch in skillsets within the operating theatre jeopardised patient safety and placed additional pressure on the surgeons who were operating. This could potentially interfere with safe practices and place additional risks of negative health outcomes on patients, particularly if the operation took longer than was required. One respondent perceived TNs lacking the required skills to work in the operating theatre environment as: Makes it very, very difficult and it is stressful for the surgeons... the patient ends up being anaesthetised for much longer than they need to be (PE).

Being 'thrown in the deep end' to manage an operating theatre when the staff member had limited managerial skills represented another threat to patient safety and the development of 'stress' for the professional teams working in the operating unit. This generated intense pressure not only for the 'professional teams' but, particularly, for the theatre nurse manager who internalised of a deep sense of responsibility:

If you are in charge of that theatre, you want to do everything; you want to make sure everything is done properly: because you are in charge, and you are responsible for it (PH).

TNs in this study reported experiencing external pressure from the expectation to continuously perform to very high standards and a perceived assigning of unfair blame when things did not go according to the procedures stipulated by their employer:

If something goes wrong, it's usually at the fault of the scrub nurse; it's always the nurse that gets the blame or the nurse in charge of that particular theatre that gets the blame, and when actually it is multiple people's responsibility to point things out; or to identify things, and to stop never events (PG).

Work pressures, coupled with limitations within some TNs' training and experience, led to a perception that unrealistic expectations were aggravated by a lack of sensitivity or acknowledgment by senior management, that some staff had not reached the competency level required to undertake the role of a TN. Thus, staff were often placed in situations where they were forced to work outside of their individual scope of practice, experience, and skillset:

A department that has different skills, different... types of surgery, and sometimes you haven't really done this kind of operations, but you are looking at it with a new staff member (PD).

A team with mismatched skillsets was perceived as an organisational failure, rather than a departmental shortcoming, when TNs were found to be lacking the required skills for a particular procedure. Managerial decisions tended to make TNs uncomfortable, particularly an expectation for a staff member to possess all the required knowledge and skills to work in any area of the operating theatre, irrespective of recent experience or competency for the skillsets required for a designated area of theatre. This concept is evidenced by the following statement:

All of a sudden, they put you in one theatre that you haven't been in ages, and they expect you to know everything; even the size of the gloves that the surgeon wants (PC).

The use of the phrase 'all of a sudden' conveys this respondent's perception of being unprepared or unsure of her responsibilities to work in a different theatre, thus, concern that she may be expected to work outside of her scope of practice and responsibility.

### 4.5. Constraints on job performance leading to job dissatisfaction

The overarching theme titled "Constraints on job performance leading to job dissatisfaction" represented TNs' perception that there was a lack of recognition for their efforts, feeling underpaid, and frustration at the lack of funding for appropriate equipment in the department. There was also increased workload due to limited numbers of staff, and little opportunity for much-needed training, which were all root causes for job dissatisfaction. There were five sub-themes within this major theme including: "Lack of recognition for efforts"; "Monitory remuneration"; "Frustrations with lack of funding for appropriate equipment"; "Limited opportunities for training" and "Future pressures of low staffing levels" which represented the characteristics of the work environments that prohibited TNs in this study performing their role to the best of their ability. This then generated negative perceptions of job dissatisfaction.

#### 4.5.1. Lack of recognition for efforts

The sub-theme "Lack of recognition for efforts" represented the effects of personal sacrifices made by TNs to fulfil their vocation and dedication to their role, patients, and employer, and a perception that these personal sacrifices were not valued, recognised, and/or dismissed. Some participants reported how they perceived they were making personal sacrifices when they were required to work long, stressful shifts. This negatively impacted on the overall well-being and personal life for some TNs, as evidenced by the following statements:

Sometimes you end up doing long hours, without breaks; then you know, by the end of the day, you are exhausted (PF).

# My personal relationships at home have broken down because I am constantly at work; I am tired (PF).

One TN perceived the requirement to accept long working hours without breaks, unpredictable shift changes, and the resultant exhaustion, as part and parcel of her role. There was an acceptance that a

TN role demanded altruistic approaches and personal sacrifice, thus, by nature, this was both demanding and rewarding:

Sometimes it's just unavoidable in theatres with... emergency situations (PF).

The other day I had cinema tickets booked, and the theatre was overrunning; and basically, it is tough. I have got a duty of care to the patient; I am a senior nurse within the department (PB).

The dichotomous relationship between a TN's sense of responsibility, exhausting work conditions and the nature of the operating environment was emphasised by the following participant:

It's like the story of my life; since becoming a theatre nurse, I think. I give 150% when I am here because I feel that is what my patients ask of me, and should expect from me as a nurse... The shift patterns are erratic, it's not a 9-5 Monday to Friday job, and there are times when you are in such a stressful situation (PE).

When acknowledgment for the level of commitment and hard work was neglected by management,

TNs experienced feelings of demoralisation. This affected work performance, morale, and well-being:

*I am often overlooked or undermined and not appreciated by management; so, you get exhausted (PE).* 

It gives you even more incentive, when someone is recognising the amount of hard work, or the hours; or the attention to detail you are putting into your patient's care, during their journey through theatres. It is really demoralising and deflating if you don't get the praise (PE).

Others found these experiences disheartening:

When... you are trying hard... to achieve, but you get tired, you don't get any positive feedback... you become demoralised; you become not so functioning so well in your role (PB).

You get exhausted, overlooked, and undermined and demoralising and deflating (PC).

Participants reported concerns about the dismissive nature of management when staff tried to have their concerns about long working hours heard:

Then you just come back into work the next day, because you are afraid of having to say, "I need some time off" or "I need a little bit of respite" (PE).

Some of the senior people will tell you that, "this is the way it is, tough, get on with it" or "We are not changing it" (PD).

A lack of recognition for the concerns of TNs from management was also perceived as a lack of respect, especially when TN requests were dismissed altogether, demonstrating a lack of support or regard for TNs' career progression. Respondents reported a lack of support with applications for promotion and in some cases were denied essential information required to enable them to progress. These scenarios resulted in respondents' experiences of feelings of irritation, neglect and being highly dissatisfied professionally:

The staff get frustrated. They can't see any movement for progression... then they are gone, because they are frustrated... they have little job satisfaction... they feel undervalued (PB).

In my unit... they have offered to recruit the ODPs [Operating Department Personnel] at a higher level; even though they have got less qualification time... whereas you have theatre nurses, who have been there for three years or more, who haven't [had] promotion opportunity (PM).

TNs felt the recruitment and appointment process for promotions were not managed fairly. There was a perception that appointments were made due to personal favouritism rather than merit. This resulted in participants experiencing feelings of rejection and being under-valued when merit was not apportioned accordingly. Thus, a form of aggressive 'in-group' dynamics was perceived by participants as preventing employees to progress professionally. Of the eight participants interviewed, three (36%) identified a 'clique mentality' among management and membership of the 'clique' determined which team members were promoted. The following participant statements evidence this finding:

Those receiving promotions... don't have any clue about nursing..., speak good English or are very charming, it's just one person who chooses... if they are good friends, then they will get the position. It is as simple as that (PD).

There is favouritism in that you find that... promotions come at different times... you find that [senior staff] are taking care of people; [guiding them] into management... given roles that will help them develop in managerial skills. And if you don't have anybody to support you, who does not come from your place; then you will not be supported (PC).

A lack of recognition for the role and quality of services TNs provided was a strong theme within the data. This perception of a lack of recognition extended more broadly to the nursing profession as a whole and particularly when it came to reimbursement for their service.

#### 4.5.2. Monetary remuneration

The sub-theme "monetary remuneration" represented TNs' perception that the nursing profession did not receive adequate recognition for their specialisation in terms of financial reimbursement. Several participants described feeling they were underpaid and suggested they felt this was tantamount to a lack of recognition by UK policy makers. A feeling of being underpaid made TNs feel undervalued, and this resulted in an overall feeling of demoralisation:

Like our hard work is not accepted by the government, because everywhere else... they are getting increasing salary... but nurses are just like lower-class people still. There is no increase yet; even though they are promising, but in fact I can't see anything like this improving, and I think it is not moralising for the nurse (PA).

Several participants mentioned the need for a pay rise. This was perceived as a high priority for TNs in this study and a significant factor in their job satisfaction:

*Of course, my salary could have been improved. Our increment was frozen for a long time (PF).* 

If they could think about the salary; the increments, or maybe even band clicks: that would be better, because people are really working so hard (PD).

Feeling underpaid was also perceived as having the potential to negatively impact patient care:

*Like I am not going to compromise the patient care on that one; but eventually maybe, I think: I feel that is going to affect the patient care (PF).* 

One participant mentioned the possibility of leaving her role as a TN to work as a 'Bank' staff member to achieve better pay rates:

A lot of nurses, maybe they do Bank, because they find that Bank pays better when they are part-time... A full-time one day is no money, because if you really look into the payslip of a just newly qualified nurse... you get paid £12 per hour. Yet I can still do Bank during that day; I can get paid ... £28 an hour. So, you see that makes a big difference. It doesn't motivate you to be a full-time nurse (PG).

It was mentioned by participants that 'Bank staff' were used in the theatre department. This was to cover and/or supplement permanent and part-time staff absenteeism for sickness, holidays, and periods of temporary fluctuations in staffing needs. Participants in this study highlighted that low pay rates were a significant factor to seeking work elsewhere via a service agent who would supply 'bank or agency nurses' to the hospital. This phenomenon generated issues that negatively impacted effective teamwork:

We use a lot of agency because our staff are doing bank elsewhere. They are the ones who... know how the department functions. So, you get someone from outside to come and fill in that vacancy; because... the trust is not paying enough so, there would be a continuity of care if we had our own staff coming in (PD).

When I started; it was like a lot of agency staff; it was totally crap team... broken. Now we are building it up, and we are getting somewhere; but not complete yet (PF).

Paradoxically, bank staff are among the hospital personnel who are employed when the budget cannot cover the more lucrative salary offered by an agency. This ironically results in the very conditions that lead to nurses working as bank staff as the situation pays better than if they were on a permanent contract.

4.5.3. Frustration at the lack of funding for appropriate equipment

A common source of frustration was the lack of essential equipment required to assist TNs in achieving their role's objectives in terms of overall care provision. This was described as a constant problem:

We are constantly fighting with other departments over equipment and people almost become... it becomes really bad (PD).

Frustration with equipment shortage partially reflected the expectation that TNs source equipment within their time-poor schedules:

I am not sure how they get their financial support from the trust, because sometimes you have to borrow equipment. We share equipment between three floors. So, in the morning... maybe three theatres are doing a similar list. So, you have to run around wasting time, looking for [shared] equipment (PD).

Equipment shortages represented a daily reality for TNs in this study:

As a department, we are forgotten about. Theatres are... overlooked by all the big shiny departments like the oncology and cardiac departments. And Theatre is a really important part of any patient's perioperative care (PE).

The lack of efficiency in terms of theatre lists running over time resulted in a significant burden on the staff's workplace health and safety. This was associated with reduced breaks and increased levels of work-related pressure:

When you finish late, like a morning list finishing late, there would be so much pressure on you from the same people, who knew why you started late; to start the afternoon list. So, lunch breaks tend to be made shorter, because you are rushing; you don't have proper breaks. Once you start late... the afternoon; the list will be late. (PD)

Postponing procedures until equipment or beds became available had a deleterious impact on patient well-being, according to the following respondent:

You will start late; patients will be cancelled, and may be scheduled for another day, and that has a bad effect on the patients (PB),

Because of the lack of beds in the hospital... the patient is retained in recovery for an extended period of time, which gives the patient a poor patient experience because what happens is... you then have distressed patients around the patient that is staying for a while; there are no facilities. They can't eat; they can't have a drink; they can't eat there are no toilet facilities. This makes the patient experience poor, which is frustrating... if it's a child, only one parent can come in with the child... the family has a poor experience of being in hospital (PB).

Shortages of basic equipment such as beds were the most frequent reason for a cascade of delays for patients, including the cancelation of a patient's procedure and/or closure of a department:

The ultimate impact of patients' not being able to go back to the ward is... once recovery is full, we then have to stop the lists (PB).

You may have to shut A and E [Accident and Emergency] ... if you get an emergency, you wouldn't have anywhere to put them (PB).

Thus, a lack of adequate health service resourcing interferes with patients' access to health services.

#### 4.5.4. Limited opportunities for training

The sub-theme "limited opportunities for training" represented respondents' dissatisfaction with a lack of support from management to enable TNs access to professional development. This was associated with NHS financial constraints and limitations. TNs made frequent reference to their dissatisfaction with the limited availability of training opportunities and how this was associated with the theatre department's financial limitations:

Education is not very well supported in this department, because of money issues (PD).

When I have raised this issue [limited training], I am told that there isn't any more money (PB).

There is less and less money available for continuing professional developments (PE).

Learning new skills was important to increasing staff satisfaction and work performance as ultimately this enhanced patient care. It also led to role fulfilment if training were made available, enabling the provision of greater effectiveness in terms of surgical assistance:

It would give you another layer to your education... why we use what we use, and the tools that we use for different parts of the procedure; [making] you a much more efficient nurse. If you generally understand the surgery, and the signs behind it, you could predict what the worst-case scenario would be; or what might be needed and... be able to propose ideas to your surgeon: if they are finding a particular surgery difficult (PE).

One participant mentioned that she had noted junior nurses are unable to consolidate their foundational learning by putting it into practice before joining a theatre team. As there was inadequate training on offer within the department, she sought out staff within the department to share their expertise and knowledge to support more junior staff:

You have junior staff who are not being trained really to the... highest standard that I would expect, who are then teaching student nurses, which in turn waters down their quality of training... [Junior nurses] don't have long enough in the specific areas. They have got an enormous amount to learn, because they have got lots of different specialities to learn in theatre (PB).

This was a similar scenario with respect to the recovery unit:

They have also got a recovery unit to have training in. So, what tends to happen is, they will have a six-week training in recovery...and then they are deemed competent to work in recovery (PB).

Other participants identified a high level of dissatisfaction with the quality of training provided to junior nurses. One TN highlighted dissatisfaction with the time required to learn the skills in the appropriate setting, to achieve the required level of competency to practise independently as a registered nurse:

Placements are not for an appropriate length of time, and I think what it has to be analysed more... We have different types of learners. Some will appear to be more confident but don't have the skills, whereas others could be a lot slower and need more time to be more skilled (PH). Gaining access to professional development was impacted by staffing levels. Staff shortages often prohibited TNs from attending training days and, conversely, limited training opportunities were a reason for staff to leave, thus compounding staff shortages and stress on TN staff:

You won't get time out... because they will be short of staff (PG).

Giving them... training opportunities... because I know that some people have left the place, the reason was... they were looking for some training opportunities, which they were not granted... and they had to leave (PF).

A lack of training makes them feel really overwhelmed when they come into theatres and having to deal with big cases... Say if someone is here for three months, and they still don't feel they have had the training, they don't feel supported; they feel really overwhelmed, and they think, "Okay maybe this theatre nursing is not for me." And they move on... the length of their rotation is not enough in each theatre (PF).

#### 4.5.5. Further pressures of low staffing levels

The sub-theme "Further pressures of low staffing levels" described system inefficiencies that negatively impacted the health and wellbeing of TNs in relation to low staffing levels. When management did not address low staffing levels, participants perceived this as a managerial failure, with an expectation that existing staff would shoulder the burden and accept unacceptable working conditions, particularly when patient load and care needs are at their highest. In terms of patient safety, the situation was perceived as unsafe and, in some instances, particularly dangerous. The following statements evidence system inefficiencies affecting workplace health and safety of TN in terms of risk of fatigue and service provision with patient care:

When we are under a lot of pressure, the nurses won't get breaks, so they may not get their tea breaks... their lunch breaks; or their breaks will be delayed... There is no one to come and relieve them, because the theatres are working to such high turnover, and they have got absolutely full capacity. There is no give in the system at all (PB).

Rather than cancelling, they'll stretch the services; so, they will say, "It doesn't matter that you have only got three nurses in the recovery unit. We can manage". They will pull people in from all different places; they will pull people who aren't experienced in, just to make up the numbers... so that really affects the patient (PB).

The following respondent described a concerning scenario whereby she and her patient were placed in a difficult position due to low patient/staff ratios. The scenario was both frightening and unsafe for the TN and her patient: Sometimes we are really short of staff... so... when [a] patient wakes up [in recovery], it is only you, and that patient can become very aggressive because they don't know where they are... the patient is at risk and you as well. You are afraid to say... "I can't get help from the colleague because we are short of staff." (PG)

On occasion, temporary agency staff were sometimes employed to relieve staff of their workload. Respondents highlighted how this frequently hampered established teams' working routines and had a deleterious knock-on effect generally on patient care. This was associated with agency staff not having the required skills to deal with the complexities of working in a theatre department when they had not worked there before and/or needed to be trained in theatre nursing. This scenario is evidenced by the comments of the following respondent:

When I started... we were running the department with 80% [agency] staff. And I started a new [management role], doing a location rota. I really found it difficult. It was a really difficult time for us [for] two to three years, because of the staffing... we have lots of new staff, who are still training. They don't still have much experience... We are in the process of training them; so, it is always that process going on (PF).

One respondent believed management did not do enough to ensure newly employed staff were supported to gain the knowledge and competencies required to undertake their role, thus generating additional pressure on existing staff:

They [management] employed a big cohort of junior staff, who... aren't getting the training that they require in order to carry out their job (PB).

Despite increasing nursing staff numbers, the use of agency staff continued, which brought its own issues and pressures for permanent nursing staff:

It puts a lot of pressure on the permanent staff; given that, with the high amount of agency staff, they know their job. They can scrub maybe but [as agency workers] they are not really able to circulate and do the other things (PF).

The benefits of agency staff were only experienced if the agency staff member worked regularly at the same unit for sustained periods of time. This then enabled the agency staff member to gain sufficient experience, familiarity and competency with the theatre skills required to work in the department. It was at this point that greater flexibility in teamwork was experienced by existing staff. This scenario was then perceived as an improvement in overall staffing and morale:

Up until recently, we did have a lot of agency nurses working with us. Usually, that would be a negative thing, but actually, we had quite high-quality agency nurses that would keep coming back, so they were on lines within the department, and... in fact, it was relatively stable. We did a big recruitment drive and... we have now got mostly substantive staff, which is good for team morale, because everyone knows each other well, and no one is... disappearing (PB).

These were the constraints placed on permanent nursing staff in the theatre department that impacted their job performance, satisfaction, and patient safety. Work-related pressure due to inexperienced agency staff being sent to work in the theatre department resulted in TNs feeling frustrated. Participants perceived that the root cause of these issues was a lack of NHS funding and poor organisational management.

#### 4.6 Conclusion

This chapter has presented the results of a thematic analysis undertaken on eight in-depth interviews from TNs working in an operating theatre in the UK. Theatre nurses in this study perceived the operating theatre work environment as a dynamic space, that required highly skilled and efficient team players who were passionate and devoted to providing quality patient care. They viewed effective teamwork as an essential ingredient to job satisfaction. While the benefits of working within a multicultural team were acknowledged, a cultural tendency for internationally trained theatre staff to speak a non-English language when communicating about the patient was perceived as disrespectful, a form of bullying through exclusion and a threat to safe patient care. Having adequate staffing levels was perceived as essential to safe patient care, job satisfaction and effective teamwork, and the need for a fair wage and fair treatment was highlighted. A gossip culture existed within the theatre department. This was perceived as a threat to patient safety and job satisfaction. More generally, it was viewed as a disrespectful form of intimidation and bullying and, in some instances, led to breaches of individual participants' privacy and confidentiality, which stimulated and perpetuated a gossip culture. TNs also perceived a sense of unfair treatment from senior management.

The following chapter 5 will provide an in-depth critical discussion of the findings from this study to interpret and synthesise these findings against the existing literature. It will also align them with this study's research questions and objectives and provide recommendations.

# Chapter 5 Discussion

## 5.1. Introduction

This study has revealed that TNs' perceptions of their role, and what they perceived as the barriers preventing them from effectively fulfilling that role, were drawn from organisational, personal, and cultural perspectives. Central to the TNs' perspectives on their ability to perform their roles efficiently was the need to differentiate between perceived and actual barriers in achieving workplace satisfaction. The ability to distinguish real barriers is, therefore, important since differences in barrier types require tailored strategies and approaches to address them.

Methodologies based on individual qualitative interviews with practitioners focus on perceptions; with participant reports blending matters of fact with cultural or organisational expectations and individual beliefs or values (Britten, 2006). Distinguishing between values and assumptions underpinning individual interviewees' responses is essential to an understanding of what conditions TNs' perceptions and thought processes. In this regard, Tajfel and Turner's (1979) Social Identity Theory (SIT) is a useful analytical tool for examining the nexus of values influencing the team's responses inside the workplace.

SIT explains intergroup behaviour based on group formation as deriving from individuals who 'strive for a positive self-concept', often through 'enhancing strategies'. Through this, they "disassociate from the group and pursue individual goals designed to improve their personal gain rather than that of their in-group" (Tajfel and Turner, 1979; Ashforth and Mael, 2004; de la Sablonnière and Tougas, 2008). This type of behaviour can be predicted by analysing how members move between groups. In this regard, stability is achieved through the individual's acceptance of the group's legitimacy, from which the individual also achieves status.

The aims for this thesis were to establish:

- 1. How do theatre nurses perceive their work environment?
  - **a.** To better understand the nature of TNs perceptions and disaggregate the various factors which are involved in their construction.
  - **b.** To identify and explore any organisational, cultural, or social issues that may facilitate or prevent an effective work environment.

**c.** To identify and explore strategies for addressing key challenges and barriers to improving the TN experience.

This chapter is set out as following:

- Section 1 introduced the discussion chapter and reiterates the aims for this research study.
- Section 5.2 identifies Social Identity Theory's (SIT) value as a tool in analysing the barriers arising from TNs' perceptions of difficulties in their roles.
- Section 5,3 and 5.4 examine the positive and negative drivers behind TNs' experiences respectively.
- Section 5.5 discusses the study's limitations resulting from the selected research approach.
- Section 5.6 recommends improvements to TNs' work environments
- Section 5.7 suggests areas for future research.
- Section 5.8 concludes with ways in which TNs' perceptions could be used to improve the work environment in similar healthcare contexts.

#### 5.2. Key Issues

The aim behind exploring and understanding the nature of TNs' work environment perceptions was to identify explorative strategies for addressing key challenges and barriers to improving TNs' work experience. This required the disaggregation of various factors contributing to a perceived negative impact on TN roles. The perspectives of the professional practitioners collected through the interviews assisted in the identification of knowledge gaps, as well as in addressing these gaps. TNs' experiences are key to any understanding of organisational culture, support structures, and other factors such as 'team belonging' – which, in shaping work environments, impact TNs' day-to-day endeavours.

Despite growing academic literature focused on the NHS (see Chapter 2.1), healthcare environments, and strategic business plans in healthcare, research specific to TNs' roles, experiences and perceptions have been limited to a few journal articles. Thus, a significant gap in our knowledge and understanding of the impact of TNs' perceptions and experiences of job performance, job satisfaction, occupational health, recruitment, and occupation retention exists. Given the reported high 'burnout rate' for this segment of healthcare workers (Kirkcaldy and Martin, 2000; Khamisa et al., 2015; Delgado et al., 2017), understanding these 'drivers' is critical for hospital trusts. Such an inquiry is also of interest to policymakers seeking to improve on the provision of consistent support to theatres and thus contribute to successful organisational and patient outcomes.

A range of organisational factors shape the environment for healthcare workers, including the leadership style of management (Sandelin and Gustafsson, 2015), low levels of peer support (Serou et al., 2017), uncollaborative theatre culture (Kaldheim and Slettebø, 2016; Sandelin and Gustafsson, 2015), poorly organised teamwork systems (Purpora and Blegen, 2015), and workload and time pressures (Kelvered et al., 2012). These organisational factors, which are associated with elevated levels of stress among staff, have had a marked negative impact on patient safety and healthcare outcomes. Direct discussions with TNs substantiated these findings. In this regard, a qualitative approach was adopted and relied on participants' perceptions, as well as drawing on organisational factors and other relevant factors, such as cultural factors. For in-group dynamics, social identity theory's (SIT) theoretical framework (Tajfel, 1979) proved useful in examining such influences.

#### 5.2.1. Group dynamics

Drivers for satisfaction and dissatisfaction stemmed from how individuals perceived their role within a broader group – the hospital, the TU, or the wider profession. Given the emergent issues centring upon discrimination, in-group inclusion and exclusion, SIT can be used as a framework in contextualising TNs' responses. SIT aids in the study of group dynamics, and particularly intergroup relationships; here referring to salient social categorisation and in-group identification. SIT considers the degree of subject identification with the relevant in-group and interrogates how collective identities are formed and reinforced. Of particular importance in this context were status issues. Here, TNs perceived themselves as victims of a lack of status. Thus, issues of status were often played out – either in terms of a functional, or a dysfunctional, relationship with management.

In line with Tajfel's (1979) SIT model, individual and collective self-esteem among participants were reinforced through the externalisation of problems and negative behaviours to other groups. SIT is in alignment with the concept of "lived experience"; as workers adapt to a work environment such as a specific TU, they become identified with that unit. Their lived experience of life on the unit impacts their identity as a worker on that unit. Consequently, it is important that an understanding of the complex dynamics within the TU environment, through the SIT lens, informs recommendations for future practice.

#### 5.3. Theatre Nurse Experiences: Positive Drivers

Participants cited a wide range of factors that were deemed to contribute positively to their work environment. These factors often stemmed from the informal networks and relationships TNs formed with one another, as well as with those in their care, rather than through any formal support or 91

incentive mechanism. In this regard, key concepts identified were job satisfaction induced by a sense of helping patients: providing quality care, subject interest, developing new skills, teamwork, strong peer relationships, good and effective communication, and authentic leadership from managers.

The TNs in this study demonstrated a strong urge to communicate their understanding of their experiences to have their concerns heard. They cited *'helping others'* as a motivation for choosing the theatre nurse career path, which in SIT terms is a good example of self-stereotyping (Simon and Hamilton, 1994). When asked what it meant to be a TN, participants expressed negative views about aspects of the job, but a total absence of negative references concerning their social identity. This social identity was defined by their working role, which they perceived as positive and as being perceived positively by others. This raises questions about how TNs perceive their role and their motivations for specialising in this area.

The widespread perception among management participants suggested self-categorisation. As members of a sub-organisational in-group, TNs exhibited a particular behavioural type, akin to the SIT 'minimal group' paradigm. This was expressed with regards to other sub-organisational groups such as senior nurses and management. Similarly, Lloyd et al. (2011) conducted a study dealing with obstacles posed by a strong in-group identity and its impact on effective multi-professional and interprofessional teamwork. This entails close, integrated, and interdependent work between different health care professions, such as TNs. In contrast, collaboration with surgeons within a TU is better described as the relationship of TNs with upper management (Lloyd et al., 2011). Here, both groups work together to provide a care service, but without necessarily interacting with one another.

Across the interviews, culture was identified and highlighted as being significant to how TNs perceived their team role. Here, culture refers to both the officially sanctioned organisational culture and the less formal professional and team culture. Organisational culture plays a pivotal role in cooperation within organisations, particularly in terms of enhanced social identity for effective learning (Korte, 2007). This makes it important to understand positive and negative effecting factors within a TU, which depend on cooperation and learning new skills *in situ*.

#### 5.3.1. Job satisfaction

Job satisfaction was the key positive factor for TN interviewees regarding their perceptions of the work environment. A philanthropic desire to help patients was a key source of satisfaction and an initial source of motivation for joining the profession. However, satisfaction raises organisational questions relating to who TNs work for and to whom they are accountable. Although the relationship between TNs and the team's patients is direct and immediate, it was often presented by them as something unmediated by management or the determining organisation.

TNs held a view of organisational factors as being an impediment to the delivery of efficient patient care, rather than assisting them as a care enabler. This was presented in terms of the organisation constituting 'overriding difficulties' in the maintenance of patient care. Responses from TNs about organisational impediments were often emotive and focused on exposing themselves to personal discomfort – or otherwise operating independently of structures, which they perceived as being only notionally there in support of their teamwork.

Though seemingly paradoxical, this sense of 'overcoming difficulties' was identified as a driver in terms of higher role satisfaction, rather than simply a source of dissatisfaction. In this regard, overcoming obstacles was cited as a source of personal and professional pride. In terms of the informal culture of the profession and the constructed self-perception of 'heroic caregiver', overcoming obstacles in delivering care was the core mission of patient care.

#### 5.3.2. Subject interest and skill acquisition

The TN role is a particularly complex one that, beyond technical expertise, also requires interpersonal skills in the theatre context (Eley et al., 2012; Chambers et al., 2009). Continued satisfaction with the role, therefore, presupposes engagement with, and acquisition of, a wide range of know-how and field-specific information.

Participants indicated that subject interest and the opportunities afforded by the role of theatre nurse to learn new skills were key to job satisfaction (see Chapter 4.3.3). A sense of learning something new, or developing a new skill, emerged as key drivers in motivating TNs. Opportunities arising from technological development increased long-term interest, motivating TNs through the challenge of mastering new technical skills.

The interviews revealed that opportunities for learning new skills had a powerful impact on TNs' sense of competence and satisfaction, as well as acting as a countermeasure to the negative impact on motivation of factors such as stress and time constraints (Støren and Hanssen, 2011). The complexity of the role, and the opportunity to learn and apply new skills, was a recurring sub-theme in what motivates nurses to join and remain within the profession.

As noted, skills acquisition was a recurring theme, where participants focused particularly on gaining exposure to different treatment methods afforded by multidisciplinary teamwork (Jowsey et al.,

2019). TNs drew satisfaction from learning 'on the job' and acquiring a broad skill set (Beydler, 2017; Radford and Fois, 2018). As discussed by Meyer et al. (2016), operating theatres offer the opportunity to gain and develop skills despite possible anxiety provoked by teammate behaviour (Meyer et al., 2016; Freeling et al., 2017; Cope et al., 2019).

Both participants and studies have noted how training enables better worker performance which, in turn, results in improved patient care. Interpersonal relationships within nursing teams are strengthened by continued education (Trajano et al., 2017). This is associated with aspects of technical and communicative work and collective decision-making, such as having regular meetings to address service problems. Although the TN participants did not directly discuss the process of collective decision-making, experienced participants wanted improvements to the mechanisms through which they communicate with management. This will be discussed in more detail in another section of this chapter. Participants noted that the outcomes of changes being implemented would be improved with more TN involvement in the management's decision-making process.

#### 5.3.3. Teamwork and peer relationships

Effective teamwork and peer relationships within the TU were identified as positive factors closely related to the sub-themes of increased satisfaction and skill acquisition, particularly when superiors played an active role. These factors were observed to have a corresponding impact on patient care. The high dependency nature of the theatre environment increased inter-team reliance, which is an observation supported by anecdotal and empirical evidence of an operating team as being the 'ultimate example of teamwork' (McFarlane, 2018). This is largely due to the patients' vulnerability and the risk potential within this work environment, where errors can lead to significant injuries.

According to interviewees, the most positive teamwork experiences stemmed from occasions where managers and other peers were also included in the process (see Chapter 4.3.4). Other published research is also supportive of this, for instance, that of an interdisciplinary theatre nurse team in Norway (Kaldheim and Slettebø, 2016). Noting the challenges team members face, both in anticipating and adjusting to one another within a high-intensity environment, respect was found to be the most important factor, particularly in determining a member's value. Respect, drawn upwards from support, also assisted surgeons in effectively performing their procedures. Feelings of stress were also reduced when team members made a point of always being on-hand to be supportive of the others (Smith et al., 2018).

However, since teams can be organised both in formal and informal interactions (illustrated by SIT's 'minimal group' paradigm), they can also be forged by both excluding and including people and their perspectives. Teams often develop their own cultures and behaviours to operate in a way that complements formal structures, even though this has the potential to be challenging and override existing forms.

Interviewee responses on teamwork revealed that being a constituent part of a team was a source of validation and an expression of belonging (see Chapter 4.3.4), indicating that participants' prominence, in terms of social identity, was based on their working team membership (Tajfel and Turner, 1979). Moreover, it was the participants' perceptions that such validation would not always reach them through formal routes and structures (see Chapter 4.4.3).

Informal team bonding indicates the complexity of identity and belonging within the TU environment, which forms the basic assumption in SIT. In a series of overlapping identities, individual TNs may feel it as being a part of, or as being beyond, their profession. Level of experience, age, gender, or ethnicity form the basis of a positive self-image and is conducive to the formation of 'sub-groups', such as those including members with common language backgrounds. The interview sample was not large enough to investigate the prevalence of competing social identities in detail, although there were emerging findings around nationality and language which are discussed later in this chapter.

#### 5.3.4. Effective communication

Communication was identified as vital in contributing to positive peer relationships and encouraging effective and supportive teamwork, both among TNs and between TNs and their superiors. Effective communication was strongly associated with participants' positive perceptions of their work environment and their ability to fulfil the demand of the role as a TN. Communication is a central driver of team coherence (see Chapter 2.2), (Gillespie et al., 2010; Bezemer et al., 2015; Clayton et al., 2016), which was evidenced in the interviews.

In terms of team bonding, participants' experiences, and perceptions of formal and informal channels of communication provide opportunities for comparison of the value and validity of communication – depending on who is sharing, what is being shared, and how it is being shared. Participants spoke of the existence of a 'gossip culture' within TUs when referring to informal communication. Gossip allowed information to circulate within the unit, otherwise precluded by formal communication channels, which was especially important for TU culture as it determined how information was communicated to new team members. Since gossip forms a critical role in allowing teams to bond effectively (see Chapter 2.6.1), sharing informal information can be creatively used to encourage connectivity and intimacy between group members, inaccessible through formal communication structures.

When discussing the role of gossip within TN teams, it is too simplistic to regard formal communication from managers as acceptable, and gossiping as unacceptable, because forms of communication exist in complex relationships with one another. Interviewees' value judgements attached to these communication channels were highly informative. For example, within the theatre environment, where patients are under anaesthesia, TNs have a lot of time to socialise and gossip. Other nursing staff by contrast typically do not have such time to socialise. Negative perceptions of gossip often focus on contexts in which there are clear separations between formal and informal communication. For instance, respondents cited examples of management sharing confidential information about staff with their colleagues, which was not theirs to share.

This type of behaviour, whereby TNs feel their confidentiality has been breached, has far-reaching consequences for open communication. Irrespective of the effects of gossip on the relationships that TNs had with their peers, informal communication correspondingly improved their ability to focus on patient care. The presence of gossip and the perceived accompaniment of bullying within perioperative teams relates to 'power relationships', as discussed by Trajano et al., (2017), which weaken interpersonal interactions and promote conflict (Trajano et al., 2017; Chang et al., 2017).

During the interviews, it was interesting to note that several participants referred to gossip as a form of bullying (see Chapter 4.4.2). The data suggested that overtones of discrimination are to be found within perioperative teams, which aligned with findings on workplace culture gossip and its marked impact on team communication (Sonoda et al., 2018; Eskola et al., 2016; Refai et al., 2017). Correlations between bullying and rates of staff burnout in gossip cases have been identified in the literature (Allan et al., 2009). Similarly, as with participants' reactions to perceived gossip in a non-English language where this was seen as being exclusionary, (see Chapter 4.4.1), Johnson (2016) explored gossip as a form of both bullying and discrimination by examining the discomfort and psychological harm arising from exclusionary practices (Johnson, 2016).

TNs provided mixed reactions regarding their experiences with management communications, as well as with their relationships with superiors. There were both positive and negative experiences, depending on the nature of the issues being shared – whether personal or practical, for instance.

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Personality types involved the style of communication, or simply the degree of familiarity, and were a factor in establishing reasonable dialogue between interlocutors.

A commonly raised communications issue was a lack of 'responsiveness' on the part of management. When TNs felt they were being listened to, they also perceived that conversations resulted in action and simultaneously improved perceptions of their work environment. Participants cited managements' follow up of their concerns in both positive and negative terms. Participants noted that their issue had less to do with communication and more with the ability to raise issues and identify changes resulting from those issues being considered; in other words, the sense of agency that comes from effecting positive change. The driver of positive experience for TNs was this sense of agency and being able to see change occurring – based both on experiences and feedback.

#### 5.3.5. Authentic leadership from managers

A key driver of satisfaction for TNs was a sense of 'mission' unmediated by management. Managers were perceived positively when their actions were validated by this self-perception on the part of the TNs, assisting them in achieving their 'mission', unfettered by perceptions of external instruction. Unblocking and enabling, as valid roles of management, were viewed positively by interviewees in terms of improved management, organisation, and administration of TUs' operational efficiency. This led to a more positive experience for the TNs.

Bradley and Griffin's (2016) study, despite its relatively small sample size, provides informative insights into managers' role in driving change. Participants discussed their managers' responsiveness to rapidly evolving situations within the theatre itself, such as their response to bed shortages amid concern for patient welfare (Bradley and Griffin, 2016) (see Chapter 4.3.1). Participants also underlined their frustrations over managers' lack of response to equipment shortages (Siirala et al., 2019). The data presented in the findings of the thesis highlighted the transactional relationships that exist between TNs and their superiors, where managers are viewed positively when they deliver on practitioners' requests, and negatively when they fail to do so. Subject interest and skill acquisition strongly aligned with those of Fallatah and Laschinger's (2016) survey of Canadian graduate nurses, in which leadership authenticity appeared directly linked to levels of job satisfaction, through support mechanisms for nursing autonomy and collaborative practices (Holland et al., 2013; Fallatah and Laschinger, 2016).

The reviewed literature identified positive leadership qualities as being associated with job satisfaction, emphasising staff's desire for relationships of trustworthiness, recognising, and addressing the issue of burnout and introducing measures that encourage employee empowerment.

Top et al. (2015) explored organisational trust, that is, staff trusting their employer, and found that degrees of job satisfaction were direct predictors of organisational commitment (Top et al., 2014). This suggests staff identification and involvement with work. The benefits of a human-orientated approach to management have also been found by others (Bawafaa et al., 2015; Fallatah and Laschinger, 2016; Yin and Wang, 2018), however, TNs did not explicitly link the emotional intelligence of particular managers to multiple improved outcomes.

Empowering TN staff to be involved in decision-making processes is fundamental to maintaining TN's job satisfaction, motivation, and efficiency; as well as in preventing burnout (Choi et al., 2016; Morsiani et al., 2017; Boamah et al., 2018; Price et al., 2018). According to Bawafaa et al. (2015), resonant leadership and structural empowerment together accounted for 36% of the variance in job satisfaction across participants. The interviews did not yield sufficient evidence to definitively state if this finding was replicated among TN participants, nor does it reveal how they made decisions. For the TNs, the perceived positive contribution of management was in supporting frontline delivery; not enforcing rules on issues or managing budgetary constraints.

Previous research on managers' impact on TNs perceptions of their workplace compared favourably with wider hospital-level factors. According to Arrogante and Aparicio-Zaldívar (2017), no matter the levels of stress and work within a TU, managers that are encouraging of resilience and are engaging and sensitive are vital to minimising staff levels of emotional exhaustion and, conversely, enhancing feelings of personal accomplishment (Arrogante and Aparicio-Zaldívar, 2017). Implicitly, interviewee accounts frame staff who feel isolated against a team whose attitude is 'all in it together'. A phenomenological investigation by Karanikola et al. (2018) similarly shows that positive feelings about the self are associated with wellbeing, perceived clinical effectiveness, and adequacy of professional skills. Although there are factors positively influencing TNs' perspectives on their role, research indicates there are factors that negatively impact the team's day-to-day operating of TUs (Karanikola et al., 2018).

#### 5.4. Theatre Nurse Experience: Negative Drivers

Although there are identifiable factors leading to TNs' positive perceptions of their work environment, there are factors frequently cited as contributing to their negative experiences. These often mirrored the positive factors of drivers of satisfaction. Central themes revolved around the issue of the team's poor performance, feelings of exclusion, staffing and resourcing issues, mismatched skill sets among team members, poor relationships with managers, limited recognition and compensation, equipment 98
and patient safety, and limited development and training opportunities. These factors impact individual and team motivation and performance and require practice recommendations.

### 5.4.1. Underperforming or exclusionary teams

The importance of effective teamwork for achieving the primary goal of patient care is also significant in enhancing a positive workplace experience. However, group membership is not a one-sided affair. Strong, coherent teams can operate by excluding those who, for one reason or another, are not perceived as 'fitting'. This opens the potential for teams to define themselves by exclusion as much as inclusion, in line with the SIT theoretical framework. Importantly, teams are seldom single; instead, they are a *locus of individual identity*. According to SIT, being part of a group is a key source of pride and self-esteem (Tajfel and Turner, 1979). Being part of an identifiable group, such as a profession or a team of TNs, does give a sense of identity. However, 'team' is a fluid concept; people can belong to several groups simultaneously – personal, professional, cultural, or linguistic. That there are tensions between competing identities was self-evident from participating interviewees' responses.

The SIT is a useful theoretical framework that assists in shaping our understanding of response. As Tajfel and Turner demonstrate, a key function of in-grouping is the construction and strengthening of self-esteem among the group membership (1979). TN respondents' fluidity was evidenced in terms of how, and where, they identified themselves. When their self-esteem was bolstered by reference to their professional status as a TN, for example, it is with this that they choose to identify. When bolstered by other factors – for instance, cultural identity – it is that group to which they identify with and belong.

Participants also sought to identify themselves in opposition to identifiable 'out-groups'. A central hypothesis of Tajfel and Turner's SIT is that members of an in-group will seek to emphasise the negative aspects of an out-group and by doing so enhance their own self-image (Tajfel and Turner, 1979). This latter point came across clearly in the interviews, where TNs identified themselves in opposition to other teams, sub-teams within the same TU, or more commonly, 'management'. From the interviews, it was clear that team coherence was often constructed in opposition to 'out-groups', revealing a siege mentality that reflected a wider perception that the institution, or profession, did not indeed sufficiently value the role of TNs.

Management was not the only 'out-group' identified. The presence of non-native English speakers was another frequently perceived obstacle to team coherence (see Chapter 4.4.1). Participants repeatedly cited excluding foreign language usage as divisive, tacitly acknowledging the linguistically

specified social identities that become salient in a context where unknown languages are spoken. The perceptions of several TNs matched the predictions of SIT; outsiders perceive 'in-groups' as being where information and support are shared, but which the 'out-grouper' feels unable to access because of their inability to participate within the in-group. Although research has focused on teams as single, solid entities, understanding requires acknowledgement of teams' complex natures; how wellbeing stems from a sense of collaboration and membership among TNs, for example. Without that, understanding remains incomplete.

Those outside linguistic or cultural in-groups were reported by participating interviewees as receiving a lack of respect, resulting in reduced cohesion in team dynamics and less fluidity in patient care. The alienated felt excluded from workplace communications, feeling that patient safety was being jeopardised during handover sessions from one team to another as presented in Chapter 4.4). Native English speaking TNs felt that the use of a non-English language negatively impacted the achievability of work objectives – even if exclusions were unintentional.

The dynamic was perceived by an interviewee as being an inevitable consequence of multicultural teams (see Chapter 2.6.2). Clayton et al., (2016) explored communication within a multicultural TU and perceived corresponding difficulties with negative impacts on patient care and work environment (Clayton et al., 2016). Applying the SIT lens establishes that in-group identification leads to discriminatory behaviour and conflict (Rubin and Hewstone, 1998). In this study, some group members discriminated in favour of their in-group through a desire to maintain or establish a positive social identity: the 'self-esteem hypothesis'.

As non-native speakers of English can feel excluded from interactions between native English speakers within the TN team (see Chapter 4.4.1), sharing their perception of promotion as being determined by English-speaking ability suggests feelings of alienation are a possibility. For instance, according to Baptiste (2015), internationally educated nurses encountered workplace discrimination, which acted as a direct obstacle to career advancement and professional recognition (Baptiste, 2015). Discrimination directly impacted TNs' psychological and physical wellbeing and their ability to provide quality care, as well as affecting healthcare teams' organisational costs. Although Baptiste failed to examine migrant TNs' experiences of discrimination, the behaviour of non-English speakers was shown to be frustrating in the experience of staff members. As 63% of the participants interviewed were not from the UK but were born in India (25%), the Philippines (25%), and Spain (13%), it is a social dynamic fraught with possibilities for frustration and conflict (Baptiste, 2015). Findings in the data in this current study showed that group membership can create feelings of support and inclusion, as well 100

as isolation and exclusion. The group functions as an enhancer of workplace experience, where exclusiveness is a negative aspect of social dynamics.

### 5.4.2. Staffing and resourcing issues and mismatched skills

The negative impact of unsatisfactory staffing levels on delivering the level of care required and aspired to by TNs was a recurrent theme of the interviewees (see Chapter 4.5.5). Staffing deficits have implications; working outside areas of expertise, pressure to work unsociable hours, reliance on agency/bank staffing, and causing stress for practitioners (Oblak and Skela-Savič, 2017) – each of these were cited by the participant(s) when expressing concern at reductions in manpower. The underlying structural cause was a wider funding issue affecting NHS Trusts.

While expressing frustration at managers in some areas when it came to resourcing, TNs generally empathised with pressures that managers faced with a limited budget as discussed above (Section 5.3.5). This understanding led to a general willingness to work beyond contracted hours and act flexibly when it came to covering areas that might not match their specific skills set. However, such flexibility had limits, as reported by the participant PB (see Chapter 4.5.1) and took its toll on perceptions of the work environment.

Interviewees expressed frustration that managers did not acknowledge the additional workloads and degree of personal 'sacrifice' TNs undertook (see Chapter 4.5.1). As is evident from other similar studies (van Oostveen et al., 2014), the TNs wanted change. Staff shortages were attributed to problems regarding authority. These included conflicting interests between nurses/head nurses and management/physicians as well as autonomy; nurses not being involved in decision-making concerning strategic goals and policies such as staffing. TNs also recognised the contribution that managers make, in terms of supporting the team achieve their own acknowledged goal of delivering frontline patient care.

Multiple participants, in different ways, revealed sentiments equivalent to 'not being appreciated' (see Chapter 4.5.1), which were expressed in terms of being excluded from key decisions, lack of pay or training, or the absence of gratitude from senior staff. A specific consequence of staffing pressure is identified as a mismatch between skills and requirements for a TU's day-to-day workings. As the theatre environment is multidisciplinary in nature, the high skill set required is a source of job satisfaction for some team members.

Due to the specialised environment, being asked to work in areas of mismatched skills was a source of tension. Participants confirmed it as a cause of stress in their work environment, and a lack of skills

through mismatching resulted in a failure of patient care (see Chapter 4.4.4). For instance, if a mistake was seen as 'the fault of the scrub nurse', it was located with, and attached to, a specific individual. Such downward pressure adds to stress levels experienced by TNs, particularly when the consequences of mistakes on patient care, and patient outcomes, is potentially so serious.

TNs saw the mismatching of skills and tasks not as a mistake of the individual but in terms of failed communication and planning earlier in the process. Mismatches were perceived to be the fault of management and/or organisation within the department, rather than the individual theatre nurse. As lines of accountability are perceived by TNs, successes of their own, or among the others, were considered as personal, and failures organisational (see Chapter 4.5.1). This relates to 'management' being constructed as an 'out-group'; providing paradoxical coherence to the practitioner team. Where mistakes were seen as the consequence of a mismatch of skills, TNs regarded it as stemming from managements' lack of understanding of the skills they had or being excluded from discussions when decisions were made on effective resource allocation.

The impact of exclusion from discussions emerged on a series of occasions during the interviews (see Chapter 4.4.2). There is potential for the marginalisation of TNs during key discussions, profoundly affecting the level of patient care. The value of recognising expertise and involving practitioners' discussions has a significant positive impact on patient outcomes (Matziou et al., 2014). The absence of such involvement causes frustration and potentially poorer patient care. However, a substantial frustrating element stems from issues of status, recognition, and the validation of expertise (see Chapter 4.5), which TNs perceived themselves as having. However, the specialist skills required in the environment of the TU led to mismatching between skills and tasks, more than in other areas of nursing. The negative impact of staff feeling unprepared for specialised and complex tasks is consistent (Higgins and MacIntosh, 2010; Vowels et al., 2012).

Unlike studies focusing on the impact of conflict within teams (Ralph et al., 2013; Bezemer et al., 2015), the challenge of training is that of building and maintaining an adequate skill set for competence within the theatre. In SIT, those without such skills – for example, staff from agencies – are excluded from the collective sense of membership within the TU. This tendency was identified by Bezemer et al., (2016), who noted the negative impact of transient teams on nurse-surgeon collaborations within the theatre environment. The use of agency and bank staff were identified by participant interviewees as negatively impacting the cohesion and overall effectiveness of the team.

Poor decisions relating to responsibility-assignment were sometimes attributed to day-to-day shortcomings of managers (Williams, 2017), which is a wider issue within the NHS workforce (see Chapter 1.4), while decisions regarding resource-allocation were contextualized by limited government funding (see Chapter 2.3.1). Participants were acutely aware of the limitations within which the service operated. When discussing resource issues, for example, the 'in-group' came to include managers, while the more senior institutional, or governmental tier, became the 'out-group'.

### 5.4.3. Poor relationships with management

The social identity model of a team achieving coherence through the identification of an out-group is seen most clearly in the sometimes-dysfunctional relationships that TNs have with managers. PC's complaint about poor, unsupportive or unresponsive managers (see Chapter 4.4.3) received support from the other TNs' reports of failure to address allegations of unprofessional behaviour such as bullying or gossip. This led to a degree of dissatisfaction and distrust towards senior managers, who were perceived as a barrier to, rather than an enabler of, the delivery of effective patient care (see Chapter 4.3.3).

Recognising such concerns, based on their self-perceptions of themselves as primary care providers within a culture of distrust towards decision-makers, and against the backdrop of the hospital's organisational hierarchy, TNs occupied a key position in obtaining managerial support. Resolving issues related to fundamental differences in viewing hierarchy. Although managers are nominally more senior than TNs, as nurses are closer to patient care they believe they have authority and that their opinions are weighed carefully by those making internal hospital decisions. TN's perceptions of their 'mission', and of themselves being ultimately accountable, lead to difficulties in communication with those whose role it actually is to pursue the mission goals of medical treatment and provision – and so negative relationships arise between team staff and management.

Participants reported negative perceptions of line managers, and of those responsible for their professional development with the TU. Moreover, specific actions taken by management that had a negative impact on levels of trust between team staff and managers were reported by participants. A recurring sub-theme among interviewees was the misuse of confidential information and the querying of abilities and professional expertise of TNs (see Chapter 4.4.3). Managers are important in creating a positive work environment and are the basis for developing recommendations (Radford and Fois, 2018; McCance et al., 2011).

### 5.4.4. Limited recognition and compensation

A recurrent sub-theme among interviewees was the perceived lack of recognition for the work they carried out. In this regard, TNs perceived a broad lack of support for career progression, assistance with applications, and the sharing of opportunities for advancement. The nature of their work environment, which did not allow time and space for discussions centring on career progression, was perceived as limiting development and restricting opportunities for promotion. This was exacerbated by the promotion process being perceived as being unfair and not always transparent; determined by 'favouritism' on the management's part rather than through performance reviewing to ascertain staff suitability. In SIT, 'favouritism' is a basic tendency of in-group behaviour, demonstrated in the minimal group paradigm. Positive attributes of those with shared social identities are exaggerated and negative traits underplayed, while there is an inverse exaggeration of negative traits with those who do not share the social identity.

Feeling salaries were incommensurate with the work demanded of participants, TNs expected management to recognise they were underpaid for the skills they possessed and the responsibilities that they had, which was explicitly mentioned as a motivational issue for the unit. For a considerable period, incremental salary increases, in other words, payment in line with other employees in similar industries or those evaluated as being on the same level, had remained frozen for a long period by the government. This was identified as a further aggravating factor for nurses' frustrations.

The finding of dissatisfaction with the reward structure was seen as directly impacting patient care. Indirectly, unsatisfactory pay led to a failure to retain staff, resulting in an over-reliance on agency staff. This had affected continuity, familiarity, and collaborative efficiency to the detriment of care quality. A lack of feedback, and/or positive affirmation from managers, also left TNs feeling that their skills, expertise, and contribution, were undervalued. The demonstrates an important need for TNs to be recognised as a distinct specialisation and professional group, which was a clear issue and finding highlighted in the interviews.

### 5.4.5. Equipment availability and patient safety

TNs frequently expressed frustration at equipment shortages that affected their ability to deliver quality care. Participants reported situations with a disproportionate amount of time spent obtaining equipment, which led to less time spent on patient care, delays in treatment schedules, and an increase in pressure and stress. Lack of equipment also had an impact on the patient experience; for example, patients being kept in the unit for extended periods because they were unable to be returned to a ward.

In reflection of the interview data, it was apparent that the importance of the TU was overlooked within the wider hospital environment, particularly when compared with services such as oncology and cardiac care. Within the SIT model, the 'in-group' was then extended to include everyone in the TU – including managers – while the 'out-group' became 'the rest of the hospital'.

Managing the flow of patients in and out of the unit was also flagged as an area of concern. A consistent suggestion by interviewees was of tension between managing patient flow and ensuring they were safely cared for (McGarry et al., 2018). Keeping to the patient list while balancing patient care with schedule and time constraints was a recurring sub-theme regarding the difficulties TNs face (Bruckenthal and Simpson, 2016). TNs were conscious of the need to address patients' complex needs as being a fundamental part of their role, which sometimes entailed sacrificing requested leave or cancelling social plans to remain and complete the treatment for the patients on the list; further adding to workload pressures.

### 5.4.6. Staff development and training

Repeated dissatisfaction with Continuing Professional Development (CPD) provisions, and other training opportunities available to TNs, was viewed as primarily being a consequence of the financial limitations within which the department operated. Pung and Goh (2017) confirm a lack of professional development opportunities with a sense of feeling undervalued as a key driver of dissatisfaction (Pung and Goh, 2017). The negative impact on TNs' perceptions of the environment within which they worked remained palpable to them. Staff often came to the TU with limited knowledge and experience. Sessions in theatres were not typically included as an elective course component for most nurses' training, although there are exceptions, which in recent years has become a filled CPD gap (Beitz, 2019; Plank, 2019).

More time needs be allocated to new members of staff to acquire the necessary skill sets for operating within the specialised environment of the operating theatre, particularly given the limited opportunities for training that are a result of staff shortages. Within the participants' concern of status issues relating to their expertise remaining unacknowledged was a need to receive validation from peers, senior clinical staff and managers. Their wider perception was of a desire for increased training to allow the fulfilment of TNs' roles more effectively, and thus enabling them to provide additional assistance to the surgeon.

Work pressure within the TU is accentuated by a lack of skills among staff, which contributed to further stress and absences, resulting in the cancellation of leave, and working longer hours to make up the shortfall. There was a feeling of blackmail; if the members of the team did not sacrifice their time to care for patients, there would be a negative impact on patient safety, which was their self-avowed 'mission' to ensure. Although the standard organisational response was to fill gaps with agency staff, they often lacked the necessary skills, and would therefore have a disruptive impact on team working practices and weaken overall coherence. Interviewees' data was not entirely negative regarding agency staff, however, with the team noting that experienced returnees became valued members of staff. This boosted morale levels through TNs perceiving that they were successful trainers.

### 5.4.7. The impact of negative experiences

Factors contributing towards negative workplace experiences impact individual TNs, patient care, the team, and the TU within the wider organisation. These impacts were broadly in terms of job satisfaction, low morale, and stress-related wellbeing. The psycho-social implications were a specific interviewee sub-theme, and studies within the literature reviewed identified inefficient interpersonal relationships as a key source of occupational stress (Weldon et al., 2013). Ineffective communication affected teamwork, rather than just individual well-being. However, it is impossible to disaggregate, given the pivotal role that effective, functioning teams have in determining wellness within their work environment.

Workplace stress in some cases was the key contributor to burnout and mental health issues, as evidenced in the reviewed literature. Here, various studies note that nurses, more than in other speciality, are at greater risk of burnout from stress-related mental health issues because of regular exposure to patient suffering (Hunsaker et al., 2015) and the constantly demanding nature of their work (Bjorn et al., 2015). Individuals working in stressful environments, such as operating theatres, are more likely to experience mental health issues (Yaribeygi et al., 2017), especially TNs (Flodén, 2017; Gao et al., 2017; Smith et al., 2018).

The impact of working in such a high-pressure environment was raised by interviewees in terms of their experience of specific effects of stress and burnout, reducing energy levels and motivation and having a deleterious effect on personal relationships while producing a poor work/life balance. In contrast, the literature reviewed physiological effects of stress on brain function, attention span, and decision making (Sandi, 2013), as well as the incidence of physical illnesses or complications (Nabavizadeh et al., 2011; Rozanski and Berman, 2016). This suggests that TNs' avowed 'mission' to

care for patients was, indeed, self-sacrificing because their main preoccupation was in maintaining performance levels.

Two of the TNs interviewed stated that they had actively considered leaving their roles because of burnout and mental exhaustion. The latter aligns with findings by Sillero-Sillero and Zabalegui (2019), whose study reveal that those experiencing burnout are more inclined to leave their jobs because of the practical and emotional challenges of their role. Attrition rates follow from the loss of team members; remaining staff are also more likely to leave (Sillero-Sillero and Zabalegui, 2019; Monahan, 2015). Data exists on the role of personality traits as a mediator of burnout rates (Perez-Fuentes et al., 2019) which reflects on neuroticism – a strong corollary for those with a tendency for burnout.

Participants noted that stress, resource issues, and lack of training were all felt to be issues that affected patient care. This reflects the close and complex relationships existing between patients and TNs, who view themselves as a champion, an advocate, and even a 'proxy' for the cared-for patient. The participants regarded the lack of support, equipment, training, and communication as impacting the quality and consistency of care received by their patients.

# 5.5. Study Limitations

This study has limitations. The study was undertaken in one medium sized hospital and with a small sample size. This means the findings may not be representative of the diverse TN workforce generally operating in TUs throughout the UK. Additionally, this factor may have impacted the conclusions drawn from the small sample. All the participants in this study were female TNs, as no male TNs volunteered to participate. This means the perspectives of male TNs are not represented, which may offer an alternative perspective. With respect to the findings relating to TNs experiences and perceptions of in-group and out-group phenomena, and of a division between management staff and TN working on the floor, further research focusing on the perspectives of operating theatre senior managers may offer alternative insights.

The operating departments are fast paced, dynamic environments consisting of multi-cultural, multidisciplinary teams, which can consist of and exhibit a range of diversity in behavioural patterns. Further research is needed to explore multiple sites across different regions and possibly private vs public service centres across the UK to establish comparisons across a verity of healthcare contexts. This would then enable an investigation that tests the findings of this study to establish if they are representative of the experiences of theatre nurses working in operating departments in the NHS.

Regardless, there remains limited research in perioperative nursing, and the views of ODPs would be interesting to compare to this research. It would also be interesting to conduct research in two TUs, one in a foundation trust and one elsewhere.

### 5.6. Recommendations: How Theatre Nurses' Work Environments can be

# Improved

These recommendations were informed by the findings of this study and aim to improve TNs' workplace experiences. Areas for improvement include practical and operational support from management to better prepare and enable TNs to be better prepared to navigate their work environment and the more 'normal' range of challenges one might expect when working in a high dependency unit such as an operating theatre. The health service provided by operating departments by their very nature carry the potential for unpredictable emergencies, work pressures and flows. Improvements in the following areas are required: cohesion of teams, collective decision making, management and career development, training and CPD, and overall communication and communication practices in the TU.

Positive and negative factors associated with teamwork impacted TNs' experiences in the workplace. Some teams work in positive, supportive environments, while others can be dysfunctional, particularly if team relationships are fractured, and/or staff feel overworked and excluded. Moreover, teams that provide members with a supportive environment elicit converse emotions in out-members. The data illustrates that TNs approach teams with a degree of fluidity. They are simultaneously members of a range of different teams – professional, organisational, departmental – as well as of the TU itself.

The nature of team dynamics' influences on the workplace experience is the basis for formulating practical measures mitigating factors leading to dysfunctional and fractured teams.

It would be helpful if management created time and space in the schedules of the staff, they oversee for activities designed to improve teamwork and communication. The TU's busy environment creates challenges in terms of the availability of training and development, as well as the space needed to focus on issues such as effective communication and teamwork. The absence of time and resources in this regard represents an organisational deficit, which has long-term impacts on costs – in terms of retention and absenteeism, and on patient care. Emphasis on social integration could improve work culture through social gatherings (Clayton et al., 2016), inclusive of migrant nurse commonalities for mutual support, as recommended by Schilgen et al., (2019). However, there are logistical challenges in the delivery given the shift patterns within a TU and the limited leisure time TNs have.

As it stands, senior management training, focused on providing overseers with a sophisticated understanding of the costs and benefits of investment in professional development and support, leans heavily on the use of bank nurses – a cost reducible by attracting and retaining more TU personnel. Current expenditures focus on short-term effects, in other words, on specific shifts in need of quota filling, rather than obstacles to retention.

Integrating management more effectively with teams requires strategies and approaches to be in place. Shared Governance Forums are an organisational model used in nursing divisions, consisting of a decentralised system of management in which all the nurses make decisions. Managers advise, consult, coach, mentor, and may or may not have veto power. This mandates collaboration among the nurses on the unit and creates a high degree of autonomy, promoting collective decision making, engagement, and empowerment of teams. However, there is a central fault line, where teams define themselves in opposition to management, and this can negatively impact directly on patient care. Interviewees expressed reluctance to flag up concerns about colleagues' performance to managers because of worries that such concerns would not be dealt with confidentially.

### 5.6.1. Collective decision making

TNs felt their expertise and input was not always sought at appropriate times, which led to decisions about resourcing, or allocation of staff, that they experienced as being 'done to them', rather than 'done with them'. This reflected a broader set of concerns about how they were regarded within the organisational hierarchy. Involving practitioners is not simply for morale and retention, it leads to positive outcomes for patients (Matziou et al., 2014). There is an organisational benefit to collective ownership of decisions; TNs must have a stake in making difficult decisions on the allocation of resources that managers wrestle with: a recommendation entailing a cultural shift, which also requires preceding cultural changes. The adoption of a more collaborative approach to decision making may address the 'us and them' mentality evident in the interviewees, moving TUs towards a team model inclusive of managers rather than defined in opposition to them.

Building on recommendations by Trajano et al., (2017), who argued for collective decision-making facilitated through regular meetings to address staff issues, broader organisational issues focusing on more specific issues should be addressed, such as error reporting to foster a culture of safety (Chard and Tovin, 2018). Building on the work on staffing issues done by Van Oostveen et al. (2015), the

absence of nurses from the decision-making process was specifically highlighted as having a deleterious effect on retention.

### 5.6.2. Management and career support

That the experiences of TNs were heavily influenced by which team they worked in is corroborated by the findings of Radford and Fotis (2018). Of particular significance are the positive and negative roles played by mentors and managers, as well as the workplace culture and service pressures produced by NHS cuts, managers' teaching methods, and the amount of time available for CPD. However, TNs invariably presented management as an obstacle to, rather than an enabler of, effective patient care. From seeing managers as 'solvers of problems' or 'distributors of resources', to seeing them as occupying more of a coaching role – where they work with TNs to achieve the best outcomes – is a cultural shift requiring knowledge of individual differences and a multi-faceted approach towards dealing with the diversity of teams managed. The Boston Consulting Group (BCG) and the Technical University of Munich found a statistically significant positive relationship between the diversity of gender, industry background, and country of origin and innovation (Lorenzo et al., 2017).

Structured support for TNs' career development is key to their acquisition and usage of skills. Feeling undervalued and underappreciated, TNs need consistency in their careers, for instance, through Personal Development Plans and dedicated time in one-to-one discussions about their future path.

An unhealthy workplace culture specific to TUs emerged in the data, related to gossip, bullying, and mismatched diversity. Considering this, managers, TUs, and other staff are indicated as candidates for remedial training – to consider the benefits and challenges of multicultural teams and to deepen the understanding of each other's key skills and roles. The development of such 'cultural competence' was also a recommendation made by (Oikarainen et al., 2019).

### 5.6.3. Training and continuing professional development

A more supportive environment for the career development of TNs means focusing on training and CPD. Training develops useful skills of delivery. Interviewees identified stress in the workplace as caused by a mismatch of skills with tasks. It is of vital importance to TNs that they are professionally valued; that is, that the organisation invests in their skills because they are important members of the team. When considering training needs, there are significant skills gaps not just among TNs. Unless the gaps in managers' skill sets related to motivating their teams are addressed, it is unlikely that the team will perform to a high standard. Any skills strategy needs to have a broad enough scope to address the needs of those who serve the deliverers.

The TU is specialised and distinct, with its own set of pressures and rewards, which requires trainees to develop skill sets. In boosting the prominence of theatre work, nursing courses emphasise skills training, encouraging personnel into the TU at an early stage in their professional development. Although theatre sessions are not typically available as elective course components at present, increasing the prominence of TUs within the hospital environment boosts graduate awareness and interest in theatre nurse work (Ball et al., 2015).

Even if trainees choose not to pursue theatre nurse training as a career path, the benefits of expanding nursing training courses to include a theatre elective component raises awareness of the TN field, and so facilitates a process of demystification. Professional bodies, such as the Association of Perioperative Practice, support the demystification of theatre nursing.

#### 5.6.4. Improved communication

Managers, as well as TNs, need support to communicate more effectively with one another. Communication is not simply 'telling people something', but relies on learned sets of interpersonal skills, which are as much about listening as they are about speaking. Systems, processes, and commitments around communication may be in place, but based on the interviews conducted, inconsistency plagues such forethought. The development of more open formal communication routes is recommended. Improvements in this area would displace informal communication routes, which develop in the absence of formal channels. Notably 'gossip culture', which participants often referred to, is a sign that teams are not working effectively. Here, gossip indicates that individual team members have developed more informal communication mechanisms that fail to serve the needs of the team. A feasible departure point is the enforcement of adherence to existing systems and processes of communication for TNs and other members of the TU. Expectations of managers regarding acceptable and unacceptable behaviour need to be clear and consistently reinforced by management leading by example, and through one-to-ones where necessary.

Positive and negative factors associated with teamwork impacted TNs' experiences in the workplace. Some teams worked in positive, supportive environments, while others can be dysfunctional, particularly if team relationships are fractured and/or staff feel overworked and excluded. Moreover, teams that provide members with a supportive environment, elicit converse emotions in outmembers. The findings of this study demonstrated that TNs approach teams with a degree of fluidity. They are simultaneously members of a range of different teams – professional, organisational, departmental – as well as of the TU itself.

# 5.7. Suggestions for Future Research

It is of utmost importance that practitioners and researchers understand how TNs perceive their work environment and the issues they face at an individual level, as well as at a group level, to identify practical and informed recommendations and policy. Testing and validating findings requires a broader survey of TNs in the UK. A paper-based and online questionnaire, for example, although lacking the qualitative aspects found here, would generate a data set on which to base more policy and practice recommendations. Such an approach could adopt Perez-Fuentes et al., (2019) methodologies to analyse the personality traits of participants, which would examine TNs' perceptions in terms of their personality typologies for factors that might lessen the risk of burnout. TNs' perceptions of their role have an impact on issues such as absenteeism. Jones-Berry and Munn (2017), and the Office for National Statistics (2019) have discussed the relationship between poor staff mental health and sick days taken (Jones-Barry and Munn, 2017; Office of National Statistics, 2019).

The primary purpose of this study was to conduct a qualitative exploration of individuals' perceptions and feelings about their workplace, and to examine the challenges that they face daily. Consequently, the small sample size impacts positively on the quality of the insights afforded, which could inform a wider, more robust body of evidence in a research paper-based survey of TNs broad enough in its scope to encompass many more different voices and perspectives.

A key recommendation for future research is to draw from a larger sample size with broader representation in terms of gender, geography, experience level, and to include agency staff. It would also be useful, in this regard, to replicate this research with other TUs to identify different experiences and perspectives and to explore what they reveal about larger patterns of work behaviour and healthcare management systems. In the broader context of theatre nursing in the UK, most studies are based on healthcare systems with significant differences to the NHS, particularly other countries in Northern Europe, with significant cultural and organisational differences.

Investigating the potential for undergraduate learning and education to encourage or deter recruitment into the speciality (Schmidt et al., 2019) is likely to provide needed insights on the effectiveness of current routes into the theatre nurse profession, which could dramatically open up paths to a future career in theatre nursing.

### 5.7.1. Data dissemination

Dissemination of findings requires careful consideration as the data dissemination strategy is one in which "there is an onus on nurse researchers to inform health care providers and recipients about 112

how their study contributes to advancing nursing knowledge and practice" (Bryman, 2004, p. 731). Keen and Todres (2007) suggest that modes of dissemination that traditionally serve research communities, such as the journal article or conference presentation, often confine audiences to fellow academics (Keen and Todres, 2007). Social media has become a popular medium in which to disseminate research quickly and to large global audiences. Within academia currently, there is an expectation for researchers to hold social media accounts (such as Twitter and LinkedIn) to disseminate and demonstrate research impact (Dong et al., 2020; Keen and Todres, 2007). The results of this study will be published in a report and disseminated across the NHS and within the NHS trust. Additionally, I plan to publish in peer-reviewed journals, present my findings at academic conferences and promote the work more globally via social media platforms (such as Twitter and LinkedIn).

# 5.8. Conclusions

Exploring TNs' positive and negative perceptions of their work environment revealed strategies that could aid in improving the workplace experience. Practising professionals' views and experiences contribute to knowledge and improvement within the TU environment. In capturing practitioner knowledge, and using that to fill current knowledge gaps, future practice can be informed.

The interviews revealed the perceptions of teams working in TUs – developing an understanding of the factors is regarded as key in determining the day-to-day experiences of practice and shaped this study's specific practice-based policy recommendations. The review of the available literature demonstrated a clear gap in the limited focus on TNs' direct experiences. TNs' self-perceptions are fundamental to developing a fuller understanding of TU operation and its complex infrastructure.

Participant responses regarding the double-edged nature of team-membership, that is, in-grouping and out-grouping, led to a new understanding of training, support, and changes needed to improve the TU workplace experience. Underlying personality traits lead people into careers, and TNs are clearly individuals able to function in high-pressure environments known for inducing burnout.

Negative experiences with the leadership style of management (Sandelin and Gustafsson, 2015), low levels of peer support (Serou et al., 2017), uncollaborative theatre culture (Sandelin and Gustafsson, 2015; Kaldheim and Slettebø, 2016), poorly organised teamwork systems (Purpora and Blegen, 2015), and workload and time pressures (Kelvered et al., 2012) were associated with high rates of stress among staff, resulting in a negative impact on patient safety and outcomes.

Interviewees developed a more complex and nuanced understanding of how they self-identified as part of the team. Indeed, concepts of team membership were shown to be critical to TN perceptions. Both team and organisational cultures were central to TNs' daily experiences in their role and were difficult to address. However, practical steps include creating a supportive and respectful environment, mindful of the professional skills and expertise brought by each member of the team.

Research insights must find a direct route into practice. Indeed, the specific progress objective is to inform policy and practice, resulting in more positive experiences for TNs, higher retention rates, less absenteeism, and better outcomes for patients. TNs operate within a highly complex environment and understanding the nexus of functional relationships within that space is key to improving workplace experiences, as well as improving patient care outcomes.

The final part of this thesis presents a professional portfolio demonstrating the research journey I have taken while undertaking this study. Thus Chapter 6 discusses the portfolio and presents a personal reflection on the structural framework that underpinned this Doctorate, which was a two-year taught programme and a four-year program of research that enabled me to develop in both my professional career and as a researcher.

# Chapter 6 Portfolio

# 6.1 Introduction

In this chapter I present a portfolio of evidence to demonstrate the learning and development that has been achieved throughout this professional doctorate. My professional training and journey as a researcher was influenced and guided by the 'Vitae Researcher Development Framework' (VRDF) as this assisted by articulating "the knowledge, behaviours and attributes of successful researchers and" encouraged me to realise my potential (Careers Advisory Centre, 2010, p.62). This chapter is set out as follows:

- Section 1 provides the introduction and outline of the Vitae Research Development Framework
- Section 2 provides an overview of my personal learning journey
- Section 3 provides a discussion about the study's contributions and its potential impact on practice
- Section 4 concludes this chapter and brings this thesis to a close.

# 6.1.1 The Vitae Research Development Framework

The Vitae Research Development Framework (VRDF) was created by the Careers Research and Development Advisory Centre, a not-for profit organisation in the UK that works to strengthen research, innovation, and training. The framework identifies the characteristics of researchers across four domains, 12 sub-domains and 63 descriptors that collectively identify the "knowledge, intellectual abilities, techniques and professional standards to do research, as well as the personal qualities, knowledge and skills" that enable the development of highly skilled and effective researchers (Figure 6.1) (Careers Advisory Centre, 2010, p.2).



Figure 6-1 The Vitae Researcher Development Framework

The activities undertaken in the first two years of this professional doctorate supported me to engage with and develop the knowledge and abilities described within "Domain A" of the VRDF framework and ultimately the research project "A Phenomenological Investigation into Theatre Nurses' Perceptions of their Work Environment in one National Health Service Operating Theatre" that I then conducted in the following four years. Undertaking this 'learning in action' research process necessarily engaged me with the essential learning required and described in the remaining domains B, C and D of the VRDF to undertake quality research. Linkages to aspect covered within these domains will be referred to as they apply in the remaining sections in this portfolio chapter.

# 6.2 Overview of personal learning journey

I began this professional, work-based doctorate in 2015, while working full-time in an operating theatre at the study site. The programme structure consisted of a two-year taught component and four years of independent research. The format of the taught doctorate is structured to align with the professional practice in which research methods are applied to the professional work setting. As such, development as a researcher heavily coincides with professional development as a nurse.

This portfolio demonstrates my personal and professional development as a researcher, evidenced through eight assignments and the research project and its outputs of this PhD thesis document. The taught component of this program consisted of eight modules completed within the first two years of this program. Each module focused on the development of essential skills required for the conduct of research. This included: skills in conceiving and developing research project protocols, academic writing, tuition on research processes, techniques, and frameworks, reach writing up research findings, and presenting and evaluating professional practice. My professional journey and achievements with these modules are evidenced below (Figure 6.2).

# 6.3 Reflective Assignments

There were eight assignments completed as part of the taught component of this professional doctorate (Figure 6.2). These assignments evidence the doctorate structure and how my personal, professional, and academic skills have developed throughout the project.

fessional Doctorate 👘 ofdoc)	My Marks		
nouncements	All Marked Upcoming Submitted		Order by: Last Activity \$
dule Resources	the manual optioning optioning		
	ITEM	LAST ACTIVITY	MARK
urse Handbooks	2015 Cohort RMPP Assignment 1 Portfelio Turnitin Assignment	12-Jul-2017 08:59 MARKED	62.00
essment Submissions	2015 Cohort RMPP Assignment 2 Methodology Chapter Turnitin Assignment	12-jul-2017 08:27 MARKED	68.00
cussions	2015 Cohort Core Skills Essay Turnitin Assignment	03-Jan-2017 19:49 MARKED	63.00
ls	2015 Cohort Advanced Clinical Skills - Presentation Turnitin Assignment	22-Aug-2016 08:33 MARKED	58.00
rary Website			
iding List (Research thods)	2015 Cohort Advanced Clinical Skills - Portfolio Turnitin Assignment	04-Aug-2016 09:43 MARKED	55.00
ible Pad	2015 Cohort Research Proposal Turnitin Assignment	25-May-2016 11:52 MARKED	58.00
	2015 Cohort Research Plan Poster Ganntt Chart and Commentary Turnitin Assignment	12-May-2016 14:21 MARKED	62.00
	2015 Cohort Evaluating Professional Practice Turnitin Assignment	25-Jan-2016 14:11 MARKED	53.00

Figure 6-2 Reflective assignments undertaken as part of doctorate

The following sections briefly discuss each essay and their relevance to developing my skills as a researcher in accordance with the VRDF.

### 6.3.1. Evidenced Based Practice essay

This module exposed me to an in-depth study of the concept of 'evidence-based practice', including how it is conceived and applied in practice, and thus the practical benefits and impact of research output to practice. This aligns with "Domain D and d1" of the VRDF, which highlights the importance of engaging and collaborating with others to build a community of research practice and thus collaboratively resolve or find answers and common goals. Consequently, I was stimulated to explore and reflect on professional practice within my own practice site and consider ways to improve practice within this context. In line with Domain D (d1) of the VRDF, I consulted with my line manager at my workplace and training university, to identify areas of practice that could be explored for research purposes. This was supported by the development of a process and stakeholder map and an action effect diagram (Figures 6.3, 6.4 and 6.5). The process map (Figure 6.3) outlines the phases of care patients experience within a hospital and theatre environment, which helped to establish possible areas of inefficiently impacting TNs' perceptions of their environment.





This study's process mapIn addition, a stakeholder map (Figure 6.4) supported an analysis of the key stakeholders who had potential impacts on the role of TNs, allowing for a more in-depth understanding of the factors and populations that influenced the setting and perceptions of TNs (Shirey, 2012).



Figure 6-4 Stakeholder map of factors determining patient flow through hospital departments

The action effect diagram identifies factors within TNs' work environment that both affect and/or improve TNs experiences. The action effect diagram is goal-oriented, in which the stakeholders are assigned an overall goal to determine tangible actions that may be undertaken to achieve that goal



# ACTION EFFECT DIAGRAM

(Figure 6.5).

#### Figure 6-5 Action effect diagram

Collectively, these activities align with Domain A1 (A1, A2, A3) of the VRDF stimulating the development of knowledge and capabilities that support the practice of quality research.

The module output was an essay titled 'Effects of Work Environment in Theatre Nursing Work' and explored theatre nurses' work environment to establish TNs' overall job satisfaction. In reflection of this activity, this activity allowed me to become immersed with the foundational research skills that were needed to prepare me to undertake this research project. This included skills to establish a research problem, formulate appropriate research aims to answer a research question and finally to undertake scholarly academic writing, including a critical synthesis of the literature and reporting findings through an 'evidence-supported academic discussion paper'. This module also introduced me to 'Action Learning Sets' (ALS). This was a supportive learning strategy whereby students enrolled in the taught doctoral programme formed a student support group (which met bi-weekly or monthly), for the purposes of reflecting and discussing shared learning about research. This stimulated a

community of learning and a helpful student group to draw upon for advice and guidance. This was invaluable to helping me maintain focus and stay on track with my studies.

## 6.3.2 Employing an accurate Gantt Chart (GC) essay

The second assignment focused on managing large-scale academic projects, specifically 'employing an accurate Gantt Chart (GC)' and is, therefore, aptly suited to the management of doctoral and hospital work. The GC is a tool for creating an accessible representation of a project plan with "a series of identifiable tasks" (Needleman, 1993, p.62). Simultaneously, it illustrates the time and scheduling required to complete intermediate tasks incorporated within a tracking framework. Providing researchers with a sense of structure, GC facilitates adjustments to timelines with unforeseen obstacles or developments that impede research when allocating time to a task.



Figure 6-6 Illustration of GC as applied to this doctoral project.

Figure 6.6 demonstrates the project activity outlook timeline, which depicts the activity level over time, creating a high-level initial activity map. When used in conjunction with the Gantt chart, the plan identifies busy periods and tasks that could potentially run over a specific timeline (Figure 6.7). Similarly, the map identifies rest periods and critical milestones essential for the project's longevity.



Figure 6-7 Project activity outlook timeline

I had never developed a Gantt Chart before, as it has never been necessary in my previous roles. However, the immediate benefits were apparent. The GC gave me an overarching view of my project. As a registered nurse, I work full-time, and the GC allowed me to keep on top of my work and track any unexpected changes. Perhaps the most frustrating aspect of early GC integration was underestimating some tasks. For example, I underestimated how long it would take to gain ethics approvals from service sites. In the future, I will take this into consideration and when developing the timelines plan for such eventualities when undertaking future research. Engaging with organisations involved in research governance structures, such as ethics committees, fall within Domain C (C1) of the VDRF, and professional conduct is both a legal and ethical requirement for undertaking research. The completion of the ethics application required me to articulate the measures I would need to take on health and safety issues, security and cultural safety and public engagement measures, to ensure ethical research practice and safety toward the public, especially when working and researching within a healthcare setting (Careers Advisory Centre, 2010). I found it difficult to articulate in detail the specifics about each task and to be accurate with timeframes. Timeframes can very easily be impacted by external factors that are outside of a researcher's control, for example a global COVID 19 pandemic. This project was impacted by the COVID-19 pandemic, as my attention at the time was focused more on my patients than on finishing writing this thesis. However, the GC was a useful tool that allowed me to identify any potential flashpoints and to take immediate action when necessary. A GC is a useful tool for large scale projects, whether in academia or industry, only so far as there is a realistic timeframe and accurate information. Poor quality or unrealistic tasks in the GC can be detrimental to overall progress, motivation, and the quality of work. Fortunately, for this project the GC allowed me

to switch my priorities to helping my patients without negatively affecting this research project, as it was useful for quickly adjusting my timetables and allowed me to take an overarching view of the wider work plan.

# 6.3.3 Research Proposal essay

The aim of this module was to engage students in the research process, introducing fundamental elements of theory and providing an overview of the traditional methodologies and methods associated with independent research. This module was designed to provide a foundational understanding of the scientific research process.

During the research proposal module, I began thinking about my questions, aims and objectives in depth. In this module, I developed my knowledge by learning about epistemology, ontology, interpretative phenomenological analysis, and their use within the context of independent research. This aligns with Domain A, (A1), the development of knowledge and intellectual abilities section of the VRDF (Careers Advisory Centre, 2010). This is also where I began to develop my approach and theoretical grounding for my own research. In class, we also discussed alternative theories such as grounded theory and action learning research. As a doctorate group, we discussed numerous different approaches. As a novice researcher, it was initially challenging to grasp these new concepts and their wider implementation and significance. Through the development of an outline for my research project, I also recognised the importance of consistency and integrity in ensuring academic rigour and the successful completion of the research project. Despite successfully completing dissertations and other academic work during my undergraduate training and at a postgraduate level, I felt a sense of naivety when engaging with the complexities associated with an academic research proposal. I felt compelled to rush through this step and started the literature review and data collection. However, I quickly realised that one cannot undertake research without firstly articulating a clear and directed research proposal, that outlines each step to be undertaken in the research process (Careers Advisory Centre, 2010, Maggs-Rapport, 2001). At the same time, its primary function is to define the research question, the goals, and objectives accurately. A part of this process involves a preliminary literature review to become familiar with the literature around my topic, thinking about how data will be collected and analysed, and exploring what is needed to ensure the applicability of the research in practice. Thus, in retrospect, one could argue that the 'research proposal' was my first foray into the project. That said, it cannot be stressed enough that without taking the time to conduct a preliminary investigation of the subject matter, define the research question and methodology, the quality and potential success would have been threatened by the ever-changing nature of research.

### 6.3.4 Advanced Clinical Skill Reflective Portfolio essay

This module provided an opportunity for consideration and reflection of advanced clinical practice. It aimed to develop evidence-based approaches that underpin advanced clinical skills, thus aiding in the translation of doctoral development into clinical practice. The central theme covered was interdisciplinarity and included the development of advanced clinical decision-making skills, the ability to develop research-informed practice, the development of advanced independent practice and leadership skills.

The primary purpose for developing a portfolio as part of this doctorate (informed by the VRDF) was to force students to think critically and reflect on the importance of three readings for my research (Careers Advisory Centre, 2010). This module enabled me to advance my critical thinking skills by synthesising three or more research articles followed by an articulation of my own perspective. In reflection of my learning journey, I found this aspect of the doctorate challenging, for example defending a particular perspective can be more difficult than simply presenting it to peers. Interacting with peers following the synthesis of views and sharing it with the group aligns with Domain 2 of the VRDF (Careers Advisory Centre, 2010). This process enabled me to critically engage with the gaps in my own literature review and examine the potential for introducing bias. It allowed me to identify the significance of limitations in the work of others, including whether a particular argument has comprehensively covered or whether the benefits have been exaggerated. This module enabled me to think about why synthesising information from recent peer-reviewed papers is important and pushed me to think about how to apply this knowledge in practice. It also illustrated the importance of implementing different reading styles to identify the best article to read while identifying its scope, significance, and limitations. Finally, this task helped illustrate the challenge in assimilating the findings from various papers with current clinical knowledge and applying it in practice.

### 6.3.5 Presentation essay

This part of the module required me to present the three synthesised articles and apply what I had learnt to my research in a PowerPoint presentation. It also required me to present my findings to doctoral students at a higher degree forum. The key learning for this task was to demonstrate a critical evaluation of different evidence sources and the factors that need to be considered when adopting new clinical/professional practice, and analysis of complex, incomplete or contradictory information that informs the implementation. This learning experience supported me to develop my public speaking skills, my skills in presenting research data succinctly and build confidence to disseminate my research to a large audience while keeping the audience engaged. Feedback from my supervisors was positive, however there were areas for improvement. I found this feedback highly valuable in supporting me to hone my public speaking skills to disseminate results thus help me develop skills for presenting at national/international conferences. It also supported me to develop an action plan for future learning. This aligned with Domain 4 of the VRDF, which is focused on the skill sets required to engage with influence and impact (Careers Advisory Centre, 2010). On reflection, the key things that I learnt as a result of this experience was to keep your information on the slides brief, to the point and to avoid repetition. It's also important to carefully consider the key messages you want the audience to take away and consider the 3 Ts structure for presenting findings: Tell them what you plan to tell them, then tell them what you said you would tell them, and finish by telling them what you just told them, so they don't forget what your just told them at the end (Ferraris, 2015) Secondly, practise, practise so you don't go over time, as this allows time for questions and discussion.

### 6.3.6 Core Skills Essay

The core skills module facilitated the development of academic writing skills within the context of my research. I was required to write a paper that discusses my research, which would hopefully form part of the final thesis. This module aimed to encourage students to apply understandings about research methods to their research topics, while developing the deliverable an evidence-supported academic article. Upon completion, I felt proud of myself results as this was the highest mark I had achieved so far, which was during my second year of study. I felt I had honed my critical thinking skills and developed the abilities required to synthesise the literature, and my confidence as an independent researcher was building. In this module, I learnt about theoretical frameworks that inform the study design and practice of research. I presented a critically analysed and synthesised discussion research paper, however I was also exposed to learnings about developing a research proposal and how to conduct literature reviews. These experiences helped me to develop persuasive writing skills through identifying critical arguments and using data to support my argument.

The activity of developing a research proposal supported me to develop the essential research skills needed when searching for research problems, designing research questions, designing a research study and drafting a clearly articulated research proposal, which are the essential skills required to become an effective researcher. They also align across several domains of the VRDF framework, for example Domain C research governance and organisation (C2), research management; Domain B knowledge and intellectual abilities (A2), cognitive abilities; and Domain D engagement and influence and impact (D1), working with others (Careers Advisory Centre, 2010)

This enabled an early identification of key philosophical theories, which scaffolded the arguments and allowed for an alignment of the findings within theoretical frameworks that illustrated their application in practice. In addition to the stated module's goals, the goal of this writing was to articulate a clear and decisive argument underpinned by a solid theoretical framework to promote robust and clinically relevant research findings to inform practice. At this stage of my learning, I began to feel more confident that everything was coming together, and my research was taking shape to become a reality. This was an encouraging, exciting, yet scary, time for me. This essay included a literature review, which helped to identify a gap in the knowledge, thereby enabling the research to take place.

### 6.3.7 Research Methods for Professional Practice essay

This purpose of this module was to develop students' skills and knowledge in pursuing the proposed research and to provide a good grounding in research design and methodologies, as well as offering information on a broad range of methods and approaches. In essence, it built upon my knowledge from previous modules to identify the philosophical underpinnings, taught me about research methods and tools such as data collection, and offered insights into ethical research practice and the process requirements for the conduct of a research study, including consent, participant confidentially and data protection. From the research proposal and associated work to date, the philosophical structure, arguments, and overarching structure was developed. I found this module challenging at times, particularly when trying to come up with the best methods and study design for my proposed project. I wanted to produce quality research whereby findings were significant, of a high-quality and in keeping with the narrative I was crafting for the research approach chosen. Above all, I wanted to ensure my findings were of a high quality and produced an analysis supported by my theoretical framework and philosophical underpinnings. The second challenge I encountered when undertaking this study was applying consistent coding across the data analysis phase when undertaking the thematic analysis. I achieved a high mark for this essay, which was encouraging as this work would form one of the first chapters of this thesis. It was, I believed, the most significant piece of work I had carried out in the taught program at that point in time. From this point, I developed consent forms and participant information sheets, which was exhilarating because I knew I would soon be collecting real data. I also started drafting my research approach, which later formed my methodology chapter. In this essay, I also learned how to format my chapters and learned how essential it is to keep separate

versions, as sometimes I would forget which version I was working from. These experiences align with Domain B, personal effectiveness (self-management B1, personal qualities, B1); Domain D, engaging with influence and impact (D3 and D2), communication and dissemination and (D1) working with others (Careers Advisory Centre, 2010).

### 6.3.8 Research Methods for Professional Practice – Reflective Portfolio essay

The final assignment in the taught program was the 'Reflective Portfolio'. This involved a personal reflection of my professional development in line with the Vitae Research Development Framework (VRDF, 2010: 2). This facilitated me to identify professional academic strengths and prioritise my ongoing professional development. The section of the VRDF chosen was A1.1 (subject knowledge) and A1.4 (information seeking), which were chosen as they had already been built upon in the provisional literature review. Additionally, information seeking (A1.4) was an area of expertise that I wanted to build competency and proficiency during the doctoral progress (Careers Advisory Centre, 2010). Thus, I undertook a reflective evaluation of my skill development and experience and as a result identified actions for ongoing professional development. I viewed the VRDF descriptors A1.1 and A1.4 as critical drivers to my professional development. It was at this point that I became involved in the Action Learning Sets, as outlined above. The VRDF is a useful tool to support emerging researchers to focus on key areas (Careers Advisory Centre, 2010). As I continue through my independent research, I will continue referencing the VRDF. At this stage of my career, I feel I have developed a good foundation in developing researchers.

### 6.4. Study Contributions and Impact on Practice

The findings of this study are relevant to the clinical practice area of theatre nursing and have led to direct impact on the work environment of those who participated in this study. The recommendations outlined in the discussion chapter (Chapter 5) were presented to senior management at the study site, leading to the creation of tangible, evidence-informed, practicable strategies to effect positive change, thus aligning with Domain D (D2, engagement, influence, and impact) (Careers Advisory Centre, 2010). My findings address a gap in knowledge with respect to perioperative practice, shedding light on theatre nurses' lived experiences of their work environment. In this regard, my work contributes to the conceptual understanding of perioperative nursing. The study's design and methods used represent a unique approach in which to explore TNs' subjective perceptions and details of their day-to-day work that are under-reported in contemporary studies. The findings also have relevance for

policymakers and managers, and an in-depth, evidence-led discussion reporting these findings may result in a real workplace environment change

My development as a researcher has dramatically altered how I approach problems encountered in clinical practice. I have developed an understanding of the value of evidence-based practice beyond that defined in legislation or codes of conduct, the importance of perspective and, perhaps most importantly, the value of planning. Through carrying out this research, I have also had to closely consider my own leadership style and the possible impact it may have on my teams. This observation is supported by research dealing with the nursing environment and the influence of management on efficiency and well-being, as well as documented leadership styles. While some authors suggest that research findings "often end up on paper rather than in practice and in the actual treatment and care of individual patients" (Needleman, 1993, p.10), this is not the case for this research. I have begun to apply the knowledge imparted throughout the trajectory of this professional doctorate, as well as from the research findings, into my own day-to-day practice. As I currently hold the position of Head of Department, this places me in the fortuitous position of being able to enact organisational change that draws directly from the research findings. The following sections illustrate how such change was implemented within my department as evidence of how my research has advanced professional practice.

6.4.1. Recognition from external agencies: validating the importance of the work Following presentation of the results of this study to senior management and other stakeholders at the practice site, they have expressed direct interest in my work. Interest from multiple stakeholders indicate a shared desire to improve the theatre environment. This reflects a desire to increase productivity, improve staff well-being, reduce staff turnover, and improve outcomes for patients.

6.4.2. Enhancing effective communication and creating a supportive, inclusive culture The need for regular communication with teams is a key finding from this research, and this has now become a regular commitment within the department. A new structure of teams has been implemented to create a safe space where colleagues can communicate more openly and with safety. The theatre department has set up an equality, diversity, and inclusion committee to enable the voice of staff to be heard with respect to how to improve their working environment. These strategies focused on strengthening teamwork and peer relationships while fostering inclusion and effective communication. Team days are popular, and staff do voice their views on key issues of concern.

Other initiatives have been implemented that draw directly on my research findings. Having identified the conflicts and tensions that sometimes arise between English and non-English speaking members 130

of the team, we have sought to create greater awareness of these issues and promote inclusive staff activities and interactions. Transparency within the work environment has been aided by frequent meetings that have facilitated coherent communication. This has also served to raise awareness around the impact gossip had on staff relations.

#### 6.4.3. Professional identity and recognition

Similarly, the research has identified professional identity as a significant driver of theatre nursing job satisfaction and well-being. A lack of professional identity and the associated stressors are compounded during times of crisis, such as the current Covid-19 pandemic where staff have been displaced and overburdened. As communicated within the values and principles, the goal is to shift focus from the individual to that of their peers and the wider team. In this study, I aimed to showcase all team members' appreciation, irrespective of their role, with a shared goal of ensuring patient safety in consideration of the challenging circumstances.

Consequently, a process for showing appreciation for staff members' work was developed and implemented, to tackle the findings that emerged in Chapter 4.5.1 (regarding the lack of recognition felt by TNs). Individuals are now able to nominate their peers or team for an award from the leadership team (Appendix A). This recognition personally demonstrates the support of their peers and management, thus adding to their sense of professional identity and appreciation. The management team's involvement is aimed at reducing barriers to communication between theatre nurses and management. Additionally, I have developed a well-being day where teams can meet and speak freely about their day-to-day routines and vent if needed with a focus on recognition of team contributions, as well as providing an outlet for frustrations and creating another platform for inter-departmental communication (Appendix B). This evidence of impact reflects the benefits of utilising a research development framework as a tool to support researchers produce high quality and measurable impact research outputs (Careers Advisory Centre, 2010)

#### 6.4.4. Discussion with colleagues

My research has delivered a research impact through a change in practice, which is evidenced by the ongoing discussions with a wide range of colleagues across the multidisciplinary team, for example education teams (Domain D (D3) engagement and impact). Since completing this research, numerous colleagues have implemented SIT in their own courses and research. For example, the Head of Nursing for Private Patients at a service site is using SIT to analyse her own findings as part of her MBA. I have discussed my findings, and the framework I used, with the nursing and midwifery executive committee (NMEC) at the hospital – comprising 50 senior nurses, many of whom are Directors of Nursing and

Heads of Nursing (this includes heads of nursing from across other departments such as critical care, oncology, and surgery). This represents a dissemination of findings as outlined in Domain D of the VRDF (Careers Advisory Centre, 2010).

Additionally, I have presented my findings at senior leaders briefing. This has included over 180 health professionals in practice, colleagues at senior leadership meetings, the board executives, and chief nurses. The dissemination of findings has extended to other organisations in London, many of whom have reached out to me personally, demonstrating high interest to continue dialogue and collaboration. My research has been presented to non-healthcare organisations and within management teams who apply or engage with a similar theoretical framework. Upon commencing of this doctoral journey, I was a working on a more junior nursing level (Band 5). However, I have since progressed my career and I am now working as a more senior nurse (Band 8c) at a different service site to where the original research was conducted. As part of that career progression, I have continued to disseminate my research findings by discussing my research outputs with management, colleagues, and other health care professionals at my new work environment. I plan to continue disseminating my research findings further through conference presentations (COVID 19 permitting) and papers for publications (Domain 2 (D2) Publications).

Finally, the doctoral process offered me the opportunity to teach professional doctorate students at the University of West London, building on domain D3 in the vitae Engagement and Impact – teaching others. As part of the wider research project, I taught on how to utilise the NVivo 12 software at the university, and prepared, organised and delivered sessions on how to analyse and interpret data. I also presented on my research and discussed the overall doctoral research journey – the challenges that I faced, how I resolved them, the satisfaction that comes with creating new knowledge, and my wider experiences in undertaking a multi-year research project.

### 6.4.5. Leadership

In my new role as a Head of Nursing, I have set up shared governance meetings with the TNs in the operating department. We discuss issues of concern in the department and this space fosters collective decision-making (Whiteside, 2016). The creation of an open forum through the establishment of shared governance meetings further enhances communication between management and theatre nurses, while adding to their sense of value as their decisions shape outcomes within the department (Smith et al., 2018). Similarly, the goal within this context is to create a shift in the current departmental concept of leadership away from a fixed hierarchy to a more 132

dispersed matrix or project-based diplomatic model. Central to this shift is the authenticity of leadership, where leaders are expected to "lead from the front" (Murphy, in. Ferraris, 2015, p.1414) or, in other words, where leaders participate in shared duties at the same level as other departmental members. As other great leaders have highlighted:

It is better to lead from behind and put others in front, especially when you celebrate victory when nice things occur. You take the front line when there is danger. Then people will appreciate your leadership (Mandela, in. Ferraris, 2015)

Overall, my learning journey and experiences on this work-based doctorate has enabled me to continue working full-time. This has enabled me to maintain my career in care provision and build essential, valuable skills for use in my future career. I have made a unique contribution to science and my profession which gives me tremendous job satisfaction.

### 6.5 Conclusion

This final chapter has provided an overview of the learning journey experienced as I undertook this doctoral program of study. In reflection, the professional doctorate program of education has equipped me with the research skills (from two years taught), expertise, and confidence necessary to advance my practice and become a champion of change within my practice area. As noted, I envision that I will continue to apply these transferable skills, while undertaking independent research in the future. This is an invaluable addition to my career portfolio, both at an organisational and personal level. I have already started discussing my research with peers, implementing the lessons learned from participant findings, and advancing my practice. I will continue to showcase my work throughout perioperative nursing circles and throughout the nursing discipline in general.

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# Appendix A Thank you notes



Dear

Insert Reason for Nomination

Your work and efforts have not gone unnoticed. The Management would also like to take this opportunity to say: Thank you and that you are APpreciated.

# Appendix B: Wellbeing Day





# Theatres Anaesthetic and Perioperative Medicine (TAP) Well-Being Decompression Recovery Plan

First, sincere thanks to all of you for your continuing efforts in the evolving and challenging environment brought about by Covid-19. We recognise that our staff are facing unprecedented demands and we will continue to do all we can to ensure you have the support you need.

You do not need to be told that the past 12 months has been extremely challenging for everyone, particularly front-line staff working for the NHS. Nurses caring for respiratory patients play a crucial role in fighting Covid-19 with their expert skills and knowledge as well as maintaining care for patients with long-term conditions.

Nurses have been working up to 15-hour shifts to accommodate our covid-19 and non-covid patients, sacrificing not seeing their friends and family, and being exposed to risk of infection. The workload has also increased, with the workflow and shift patterns are completely different from the usual.

The pandemic has led to short term increases in overseas recruitment as there are a growing number of nurses who are considering leaving the profession due to burnout and exhaustion as a result of the pandemic (UK Parliament, 2020). Results from 2020 surveys carried out by Kings College London highlighted the concerns that UK nurses have about the risks Covid-19 poses to their own physical and mental health. 4,063 members of the nursing and midwifery workforce participated in the survey and provided complete or near-complete data. Staff worry about the personal risks if they were to become infected, and respondents reported ongoing depression, anxiety, stress and emerging signs of post-traumatic stress disorder (PTSD) (ICON, 2020).

It is vital that the NHS protects the mental health and well-being of nurses who have contributed so much during the outbreak. The necessary safeguards also need to be put in place to protect Black, Asian and Minority Ethnic staff, who are disproportionately affected by Covid-19. We need to bring the nursing workforce back to capacity, under the kind of working conditions that can encourage hard-won, hard-working nurses to stay in our NHS.

As highlighted by the Royal College of Nursing, nursing staff need to look after themselves as well as others (RCN, 2020). As a nursing professional, it is important that you take the time to consider factors that impact your own health - this is known as self-care. Self-care is the power we all hold as individuals to influence our level of well-being.

#### Importantly, we will continue:

- Supporting the nurses who continue to surge, with the twice daily ward walks and manning the TAP wellbeing zones
- Psychology drop-ins are being offered 1-3pm Mon-Fri at St Thomas and Guys in private rooms near the TAP wellbeing zones.
- Psychology drop-ins are also being offered after handovers 8-9am and 8-9pm in the ICU small seminar room at St Thomas for those coming off a difficult shift.
- Being visible as possible through daily walks around wellbeing zones and staff rooms, to introduce ourselves and chat further if needed.
- The psychologists and members of the wellbeing team join the confidence checks for surge nurses at 4:30pm Mon-Fri at St Thomas.
- The <u>COVID-19StaffWellbeing@gstt.nhs.uk</u> mailbox is open for requests for support from a psychologist. Please contact us directly or through your colleagues/managers.
- Through email requests or face to face discussions, psychologists are then offering bookable one-to-one sessions face to face or remote.
- The psychology wellbeing team is in daily contact (Mon-Fri) with the Critical Care Wellbeing team (including TAP PDN staff) which was created to support nurses in this surge, so any concerns can be escalated quickly.

• The chaplaincy is also continuing to provide spiritual support to staff can be contacted via: <a href="mailto:spcarehosp@gstt.nhs.uk">spcarehosp@gstt.nhs.uk</a> or <a href="mailto:chaplains@gstt.nhs.uk">chaplains@gstt.nhs.uk</a>

The psychology team will continue supporting us in our de-escalation plan (for surge and nonsurges nurses/odps/doctors) - over the coming days/weeks/months:

- Shannon Cullerton
- Alex Quigley
- Neil Rees

#### Returning nurses gradually into TAP as activity increase

As staff begin to return we are putting together a well-being package for staff who are returning back from ITU, as part of the pandemic response. This plan is local and will incorporate the broader organisational Recovery Planning for staff.

The two quiet well-being rooms are continuing on each site (Guys and STH), where you can visit on your breaks if you feel overwhelmed and need space for peace and quiet. The rooms have one person allocated, who is there at all times if you wish to speak to someone quickly. Tea, coffee and biscuits are provided, alongside quiet calming music – socially distanced.

Each of you have been contacted to help us develop an over-arching program of what well-being would look like for you – therefore we have developed a local program (below) to help support your return into TAP (rest time incorporated), however, individuals plans can be developed if needed.

#### What we are planning with your input -

Rolling program from Wednesday, Thursday and Friday for returning TAP surge nurses.

The Band 7s and Matrons will be attending REACT Training to facilitate in depth 1:1 conversation(s) with you all locally.

A 5-day program focusing on 'Decompression'

- Wednesday Day OFF/AL
- **Thursday** Well-being activities (we will do Action Learning Sets with the psychologist and a Thank You (s) in the afternoon).
  - An action learning set (ALS) is a group of people within a workplace that meet with the specific intention of solving workplace problems. The main aim of an ALS is to come away with a set of realistic actions that will help to solve or understand the issues at hand.
- Friday Day OFF/AL or 1:1 session if needed with a trained REACT colleague
- Saturday Day OFF
- Sunday Day OFF
- Monday return to your local areas or where advised to

We will continue to provide continuous support throughout the year as and when needed, with your support to develop.

Please contact your line manager or matrons to have a confidential chat if further support is required sooner.

Below you will find the organisation recovery plan and additional support external to the organisation. Finally, a special thank you, to you all from the TAP Senior Nursing Team and TAP DMT for all your hard-work, support, kindness, understanding and flexibility throughout this pandemic.

#### **GSTT Recovery Plan:**

www.guysandstthomas.nhs.uk/staff-wellbeing-and-workforce-recovery-plan

# **TAP Surge Wellbeing-Day Timetable**

Thursday 18<sup>th</sup> February 2021

Session AM: Action Learning Sets (ALS) & Psychology Support

### Session PM: Thank you Testimonials & Organisation Debrief

Time	Sessions	Venue	Facilitator/Spea	aker Organiser
8am-8.30am	Breakfast	TAP Seminar Room	AP Team (Waqas a Tea Matr	am
8.30am-12noon	ALS Group 1	Thoracic Department Seminar Room	PDNs	Psychologist support team Reflective session
Breaks	10-10.15			for each group
8.30am-12noon	ALS Group 2	TAP Seminar Room	PDNs	Dr Shannon Cullerton
10am-11am	Psychology	ALS Group 1	Psychologists	
11am-12noon	Reflective Session	ALS Group 2		
12- 12.30	Lunch	Break	Lunch	Break
12.30-13.15	TAP HON TAP Dep HON TAP DMT	Teams	Waqas Choudhry	
13.15-13.45	Chief Nurse's Team	Teams	CNO team	
13.45-14.00	Thank you	Teams	TAP Charge Nurses/ODP/Sisters	
14.00-14.30	Workforce	Teams	Workford	ce team

14.30-15.00	Critical Care Wellbeing Team	CC Team	

Below are some reminders of how to look after yourself in these challenging times, as well as posters highlighting the GSTT and national wellbeing offers so please make sure you make use of these, including after you have returned from your surge role if needed:

As well as the need for workplaces to prioritise the well-being of their staff and offer staff the necessary days off, there are many well-being initiatives which staff can do from home. Choosing behaviours which help you balance the effects of physical and emotional stress support you to engage positively with family, friends or colleagues, and deliver safe and compassionate care to your patients. Remember that there is no 'right' approach to self-care and well-being, what might suit one individual may not help another.

- **Maintaining both physical and mental well-being** is key, as the mind and body are inextricably linked. Poor physical health can lead to an increased risk of developing mental health problems. Similarly, poor mental health can negatively impact on physical health, leading to an increased risk of some conditions (Mental Health Foundation, 2020)

- **Embodiment:** It is important to understand what your body does for you and how it enables you to carry out tasks. To care for your body, you must maintain a balanced diet and healthy weight; hydrate; sleep; exercise regularly; attend to your body in times of illhealth and recognise when a task is too physically demanding.

- **Emotional self-care:** It's good to talk. Emotional self-care strategies include spending time with family and friends, giving yourself praise and showing self-compassion. Allow others to support you and confide in someone you trust.

- **Time and space:** Surviving and thriving is possible, in part, by taking action to care for your own mental health. Taking some time out to reflect on your well-being and state of mind can help you to focus on what your needs are and how to build your resilience.

- **Decompressing;** time to yourself. This may be a hot bath, a walk, time away from screens and social media.

- **Mindfulness:** Paying more attention to the present moment – to your own thoughts and feelings, and to the world around you – can improve your mental well-being. Some people call this awareness "mindfulness". Mindfulness can help us enjoy life more and understand ourselves better. You can take steps to develop it in your own life. RCN has useful mindfulness techniques you can put into practice:

#### https://www.rcn.org.uk/healthy-workplace/healthy-you/time-and-space

-Meditation: meditation can provide a method for handling stress in a healthier way. Practicing mindfulness and meditation may help you manage stress and high blood pressure, sleep better, feel more balanced and connected, and even lower your risk of heart disease. Meditation and mindfulness are practices — often using breathing, quiet contemplation or sustained focus on something, such as an image, phrase or sound that help you let go of stress and feel more calm and peaceful. The popular Headspace app might be a good place to start: <u>https://www.headspace.com/headspace-meditationapp</u>

- When choosing your activity; think before you do it about what the impact of what you are choosing to do will have. If zoning out in front of Netflix is what you need and you have considered what you are going to watch then there is nothing wrong with that as long as it is not the default option taken which then leaves you feeling more lethargic. A brief walk round the block, a pint of water, brief phone call to a friend and a hot bath with a podcast might be an alternative.





Our rest and

recharge areas and

sleep pods are open

for you to take a

break.

Please remember to

speak to our staff

wellbeing champions.

and expert help. It's available 24/7 and is accessible by phone (0800 174 319) or online.

Visit gti/wellbeing-support

www.gstt.nhs.uk/staff-guidance

are about you

for more information or

from outside of the Trust

showing

to Friday excluding bank holidays)

> Practical support to help with travelling into work, accommodation as well as shower facilities are available

Guy's and St Thomas' Charity is funding **50% off food and drink** at our Tom's cafes and 50% off all 'handmade' drinks at AMT.

managers.

6699

	pport for more information staff-guidance from outside of the Trust		
Self-care	Headspace • Unmind     Daylight • Sleepio		
2	<ul> <li>Working from home top tips</li> <li>Going home checklist</li> <li>Top tips for your wellbeing</li> <li>KHP mind and body toolkit</li> <li>Cycle to work scheme</li> <li>Discussing COVID-19 with children</li> <li>Stop smoking support</li> <li>Sleeping well advice including our sleep pods</li> <li>Guide for coping with distressing incidents</li> <li>Financial wellbeing support (salary sacrifice)</li> </ul>		
For teams and managers	<ul> <li>Daily team wellbeing check-in guide</li> <li>Team time and Schwartz Centre Rounds</li> <li>Guide for maintaining team resilience in times of intense pressure</li> <li>EAP (Care First) resources for managers</li> <li>Leadership support circles and webinars</li> <li>Support and training for line managers</li> <li>Speak to a qualified coach</li> </ul>		
Personalised	Employee Assistance Programme (EAP) - free counselling, expert help, advice		
support	for managers and financial guidance provided by Care First National NHS staff support line Freedom to Speak Up Guardians ( <u>SpeakUp@gstt.nhs.uk</u> ) Spiritual care support Have a wellbeing conversation with your manager Request one-to-one psychological support using the details below		
ntact us for supp	oort		
For general enquiries, e	ort, email <u>:COVID-19staffwellbeing</u> or <u>:EvelinaStaffSupportPsychology</u> mail <u>showingwecareaboutyou@gstt.nhs.uk</u> st and recharge areas across the Trust, visit <u>GTI</u> for locations		
financial guidance, call	Programme - for free and confidential access to counselling, manager advice and 0800 174 319 (available 24/7, 365 days a year) pport line - call 0800 069 6222 (7am-11pm) for free wellbeing support. 85258 (24/7)		
• Spiritual care team - (	email <u>spcarehosp@gstt.nhs.uk</u> or <u>spcarectty@gstt.nhs.uk</u> if you work in the ncies, call <b>020 7188 1187</b>		

## Appendix C: Participant Information Sheet



Waqas Choudhry Doctor of Nursing Researcher College of Nursing Midwifery and Healthcare Paragon House Boston Manor Road TW8 9GA

#### Participant Information Sheet

My name is Waqas Choudhry and I am undertaking a Doctorate in Nursing (DNurs). I also have a BSc with Honours and MSc in Nursing, and I qualified as a Registered Nurse in 2009 and have worked in theatre ever since. Therefore, answering the questions nurses care about is important in my research.

My research is a new contribution to this topic because most papers in the past have been statistical analyses plotting the strength of the correlation between certain workplace factors (such as salary) and job satisfaction. This statistical approach helps us understand *what* factors are involved on a basic level, but never *why* they lead to job satisfaction. While there has been a trend to study the impact of environmental factors such as workload, skill mix, and staff-to-patient ratio have on standards of nursing care; we lack an understanding of their effects on nursing work in theatres. For this, we need to hear directly from nurses on their experiences at work. Only this way will we know what needs to stay the same, what needs to improve, what needs to be consigned to history, and why.

The factors of teamwork, collaborative leadership and peer support appear to boost nurses' own evaluations of their working environment There is a perception that these factors have an impact on nurses experience of their working environment but the aim of this study is to explore how they might affect the working environment of theatre nurses. This study is designed to collect a broad range of topical data on the theatre-working environment. Focusing on nurse perceptions, this study seeks to position the researcher in the place of theatre nurses, fleshing out the motives, ideas and values that give meaning to the theatre nurses' work and working experiences. It uses semi-structured interviews to explore the worldview of the theatre nurses' working environment.

I very much hope that this research will be directly beneficial to the hospital, and to you, as it will provide in depth information as to what nurses believe works in the hospital and what needs to happen for it to improve. This will be especially fundamental in the challenging years ahead as student nurses suffer greater financial burdens, and as funding settlements for the NHS continue to tighten.

Your participation will require you to answer questions (always with your consent) in semi-structured interviews with me. The interviews will be recorded and transcribed but I will protect your data fully by keeping it in a private and safe place, and I will ensure your identity is not revealed in the study or its associated publications. The researcher will consider one of the following two options, selftranscription or commercial transcription, participants will be notified of which is used. Strict confidentiality will be applied to any answers provided, so you can be confident in giving honest answers with assurance your information will not be seen by anyone but the researcher. Your estimated time for commitment will be six months. Research findings will be available to all participants if desired.

IRAS Project ID 234992

Version 3

230518


University of West London is the sponsor for this study based in the United Kingdom. We will be using information from you in order to undertake this study and will act as the data controller for this study. This means that we are responsible for looking after your information and using it properly. University of West London will keep identifiable information about you for 5 years after the study has finished.

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

I will be undertaking this research under the direct supervision of two professors at my university. Naturally, we will be strictly adhering to the university ethics code for research, and this study has received formal clearance from the University Ethics Committee and Health Research <u>Authority</u>. (HRA).

If you have any concerns either prior to making a decision as to whether to participate or during participation, you can contact the University Research Ethics team at the University of West London at any point you wish and express your concern or make a query or contact the team below.

Waqas Choudhry (researcher)

Professor Jennie Wilson (principal supervisor)

Associate Professor Rowan Myron (second supervisor)

21296001@student.uwl.ac.uk

Jennie.wilson@uwl.ac.uk

Rowan.myron@uwl.ac.uk

Thank you for reading this.

#### Wages Chardlery

Waqas Choudhry. RN BSc MSc Registered Nurse - Doctor of Nursing Researcher University of West London

IRAS Project ID 234992

Version 3

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## Appendix D: Participation Consent Form



#### Participation Consent Form

Study: We wish to ask if you would like to participate in a study on the perceptions of theatre nurses about their working environments.

Institution: University of West London Purpose of data collection: Doctor of Nursing research

Before consenting for this study, please read the participant information sheet and sign below if you agree to the criteria. If you would like further information before consenting please seek guidance from the research investigator, Waqas Choudhry.

#### Please tick the box

1.	I have reviewed the information document and fully understand the requirements of me within this research study	
2.	Data can be withdrawn up to 1 month post-interview	
3.	Anonymised quotes maybe be used in the doctorate	
4.	I will be required to attend interviews and all interviews will be recorded	
5.	All recoding will be transcribe using codes or pseudonyms for identification of individuals and destroyed upon completion of the research project	
6.	The data collected may be used for publications, presentations, conferences and further research	
7.	Access to computer files will be available by password only and containing no identifying information	
8.	Data will be stored for up to 5 years after the end of the project, after which it will be disposed of safely	
9.	I will be required to attend a Nominal Group Technique Focus group as part of the study	
10.	Involvement is voluntary, and I may withdraw from the research study at any time	
11.	I have been given the opportunity to ask any relevant questions	

I give full consent to all of the above, and would like to participate in this research study outlined.

Name of Participant	Signature	Date
Name of Researcher	Signature	Date

IRAS Project ID 234992

Version 2

150518

### Appendix E: University Ethics Form



Mr Waqas Choudhry

Student Number: 21296001

College of Nursing, Midwifery & Healthcare Research Ethics Panel Paragon House Boston Manor Road Brentford TW8 9GA Tel: +44 (0)20 8209 4110/4145 email: cnmh.ethics@uwl.ac.uk

29 January 2018

Dear Wagas

Re: Application for Ethical Approval No. UWL/REC/CNMH-00317 - A Phenomenological Investigation into Theatre Nurses' perceptions of their working environment in National Health Service Operating Theatres

Thank you for your response to the CREP correspondence and for sending a revised consent form and interview sheet. The revised documents submitted and the clarification you have provided to each of the points raised by the Panel offer sufficient information for me to confirm the approval of the College Research Panel and enable you to proceed with your research project.

If the research does not progress, or if you make any changes to your research proposal or methodology can you please inform the Committee in writing as this may entail the need for additional review. It is your responsibility, as the principal investigator, to submit a report on the progress/completion of the research twelve months from the date of this letter. The Committee wish you well with your research and look forward to your report.

Yours sincerely

Heather Loveday

Professor Heather Loveday Director of Research Richard Wells Research Centre Joanna Briggs Institute Collaborating Centre E-mail: heather.loveday@uwl.ac.uk

### Appendix F: Health Research Authority Approval



Mr Waqas Choudhry

Student Number: 21296001

College of Nursing, Midwifery & Healthcare Research Ethics Panel Paragon House Boston Manor Road Brentford TW8 9GA Tel: +44 (0)20 8209 4110/4145 email: cnmh.ethics@uwl.ac.uk

29 January 2018

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Yours sincerely

Heather Loveday

Professor Heather Loveday Director of Research Richard Wells Research Centre Joanna Briggs Institute Collaborating Centre E-mail: heather.loveday@uwl.ac.uk

# Appendix G: NVivo Code Book

Name	Description	Files	References
Access to confidential information		1	2
Agency nurses		2	2
Agency staff		1	1
Agency staff not familiar with the department		1	1
Aggressive		1	2
Aggressive environment		1	1
Anatomy		2	2
Anxiety		1	1
Anxiety can result from poor skill mix		1	1
Appreciation for work		1	1
Audit		1	1
Backlog frustrating for staff and creates negative experience of work		1	1
Backlog frustrating for staff and creates negative experience of work		1	1
Bad team culture disables nurse in focusing on patient		1	1
Bad teamwork can cause stress		2	2
Better use of audit days		1	1
Bias		2	2
Blame culture		1	3
Blame impacted my role		1	1
Breaks		1	1
Budget concerns can mean inexperienced staff are deployed		1	1
Bullied		2	3
Bullying culture in the Trust		1	1
Burnout		5	15

Burnout not every day	1	1
Career Path	2	2
Career progression	1	1
Caring	4	11
Challenge	1	2
Challenging working conditions	1	1
Cliques	1	2
Communication	1	2
Communication is key to teamwork	1	1
Communication with managers	1	3
Compassion	1	1
Concerns	1	1
Confident	2	2
Confidentiality	3	3
Conflict	2	2
Conflict with nurses	1	1
Conflicting situations	1	1
Confusion	1	1
Constrain	1	1
Coordinators inconsistent in their guidance	2	2
Creates confusion	1	1
Criticized	1	1
Dedication	2	3
Delays	1	1
Demoralizing	2	2
Department expectations	1	1
Depends on the team	3	4

Devaluation	1	1
Development for patient care	1	1
Difficulty in maintaining relationships	1	1
Dilutes quality of care and practice	1	1
Disagreement among teams	1	1
Discrimination	4	7
Dishonesty	1	2
Disappointing	1	1
Dissatisfaction	2	3
Division	1	1
Educating parents and families	1	1
Empathy	1	1
Enjoyment	1	1
Enjoyment of work	1	1
Equipment	2	5
Ethnic divisions	2	2
Ethnic divisions impact teamwork	1	1
Excitement	1	1
Exhaustion	3	4
Experience	1	1
Favouritism	3	5
Feedback unwelcomed	1	1
Feelings	1	3
Felling's	1	1
Finance	5	11
Finance concerns can mean inexperienced staff are deployed	1	1
Flexibility	1	1

Friendly	1	1
Friendly environment	1	1
Frozen Increment	1	1
Frustration	1	7
Good MDT teamwork	2	2
Good morale	1	1
Good response from managers	1	1
Gossip	4	4
Government tensions	2	2
Great team spirit	1	1
Happiness	1	1
Hard work	2	4
Heavy workload	1	1
Hierarchy	1	1
Hospital flow	1	2
Ignored	1	2
Impact	2	2
Importance of breaks	1	2
Importance of teamwork	2	2
Improvements	1	1
Incident reporting	1	1
Inconsistency in management	2	3
Influence of family and friends	1	1
Influence on recruitment	1	1
Interest	1	1
International recruitment	1	2
Intimidation	1	1

Isolation	1	5
Job satisfaction	6	16
Just a number	1	1
Knowing what you are doing	1	1
Lack of breaks	2	2
Lack of emotional support	1	1
lack of empathy	1	1
Lack of facilities	1	1
Lack of familiarisation	1	2
Lack of feedback	1	1
Lack of management ownership	1	1
Lack of motivation	1	1
Lack of positive feedback	1	1
Lack of praise	1	2
Lack of progression	1	1
Lack of support	5	25
Lack of time	1	2
Leadership	1	2
Learning new things	4	5
Leaving nursing	2	2
Linguistic divisions	1	3
Link to past professional experience	1	1
Listen to staff	1	1
Listening to each other	1	1
Listening to staff	1	2
Lots of documentation	1	3
Low morale	3	5

Low satisfaction	3	4
Making changes	1	1
Management conflict	1	1
Management expectations	1	1
Management lack of experience	1	3
Meetings	1	1
Mentorship	1	1
Middle management	1	1
Modernization	1	2
More work	1	1
Motivation	3	4
New career	1	1
New challenges in career	2	2
No allocated time for students	1	1
No constraints	1	1
No extra money for working over	1	1
No interference from family and friends	1	1
No management consistency	2	2
No replacement measures in place	1	1
No time to consolidate learning	1	1
Not a team effort decision	1	1
Not appreciated	1	1
Not interested with issues	1	1
Nurse's age	1	1
Nursing too long	1	1
Only management decided	1	1
Option for confidential feedback is positive thing for staff	1	1

Overall patient experience	1	1
Overlooked by management	1	1
Overruns	1	1
Passion	2	2
Patient care	5	25
Patient focus	2	2
Patient outcome	3	6
Patient safety	3	3
Policies	2	3
Poor teamwork affects patients negatively	1	1
Poor training	1	2
Positive	1	3
Positive about effort towards teamwork	2	3
Positive support from management	2	4
Positivity	2	5
Power abuse	1	2
Pressure	4	7
Pressure on outcome	4	4
Pride in my job	1	1
Promotion	1	1
Pushing to start list	1	1
Quality Care	1	1
Race	2	3
Raising issues - no support	1	1
Reading emails at home	1	2
Reason to choose nursing was to care for people	1	1
Recognition of hard work	1	1

Recruitment	1	1
Regular staff meetings	1	1
Responsibility	1	1
Retention improved	1	2
Return to nursing	1	1
Roster	2	4
Rotation	1	2
Rude	3	3
Sad	1	1
Safety	1	1
Salary expectation	3	3
Satisfaction from practical aspects	1	1
Shift patterns	1	1
Short lunch breaks	1	1
Situation worse	1	1
Skill mix	3	6
Skills	3	5
Sociality	1	2
Space	1	1
Speaking in a different language	1	3
Spirit of common challenge	1	1
Staff can raise concerns	1	1
Staff competency	1	2
Staff development	2	3
Staff goodwill	1	1
Staff retention	2	2
Staffing can increase or decrease job satisfaction	1	1

Starfing22Staying over - rule11Storage11Storage11Stress622Stretched staff11Studgel11Studgel11Student feedback11Support23Supporting11Supporting agency staff11Support new nurses11Support new nurses11Target driven culture11Teamwork is variable28Teamwork invroves communication11Teamwork invroves communication11Teamwork invroves communication11Teamwork invroves communication11Teanwork inproves communication <td< th=""><th></th><th></th><th></th></td<>			
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Stress622Stresched staff12Struggle11Student feedback11Support23Supporting11Supporting agency staff11Support after stressful and emotional situations11Support new nurses11Support new nurses11Target driven culture11Team work is variable28Teamwork is variable28Teamwork drives satisfaction37Teamwork inproves communication11Technical skills11Technical skills22Theatre activity11Theatre list planning11Theatre ownership11Theatre ownership11	Staying over - rule	1	1
Stretched staffIIStretched staff11Struggle11Student feedback11Support23Support11Supporting agency staff11Support after stressful and emotional situations11Support new nurses11Support new nurses11Target driven culture11Team work is variable24Teamwork fin proves communication11Teamwork drives satisfaction11Technical skills11Technical skills11Technical skills11Theatre activity11Theatre list planning11Theatre ownership11Teatre ownership11	Storage	1	1
StruggleImage: constraint of the structureStruggle11Support11Supporting11Supporting agency staff11Support after stressful and emotional situations11Support new nurses11Support new nurses11Target driven culture11Team building24Teamwork is variable28Teamwork drives satisfaction37Team drynamics11Team dynamics11Technical skills11Technical skills11Theatre activity11Theatre list planning11Theatre ownership11Teat workship11Teat strugt11Teat strugt11Teamwork improves communication11Teat strugt11Teat strugt111	Stress	6	22
Student feedbackImage: Constraint of the stress	Stretched staff	1	2
SupportImage: Constraint of the stress of the s	Struggle	1	1
SupportingImage: Constraint of the second secon	Student feedback	1	1
Supporting agency staffImage add to a state of the stress ful and emotional situationsImage add to a stress ful add	Support	2	3
Support after stressful and emotional situationsImage: Content of the stressful and emotional situationsImage: Content of the stressful and emotional situationsSupport new nurses111Swartz rounds - positive111Target driven culture111Team Cohesion111Team building2413Teamwork is variable2813Teamwork drives satisfaction371Team dynamics111Technology222Theatre activity111Theatre strist planning111Theatre ownership111	Supporting	1	1
Support new nursesImage: Constraint of the second seco	Supporting agency staff	1	1
Swartz rounds - positiveImage: Control of the sector of the s	Support after stressful and emotional situations	1	1
Target driven culture11Team Cohesion11Team building24Team building28Teamwork is variable28Teamwork drives satisfaction413Teamwork drives satisfaction37Team dynamics11Technical skills11Technology22Theatre activity11Theatre maining11Theatre ownership11	Support new nurses	1	1
Team CohesionImage: Constraint of the sector of	Swartz rounds - positive	1	1
Team buildingImage: Constant of the c	Target driven culture	1	1
Teamwork is variable28Teamwork413Teamwork drives satisfaction37Teamwork improves communication11Team dynamics11Technical skills11Technology22Theatre activity11Theatre list planning11Teatre ownership11	Team Cohesion	1	1
TeamworkImage: Constraint of the sector of the	Team building	2	4
Teamwork drives satisfaction37Teamwork improves communication11Team dynamics11Technical skills11Technology22Theatre activity11Theatre list planning12Theatre ownership11	Teamwork is variable	2	8
LearningLearningLearningTeamwork improves communication11Team dynamics11Technical skills11Technology22Theatre activity11Theatre list planning12Theatre ownership11	Teamwork	4	13
Team dynamicsImage: constraint of the con	Teamwork drives satisfaction	3	7
Technical skillsImage: Comparison of the	Teamwork improves communication	1	1
TechnologyImage: Constraint of the sector of th	Team dynamics	1	1
Theatre activityImage: Constraint of the activityTheatre list planning1Theatre ownership111	Technical skills	1	1
Theatre list planning  1  2    Theatre ownership  1  1	Technology	2	2
Theatre ownership  1  1	Theatre activity	1	1
	Theatre list planning	1	2
These factors impact negatively on patients 3 4	Theatre ownership	1	1
	These factors impact negatively on patients	3	4

Thinking outside the box	1	1
Threatening communication	1	1
Time owing	1	1
Tired	1	1
Tough	1	1
Training concerns	1	4
Troubled home life	1	1
Unappreciated	1	1
Understaffing	2	2
Undervalued staff	2	5
Unfair	4	13
Unity	1	2
Unreliable management	1	1
Value each other	1	1
Valued	2	5
Ward a high-pressured environment	1	1
Whistle Blower	1	1
Work life balance	4	8
Working hours	1	1
Working with patient	1	1

## Appendix H: Coded Transcript

Create Data Analyze Query Explore Layout View											Q	• Sea	arch		_	_	_	_		
PD It makes me satisfied at work when I see like patients' coming in and we do successful opera tions and then they are discharged and maybe follow up from the ward and find out how they are doing and you find that they actually like the trauma patients, they progressed well, that makes m e satisfied.	Work life balance Coding Density	Job satisfaction	Unfair	Lots of documentation	Bias	Promotion	Readinng emails at home	Staffing	Roster	Discrimination	Patient outcome	Confusion	Teamwork	Equipment		Motivation	Inconsistency in management Management conflict	Management expectations	Management even	UISSID
IN So patient outcome PD Patient outcome. IN Makes you really satisfied. What do you least enjoy about your work and what is it that make		ä		ation			at home			I	ne				1		nanagement flict	ectations	(	
A lot of things.	-																			
That's interesting. D We work as a team and unfortunately where I work there are people who, we work as a grou there are groups of people who have grouped themselves together, most likely depending on w there they come from because it is multi-racial. You find people working in the department, like this specialist department there are many people from one place, like 86% of people coming from on place so even if you work as a team they're a group amongst themselves. So there is some co- munication issues when like talking about a patient, like discussing a patient. People change int a language that you don't understand so those are the things that I really don't understandit ake the team really doesn't work well and there is a bit of favouritism. Because you find like in t unior ones and if you don't have somebody who comes from where you originally came from, the you are left out on this.	Linguistic divisions			Race										Team work is variable						
You feel isolated? D You feel isolated and even during working hours when the patients are on the table, prepping ble you are giving that care, things that should be discussed about the patient they are discusse in a different language that you don't understand. And do you think, have these sort of issues been raised with your managers, do you feel sup	-	Speaking in a		1																
ted that they are doing something about it, speaking a different language? It has been raised, we have students who come into the department and the students are su used to raise it. It becomes hot at the time that it has been raised and it cools down, it eases of st like that, and this is a continuous thing, I don't think the <b>management is doing anything beca</b> the people who are concerned, there are some of the senior people in the management who the same so how would it be sorted out?	Favourtism	different lang	Lack of support																	
N So that is impacting your ability and clearly do you think it impacts in patient care? D It does impact on patient care because like for example during handing over, you need to continue handing over in a language that everybody understands but somebody will just switch to a language that some people do understand and others don't and when you intervene it is like "Oh n"	ă	I.	port												Patient care					