An Interpretative Phenomenological Analysis

Exploring the Lived Experience of Trainee

Endoscopists

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Abstract

With service demand outweighing service provision training, more endoscopists are vital in the future planning of the endoscopy workforce. A review of the contemporary literature highlights a gap in qualitative research relating to the lived experience of trainee endoscopists.

The aim of this research is to examine the experience of trainee endoscopists and to explore specific themes that the trainee considers important to the training experience. The intention of the research is to investigate the lived experience of the trainee undergoing skills-based endoscopy training as a window onto the experience of being a trainee endoscopist.

The chosen methodology for this research is Interpretative Phenomenological Analysis (IPA), with data collected from ten purposively-selected participants using the methods of observations to give contexts to semi-structured interviews. The data is qualitative and adheres to IPA methodology protocols resulting in the development of three super-ordinate themes and ten sub-ordinate themes which emerged from the data.

The findings demonstrate that the trainee endoscopists identify themes such as organisational barriers, hierarchy and emotional factors which have been highlighted by the detailed analysis of the data. This provides an in-depth understanding of aspects of current training which can have an impact on the training experience and the quality of the training delivered. These findings will help provide a basis in the development of quality endoscopy training programmes which consider the themes highlighted in this research. However, it is essential that we acknowledge that learning endoscopy is an emotional journey and this needs to be managed by the endoscopy curriculum.

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GLOSSARY

Glossary of abbreviations and commonly used terms. References are provided in the thesis.

ANP	Advanced Nurse Practitioner
BSG	British Society of Gastroenterology
CINAHL	Cumulative Index to Nursing and Allied Health
Colonoscopy	Camera examination of the large bowel (colon)
CNS	Clinical Nurse Specialist
CT	Core Trainee
Endoscopy	Camera examination in to a hollow organ e.g. stomach
Endoscope	Special camera to view inside the digestive system
Foundation Year	First two years in practice following graduation
HCA	Healthcare Assistant
JETS	JAG Endoscopy Training System
JAG	Joint Advisory Group
Medline	Biomedical database
NE	Nurse Endoscopist
NHS	National Health Service (UK)
NMC	Nursing and Midwifery Council (UK)
OGD	Oesophago-gastro-duodenoscopy – camera examination in the upper gastrointestinal tract
PubMed	Biomedical and life sciences database
ST	Specialist Trainee
UK	United Kingdom

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appreciate everything. Thank you both for your help, support, encouragement and your unwavering belief in me. You are my world.

Declaration

I declare that the work contained in this thesis has not been submitted for any other award and that it is all my own work. I also confirm that this work fully acknowledges opinions, ideas and contributions from the work of others. The work was done in collaboration with Northumbria University.

Any ethical clearance for the research presented in this commentary has been approved. Approval has been sought and granted through the Researcher's submission to Northumbria University's Ethics Online System & HRA Approval 22nd Jan 2019

I declare that the Word Count of this Thesis is 75709

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Date: 27th June 2023

Chapter 1 - Introduction and Context of the Study

Introduction

The purpose of this chapter is to outline the context of the thesis, give insight into the inspiration for the study, and set out the research question and research approach adopted. The chapter also orientates the reader to the research study and thesis structure.

Research question: *What are the lived experiences of the trainee endoscopist?*

1.1 Aims of research

The aim of this research is to investigate the lived experience of the trainee undergoing skills-based endoscopy training as a window onto the experience of being a trainee endoscopist. These roles are continually evolving with the emphasis on expanding clinical responsibility and accountability across professions, thus traversing the boundaries of both medical and nursing roles. By understanding the perception of roles and the experience of the endoscopy trainee, this study seeks to provide new insights and inform future developments by working with stakeholder and policy makers to incorporate the findings from this doctoral research into local, regional and national training strategies.

Objectives

1. To gain insight into endoscopy training
2. To develop an understanding of the trainee's view of their own endoscopy training experience.
3. To develop an understanding of the potential effects of endoscopy training experiences on trainees

4. To gain insight into role perceptions, including nurse endoscopists as endoscopy trainers.

Rationale for the study

The following section gives an initial overview of the study area and my rationale for choosing Interpretative Phenomenological Analysis (IPA) methodology and how early reading influenced my decision.

In the early stages of my research planning, my focus was geared very much towards phenomenological research methods, I was very interested to investigate and analyse the essence of my research, that unknown element of my chosen question. The research has evolved during the course of this doctoral thesis and the writing has been influenced and has evolved through the analysis of the data.

Inspiration for the study

The inspiration for this study comes from many years of working as a nurse endoscopist and being a nationally accredited endoscopy trainer. The role involves the teaching of this complex skill to both medical and non-medical endoscopists. Gastrointestinal endoscopy is a diagnostic procedure which involves using a flexible endoscope to examine the upper and lower gastrointestinal tract. It is an essential diagnostic procedure which is commonly performed in most hospitals within the United Kingdom and around the world. It is essential in diagnosing both malignant and benign conditions as well as performing various therapeutic procedures. Training to perform endoscopy is a key requirement in speciality medical training. Training to perform endoscopy can be challenging for numerous reasons and it was my belief that these challenges needed to be investigated further. Therefore, my aim was to explore the phenomena of the lived experience of trainee endoscopists.

1.2 Context, background and reflexive influences to the study

This piece of doctoral research differs from the body of contemporary literature as it examines the lived experience of the trainee endoscopists, it examines how the training experience impacts on personal learning and developing the skills of an endoscopist.

Endoscopy training has traditionally been accomplished by an informal process in the endoscopy unit that parallels apprenticeship training as is seen in other areas of professional education. However, the current process is much more formalised with the introduction of mandatory basic skills training and quality measures. The trainee has constant supervision from the trainer and is verbally and physically guided through the procedure in a step-by-step process (Waschke, Anderson, Macintosh, Valori 2016), (Mohamed & Raman 2016). The training is skills-based, with accreditation through formative and summative assessment and completion of a e-portfolio. The training process is the same irrelevant of the background profession, therefore nurses undergo the same training and advanced Train the Trainer courses as medical staff.

Endoscopy training in the literature mainly discusses how to enhance the training experience. The literature seeks to explore various aspects of endoscopic training, including improving training through simulation and virtual reality (Harpham-Lockyer, Laskaratos, Berlinggieri and Epstein 2015), (Mahmood, Scaffidi, Khan and Grover 2018), the practical aspects of improving training such as providing feedback (Radcliffe 2021) and imparting practical skills in order for the trainee to understand and translate the verbal instruction into a practical and technical scope manipulation (Dilly and Sewell 2017). These studies are very much medically focused and the research was conducted by medical endoscopists. Furthermore, the literature which concentrates on endoscopy training fails to acknowledge any non-medical disciplines. When exploring the literature around nurse endoscopists, the papers are somewhat

dated with a concentration in the early 2000's (Basnyat, West, Davies, Davies, Foster 2000), (Sprout 2000), (Pathmakanthan, Smith, Heeley, Donnelly 2001), (McCallum 2003). When the role was up and coming there was a slight resurgence in around 2010 (Chapman & Cooper 2009), (Williams et al 2009), (van Putten et al 2009), however, any recent work from the UK is limited (Duncan, Bonney, Au, Chalmers, Bennett 2017). On examination of the literature there is very limited research conducted on the 'lived experience' of the trainee endoscopist. Most which look at the training experience are concentrated on methods such as questionnaires or surveys and while they hint at some of the issues experienced they fail to be interpretive or explore and investigate the issues to gain a richer perspective of the trainee endoscopist's experience (Fonseca et al 2016), (Forbes et al 2016), (Radcliffe et al 2021).

Furthermore, following further review of the literature, the bulk of the research concerns those medically qualified, with literature on nurse endoscopists appearing to be centred on the quality and cost effectiveness of the procedure carried out. Most of the literature suggests that while endoscopy performed by a gastroenterologist is considered a gold standard, the quality and patient satisfaction of the procedure performed by a nurse is often rated more highly than a procedure performed by a doctor (Williams, Russell, Durai, Cheung, Farrin, Bloor, Coulton & Richardson 2009), (Maslekar, Hughes, Gardiner, Monson & Duthie 2010). Williams et al (2009) suggest the reason for this is multifactorial: it is suggested that nurses are protocol-driven and tend to approach a technical skill in a methodical fashion, it could be also that nurses draw on their own learning from the holistic approach to their profession that underpins their practice. With regards to cost effectiveness there is a suggestion that nurse endoscopy can be in fact more expensive as additional outpatient appointments are required for a consultant to see the patient post procedure (Stephens, Hourigan & Holtmann 2015), (van, Putten, van Leerdam, Kuipers 2009). The literature argues

that a lack of clinical knowledge of the nurse endoscopists requires the patient to receive further assessment from a consultant, therefore suggesting that the role of the nurse endoscopists is merely that of a technician who is capable of performing the technical procedure but a doctor is required to interpret clinical findings (Norton, Grieve & Vance 2009), (van Putten, van Leerdam, Kuipers 2009).

I have been unable to find any research which combines endoscopy, endoscopy training and nurse endoscopy which uses Interpretative Phenomenological Analysis (IPA) as a methodology or any similar literature to this research. As mentioned earlier, much of the literature has a medical focus and the research is conducted and written by doctors. The research is rarely qualitative with the expectation of patient satisfaction surveys exploring difference between medical and non-medical endoscopy.

1.3 Brief outline of medical training in the UK

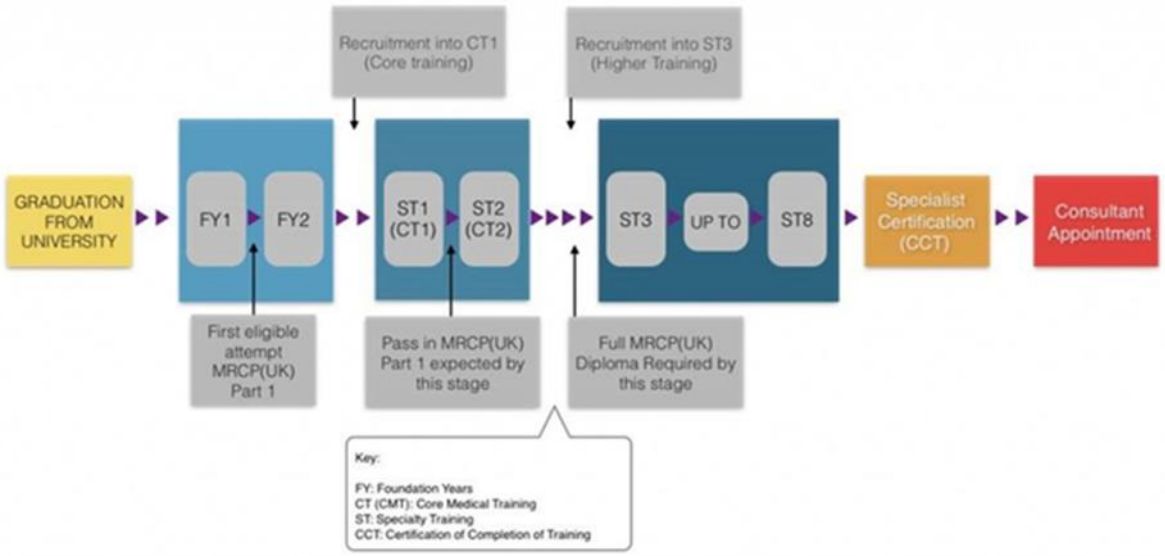
Given the doctoral research relates directly to training, the following section will explain the process of medical training in the UK. For junior doctors to be in a position to start endoscopy training they will need to have a least commenced their speciality or core training which means they will have to be at least three years into their postgraduate medical training.

According to IIME (2016), medical education is the process of teaching, learning and training students with an on-going integration of knowledge, experience, skills, qualities, responsibility and values which qualify an individual to practice medicine.

In the UK it can take between 4-6 years to become a qualified doctor. Following an undergraduate medical degree, junior doctors will then enter into a foundation training programme which is the start of their postgraduate medical training. Medical education as we know it today spans three sectors: undergraduate, postgraduate,

and the continuing professional development of established clinicians (Swanwick 2018).

DIAGRAM 1.1 THE MEDICAL TRAINING PATHWAY (HEE 2020)



The diagram above (1.1) outlines the medical training pathway. Once the doctors have effectively declared which area of medicine or surgery they wish to specialise in they are now in a position to commence endoscopy training.

Medical Education

Medicine and medical education are considered to be in a continuous state of flux. Increased access to healthcare, changes in healthcare delivery, population growth, rapid changes in science and technology and the emergence of new diseases have all had an impact on how medicine is practised. (Karunathilake and Samarasekera (2021). As a consequence, these factors have affected how medical education is delivered to align with contemporary medical practice.

Medical education spans three distinct sectors - undergraduate, postgraduate and continuing professional education of established clinicians.

Learning Approaches in Medical Education

Traditional medical education has been adopted widely throughout the last century or so. Its purpose has been to produce scientifically grounded and clinically skilled doctors. However, in recent years there have been significant changes to undergraduate and postgraduate education (Buja 2019).

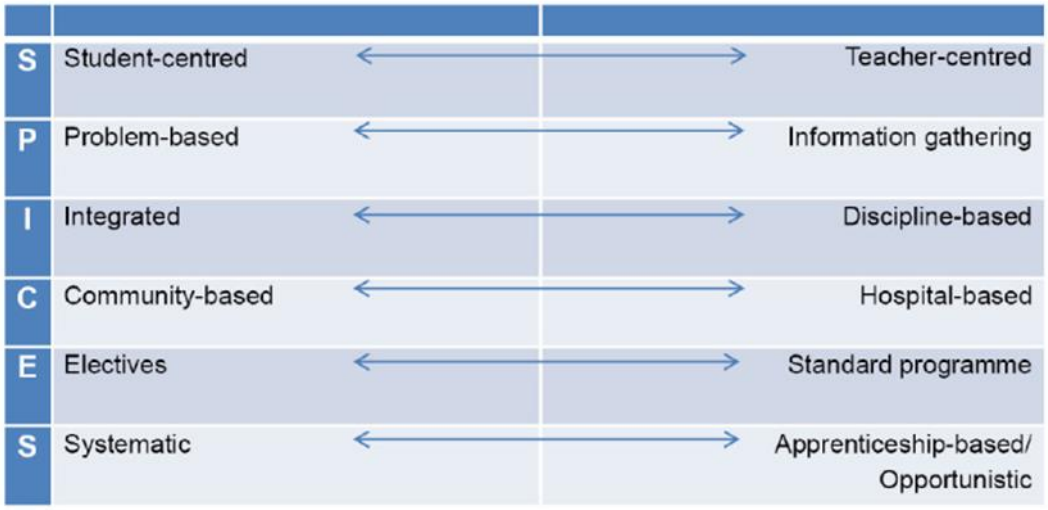
As medical education is considered to span the undergraduate, postgraduate and continuing professional development phases, learning in medical education is deemed to be lifelong. With this is mind an important goal of medical education is to foster learning in medical professionals (Mayer 2010).

Students are exposed to a wide range of teaching methods during medical school and these are divided into the pre-clinical and clinical teaching. The majority of teaching in the pre-clinical years is predominately lecture-based. The clinical teaching is often hospital-based. Students are expected to be more active participants in their learning rather than being passive learners and curriculum developers have therefore introduced various approaches including small group sessions, problem-based learning, self-directed learning, team-based learning and flipped classrooms, all serving as an alternative to traditional didactic teaching (Buja 2019). There is also the expectation in modern medical education that role modelling is applied as an educational tool within it. The role modelling influences medical student values, attitudes, ethics and professional behaviour (Mohammadi, Mirzazadeh, Shahsavari and Sohrabpour 2021). The development of these qualities, in my view, are essential for the trainee endoscopist to acquire.

There are six main concepts to medical education (O'Connell 2009, Dent 2014). According to Dent (2014) the SPICES model would be used to develop innovative teaching opportunities in ambulatory care settings. Dent (2014) explains that using this model provides opportunities for integrated learning and problem-solving which

included an inter-professional educational approach. When thinking about endoscopy training this model of education aligns particularly well.

DIAGRAM 1.2 SPICES MODEL TAKEN FROM DENT (2014)



It is clear from the literature that the training and education of doctors and other healthcare professionals needs to consider the changing healthcare needs of the population. Education is key to prepare the future workforce for the demands of an ever-changing care environment (Swanwick, Forrest, O'Brien 2019).

Overview of gastrointestinal endoscopy

The following section will highlight the principles of gastrointestinal (GI) endoscopy. It will explore the development of the procedure, the involvement of medical and non-medical endoscopists and it will seek to explore the training accreditation within the UK. This will provide context and background to this doctoral research.

Gastrointestinal endoscopy is defined as the direct visualisation of the digestive tract. It is performed by using a flexible 'endoscope' inserted in the upper and lower gastrointestinal system to examine the gut lining.

Endoscopy plays a vital role in the diagnosis and on-going surveillance for GI cancers including oesophageal, gastric and bowel cancer. Endoscopy is also performed for the diagnosis, surveillance and treatment of a wide range of benign conditions. The demand on endoscopy services is increasing and expected to rise even further following the introduction of new faster diagnosis on referral pathways for suspected cancer (DH 2019).

Endoscopy services across England face a number of challenges including lack of capacity for increasing demand, a 44% predicted increase in procedures by 2020 and more endoscopists need to be trained to meet the demand. The global pandemic has had a significant impact on endoscopy services, however demand for endoscopy in the future is expected to rise with changes and age reduction to the Bowel Cancer Screening programme for the detection of early colorectal cancers (CR 2018)

In the UK this can be performed by both medical and non-medical endoscopists (this includes Nurse Endoscopist and Clinical Endoscopist). In many European countries the role of the non-medical endoscopist does not exist, therefore, it could be argued that the UK is advancing the clinical endoscopist role.

A non-medical endoscopist is defined as any non-medical person who performs endoscopy including but not limited to nurses, physician assistants and medical assistants (BSG 2005). In the UK the term Nurse Endoscopist (NE) is not legally recognised (BSG 1994, BSG 2005), and in 2017 has been changed to Clinical Endoscopist (HEE 2017) but NE continues to be commonly used throughout the UK. In the United States and Canada, the terms non-medical endoscopist or non-physician endoscopy are commonly used. However, for the purpose of the research the non-medical endoscopists are predominantly nurses therefore to be mindful of any ambiguity the term ‘Nurse Endoscopist’ will be employed.

Summary

From the initial exploration of the relevant literature it is hoped that this piece of research will add to the body of knowledge regarding the experience of undergoing endoscopy training, influences on that training experience, Nurse Endoscopists (NE) in endoscopy training and the development of endoscopy training for both medical and non-medical trainees. IPA is a relatively recently developed and rapidly growing approach to qualitative inquiry in many settings including healthcare. Its flexible approach allows researchers to unpick the meanings contained in the participant's experience of a phenomenon through a process of interpretative engagement (Willig 2008). While also taking account of everyday phenomena, for this reason, IPA is a well-suited approach to this study. It will, therefore, provide an insight into the narrative of each trainee in relation to their own experience.

1.4 Thesis breakdown chapter by chapter

A social constructionist perspective underpins this study and in keeping with that approach many theories and perspectives have influenced the development of this thesis (Gergen 2001). This thesis includes a number of key areas of research, each of which is discussed at length in the following chapters. For clarity of presentation this thesis is presented in a traditional linear format, although in reality the thesis developed in an iterative and reflexive way. The research is sub-divided into ten chapters which are briefly explained below.

Chapter 1 *- Introduction and Context of the Study*

This chapter describes the context within which the study took place. It introduces the research question, aims and objectives.

Chapter 2 *- Literature Review*

A wide range of literature is presented in this chapter with areas relevant to the present study being considered. This chapter examines the literature around processes involved in medical education, the evolution of endoscopy and the literature surround endoscopy training will be described.

Chapter 3 *- Theory and Methods*

In this chapter a variety of issues are considered in relation to the philosophical and theoretical beliefs underpinning the study, and the way in which the study was undertaken. It explores the chosen methodology – Interpretative Phenomenological Analysis (IPA).

Chapter 4 *- Data Collection*

This chapter describes the process and methods of data collection in the research project. It outlines the methods utilised in this research including observations and semi-structured interviews and how this corresponds with the chosen methodology.

Chapter 5 *- Data Analysis*

This chapter sets out an analysis of the findings, exploring the process of data analysis relating to Interpretive Phenomenological Analysis (IPA) and bringing together the identified super-ordinate and sub-ordinate themes from the chosen methodology.

Findings Chapters: 6, 7 and 8

Chapter 6 *– Super-ordinate Theme – Organisational challenges*

Chapter 6 describes, evidences and explores the Super-ordinate theme related to the organisational challenges and the associated Sub-ordinate themes which have emerged from the interview data. The Sub-ordinate themes include:

- Barriers to training

- Service provision
- Hierarchy.

Chapter 7 *– Super-ordinate Theme – Trainee emotions*

Emotions emerged as a central feature of the trainee's experiences, therefore this chapter explores the Super-ordinate theme of trainee emotions and related Sub-ordinate themes.

- Staff attitudes that influence training
- Trainee self confidence
- Trainee – trainer relationships.

The trainee perspectives are evidenced through direct quotes from the transcriptions.

Chapter 8 *– Super-ordinate Theme – Professional Self identity*

This final chapter explores Super-ordinate theme of professional self-identity and the emergent Sub-ordinate themes

- Professionalism
- Stereotypes in health
- Justification of roles
- Self-esteem/self-worth.

These are presented and discussed in this chapter which concluded the presentation of the findings. The chapter uses quotes from the transcriptions related to the themes, and the discussion section will explore the relationship between the themes and the contemporary literature.

Each of the three findings chapters will conclude with a discussion section, this section examines the literature in relation to the emergent themes. These discussions will form the basis to examine the main findings of this doctoral research.

Chapter 9 *- Discussions, conclusions and recommendations*

This chapter brings together the study's components. It begins by examining the research findings and assessing how the aim of the work was achieved. It then considers the objectives of the research and evaluates the extent to which these objectives were met. A discussion of the main findings from the research project is presented, followed by the detailed contribution to knowledge and the academic arena that this study has uncovered.

Chapter 10 *– Critical reflection of the project*

This final chapter reflects upon the whole research process by using Brookfield's Four Lenses (2005) as the chosen model of reflection. It explores the personal journey and reflections of the researcher by the method of keeping a research journal, it details the personal development as a researcher. It also explores the reflection process through the lens of the peers, the learner and the scholarship and literature as per Brookfield's Model of reflection.

Chapter 2 - Literature Review

Introduction

In this chapter the relevant literature will be examined. In order to give a context to this doctoral research the structure of medical education and how endoscopy training fits into this role will be discussed. The principles of endoscopy training will be addressed to give some background and understanding of the endoscopy trainees' lived experience. As Nurse Endoscopists (NE) have a significant bearing on the endoscopy workforce, it is important to discuss this role and how this fit with the endoscopy workforce. Therefore, the relevant literature regarding nurse endoscopists will also be explored in this chapter.

As the research had progressed the literature needed to be revisited during the course of the study and as a result the literature review has evolved during the whole research journey. It should be highlighted that not all of the literature was found at the outset of the PhD and indeed some of the literature was discovered along the way in an iterative fashion and this was often driven by the data and emerging issues.

2.1 Establishing the Focus of the Investigation

An extensive literature review was undertaken examining the main aspects of the project. The topics covered include:

- Endoscopy training
- Nurse Endoscopists (NE)
- Inter-professional education
- Medical education
- Interpretive Phenomenology Analysis (IPA) – this will be explored in Chapter 3

- Hermeneutic Phenomenology (Husserl, Heidegger) – this will be explored in Chapter 3

A wide number of databases were used for the literature search including Cinhal, Medline, Google Scholar and Athens, and an extensive range of publications were studied from both nursing and medical texts as well as current publications. Cited reference searches and hand searching were also used to seek additional literature and follow leads. I explored various publications; I wanted to be able to understand the subjects from a clinical and educational perspectives as well as considering the changes in the delivery of undergraduate courses.

It was important that the relevant literature reviewed was pertinent to my area, unfortunately there was limited literature from the UK and I acknowledge that some of the literature is outdated. At times I needed to explore comparable literature from other countries such as United States, Canada, Australia and the Netherlands and found it offered a good robust debate between opposing arguments.

In the healthcare literature there appears to be a lack of evidence addressing the complexities of endoscopy training and the trainees' experience. Some of the publications were from academic centres where educational programmes were the focus of study as were the comparisons of skills between medical and non-medical endoscopists. The literature search was complicated by the inconsistent terminologies used to describe healthcare professionals working in team settings. I found no literature that combined the focus of my study with the methodology of Interpretive Phenomenological Analysis (IPA) or hermeneutic phenomenology.

The literature review has been an ongoing process throughout this doctoral thesis. The process began at project proposal development and approval and continued through to the literature that has contributed to the final discussions and conclusions.

The remainder of the literature review will be broken down into headings where key texts and evidence, relevant to the research is explored.

2.2 History of medicine - a brief overview

The following section will provide a brief overview to the history of medicine. The exploration of this subject helps to set the scene for the research and will provide an overview of the process of the medical education journey. This is a huge subject and my intention is not to cover this in great detail but to give background and context to the subject within this chapter.

Early medicine

Hippocrates has become the father of medicine as we know it, he lived in the Greek island of Cos around 460BC to 370 BC and he practised medicine and took pupils for a fee. The Hippocratic Corpus is considering his main body of writings which consisted of around 60 works which covered many aspects of medicine, surgery, diagnostics, therapeutics and disease prevention. The main reason they form the basis of modern medicine is that Hippocratic medicine is holistic (Bynum 2008).

The Hippocrates model was based around the four humours which were constitutive of health and disease, these were: blood, yellow bile, black bile and phlegm. These constituted a framework for understanding health and disease. Each of the humours was also linked to a theory of temperaments which provided a guide to human personality and the susceptibility of disease. These were: heat, cold, dryness and moistness, these offered a parallel to the course of disease and the stages of the individual life cycle. Each of the humours was then linked to one of the four elements – air, fire, earth and water. A fifth element in relation to the moon was also described which is ‘quintessence.’

Greek humourism was the most powerful explanatory framework of health and disease available to doctors and laymen until scientific medicine began gradually to replace it during the 19th century and this is representative of where we are today.

Women physicians, apothecaries, surgeons, nurses and midwives have all worked in a male-dominated medical world for centuries and their involvement has always provoked intense debate. Often in the face of prejudice and discrimination many women over the centuries have made outstanding medical and scientific contributions and still continue to do so. Despite being excluded from formal practice for centuries, women have often been experienced and knowledgeable medical practitioners as carers for family and friends, sharing their knowledge through word of mouth and handwritten recipes.

In healthcare today, the numbers of women in medicine are improving, however, there are still some medical disciplines such as surgery or orthopaedics where numbers of women specialising in these fields remain relatively low with less than 30% of women practising in this field in 2013 (Jefferson, Bloor and Maynard 2015).

Medicine and the NHS

The NHS has depleted numbers of doctors in post (McNally and Huber 2021). There are currently 122,446 full-time equivalent doctors working within the NHS since September 2020 (DHSC 2020). The role of the medical doctor is defined by the Medical Schools Council 2014 as:

'Doctors as clinical scientists apply the principles and procedures of medicine to prevent, diagnose, care for and treat patients with illness, disease and injury and to maintain physical and mental health. They supervise the implementation of care and treatment plans by others in the healthcare team and conduct medical education and research.'

It also states that the doctor's role must be defined as:

- Acting in the best interest of patients and of the population served

- Doctors alone amongst healthcare professionals must be capable of regularly taking ultimate responsibility for difficult decisions in situations of clinical complexity and uncertainty
- Drawing on their scientific knowledge and well-developed clinical judgement
- Underpinning this is the importance of keeping up-to-date with research
- Reflecting on their own practice and advocating for evidence-based medicine.

The role of the doctor has also become much more complex requiring the medical profession to become the agents of change and creators of innovative and high-quality practice (Nicol and Cowpe 2016). The doctor's role has also traversed the boundaries into management, the rationale being that policymakers have argued that reform in future needs to be led locally with the full engagement of clinicians (Ham, Clark, Spurgeon, Dickinson, Armit 2011). Therefore, with the expectation that doctors' roles are changing, roles of other healthcare professionals (HCP) need to evolve in order to bridge the gap and provide services to address workload and patient flow issues (McNally and Huber 2021).

Foundation Programme Training

All medical graduates must undertake and complete an integrated two-year programme of general training, in order to practice as a doctor in the UK. Once they have graduated, 98% of medical students will apply for the Foundation Programme. Foundation Training is a two-year generic programme consisting of year 1 (FY1) and year 2 (FY2). This programme is designed to act as a link between undergraduate medical training and specialty and general practice training. The purpose of this type of training is to provide trainees with well-defined practical skills, competencies and rigorous knowledge of how to manage acutely ill patients. Foundation doctors will normal under take six four-month rotations or placements in different hospital settings.

During these rotations the doctors will undertake regular assessments and achieve certain milestones (Scanlan, Cleland, Johnston, Walker, Krucien, Skåtun 2018), (BMA 2021).

From 2021 all new graduates will be completing the new Foundation Programme curriculum which sets out a much more holistic approach to care including physical health, mental health and social health. The postgraduate training will equip the doctors with the skills required to manage this in both acute and community settings including patients with chronic conditions. Foundation doctors must demonstrate that they are competent in the traditional elements of medical training but also in areas such as communication and consultation skills, patient safety and teamwork (UKFPO 2022).

Specialty and general practice training

Once the foundation programme has successfully been completed, doctors can continue their training, at this point they can either choose a route in a specialist area in either medicine or surgery (for example gastroenterology or colorectal surgery) or at this point they can enter into GP training.

Speciality training can be delivered in several in several ways:

- Run-through training programmes

These last from approximately three years for general practice and five to seven years in other specialties.

- Core and higher specialty training programmes

Core training lasts two to three years, depending on the specialty. This is followed by an open competition to enter a higher specialty training post.

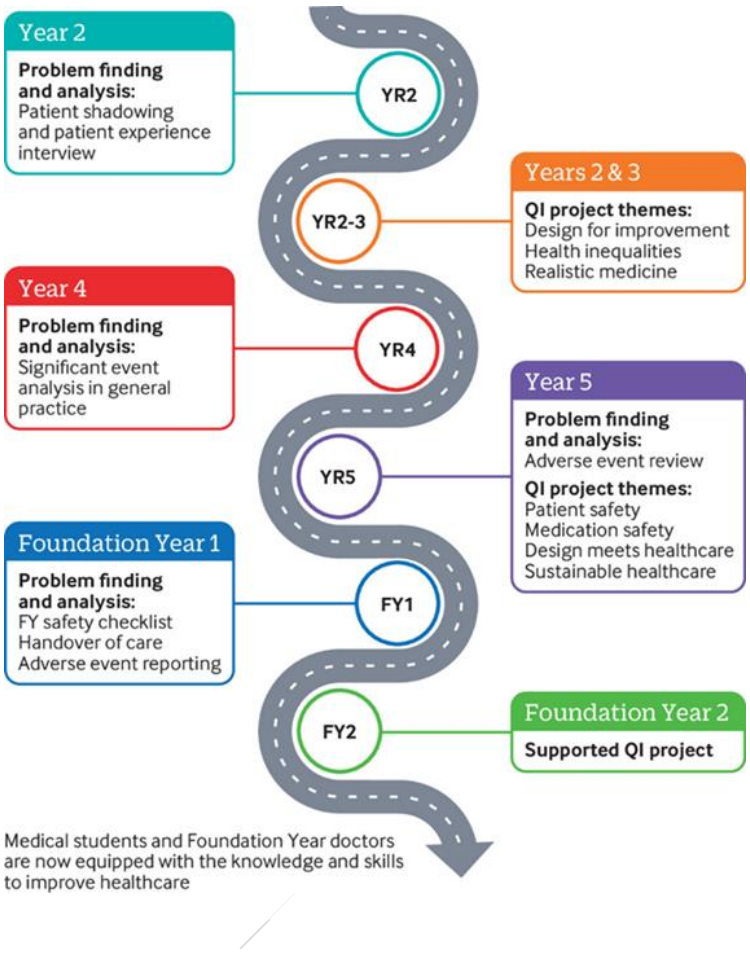
- ACCS (Acute Care Common Stem)

This is a three-year training programme that normally follows FY2. It is the only core training programme for trainees wishing to enter higher specialty training in emergency medicine and is an alternative core training programme for trainees wishing to enter higher specialty training in General Internal Medicine, Acute Internal Medicine or Anaesthesia.

On successful completion of a run-through or higher specialty training programme, doctors are awarded a Certificate of Completion of Training (CCT) which allows them entry onto the GMC specialist or general practice register.

There are some other training options open to doctors, however I have outlined the most common and for the purpose of endoscopy training, doctors will be usually completing Core and Higher specialty training programmes (BMA 2021, HEE 2022).

DIAGRAM 2.1 UNDERGRADUATE AND FOUNDATION YEARS MEDICAL EDUCATION TAKEN FROM DAVEY, THAKORE & TULLY (2022)



The above diagram (2.1) explains workplace-based learning programmes on healthcare improvement in the undergraduate and foundation year (FY) curriculum. Foundation years are the first two years of postgraduate training.

The Shape of Training Review

The Shape of Training Review was conducted in 2013 and examined postgraduate medical education and training. As a result, it proposed potential reforms to the structure of postgraduate medical education and training across the UK. It identified how best to deliver a workforce that meets the needs of future patient and models of service (Greenaway 2013). The aim of the Shape of Training in the simplest terms, is for the UK to train more generalist doctors and extend full registration with the General

Medical Council (GMC) to all trainee doctors. This has a potential impact for gastroenterology trainees as it can reduce speciality training from five years down to four years with this having a significant impact on the ability to receive endoscopy training due to the reduced time frame (Rimmer 2013), (Fuller and Simpson 2014). Interestingly a recent study by Raju et al (2021) examined trainee gastroenterologists' perception of Shape of Training and identified that the most significant concern to gastroenterology training remains gaining competence in endoscopic modalities, and 84% of respondents felt that four years is not enough time to train to become a consultant. Raju et al (2021) suggested that the impact on endoscopy training was multi-factorial and that as the higher specialist training moves to a four-year programme that significant changes must be made to training delivery. It is suggested that protected endoscopy training, immersion training and blocks of specialty-specific work may help to ensure that no delays to the issue of the certificate of completion of training are to be expected.

Summary

This section has outlined the history of medicine, development of medical education and the current aspects of medical training. The following section will discuss the relationship between medical and nursing professions highlighting inter-professional working and professional self-identity.

2.3 Differentiation between Medical and Nursing Roles

Traditionally nursing work always intersects with medical work, and with the emerging advanced practice roles such as Nurse Endoscopists the boundaries between both professions have become blurred (Davis, 2003), (Weller, Barrow & Gasquoine 2011). These advanced practice roles are interdependent and the interaction between the two can be based upon respect, hierarchy, politeness, and camaraderie, nevertheless the relationship is also based on a division between knowledge, power and authority

which can be perceived to threaten inter- professional working (Stein 1967). (Stein, Watts, and Howell 1990), (Dingwall, Rafferty & Webster 1988), (Wicks 1998).

Waring and Currie (2009) suggest that professional and managerial jurisdictions in healthcare are often blurred and can have an impact on decision making and care delivery. They also suggest that doctors respond to change through a number of situated responses that limit management control over knowledge and reinforce claims to medical autonomy. In contrast nurses often struggle to find a place for themselves in the current healthcare hierarchy and this is no different in advanced practice. Historically, nurses tend to have a subordinate status in the workplace with the division of labour influenced by the medical profession and legislation (Churchman and Coherty 2010). The division of knowledge in healthcare is categorised by professional status. Doctors are seen to have full professional status because they have exclusive theoretical knowledge which enables them to maintain a level of power and authority over the nursing profession. Even though nurses are trained to degree level and above, the issue of professional status in nursing continues. Regardless of the social and professional view that nurses are second rate to doctors, there is a vast difference between the two professions. The essence of each profession is very different; however, they are required to achieve the same goal. In simple terms the role of nursing is to care and that of a doctor is to cure. However, in my view neither is mutually exclusive, in fact one cannot successfully practice without the other. Therefore, it is clear that their professional responsibility differs. Unfortunately, doctors and nurses have a professional lack of consistency with respect to their roles and responsibilities.

It is clear that institutional hierarchy exists in healthcare today. Hierarchy distinguishes between individuals on the basis of power to influence. Variations in power status within healthcare structures are widely documented with reference to the higher paid professionals offering a more dominant position (O'Shea, Boaz and

Chambers 2019). Even a recent study by Crowe, Clarke and BrughaIn (2017) identified that emotions help to reinforce the paternalistic hierarchy described by junior doctors in the study. This was seen in narratives of hierarchy in hospitals, where trainees were expected not to challenge or question the judgements or actions of their seniors. In contrast, in a study on perceptions of power among nursing and medical students, Engel, Prentice, & Taplay (2016) found that nursing students felt less intimidated by the medical hierarchy when they focused on interpersonal relationships with medical students, rather than on asymmetrical power relations that define nurse-doctor relations.

Much of the literature surrounding the relationships of doctors and nurses focuses on gender roles, patriarchal and matriarchal relationships, stereotypes, and sexual division of labour (Stein 1967), (Stein et al 1990), (Sweet and Norman 1995), (Wicks 1998), (Hall 2005). However, while this is of pivotal importance in the doctor-nurse relationship, it could be argued that this is the beginning of a complex association among the two professional groups. At the time of writing this thesis the discussion regarding gender stereotypes has had a renewed resurgence in the media. According to Zhu and Chang (2019), gender inequality stems from a combination of present-oriented reproductive strategies adapted to high-risk environments and dominance hierarchies resulting from societal competition. Furthermore, in a recent study conducted by Breda, Jouini, Napp and Thibault (2020), it is considered that although women seem to outnumber men in higher education, they remain under represented in mathematic-intensive fields. They concluded that the concept of gender segregation across fields of study or occupations will not decrease even as societies become more developed and democratic. They suggest that appropriate policies need to be put in place to induce such a change to attempt to limit the extent to which gender segregation generates inequality on the labour market.

Hegemonic masculinity is an interesting concept and refers to the existence of multiple definitions of masculinity and at the same time to hierarchies of power authority and recognition among men and between men and women. According to Connell (1995) the qualities that are associated with this form of masculinity, which are historically constructed can be described in terms of:

- Rationality
- Hierarchical authority
- Objectivity
- Decisiveness
- Physical and mental strength
- Competitiveness
- Individualism.

Hegemonic masculinity in our society is given a privileged status, it also involves what is known as homo-sociability which is described as the preference for similarity, to work and play together with other men, to appoint others cast in their own image (Davis 2003). It is also argued by Risberg (1998) that homo-sociability means that men at workplaces, despite internal antagonisms and different positions in the hierarchy, behave unitedly in front of women and in doing so maintain their position in power. This is a phenomenon that is still apparent in healthcare today, although this is an outdated social contract implicit in the dialogue. Power hierarchies are tiered levels of power within interpersonal relationships. In healthcare, those hierarchies can present themselves in many different areas. Medical professionals see hierarchy between different types of clinicians such as doctors, nurses, or other clinical workers.

Power hierarchies can also be apparent between clinicians and their patients, relatives and carers. The traditional relationship between patient and clinician has

been viewed as paternalistic, with the doctor manging the patient care pathway. In some respects, healthcare professionals are now calling these power hierarchies into question, suggesting that they do not align with patient-centred and value-based healthcare models.

The public perception of the role of the doctor has changed, this is largely associated with increasing focus in the media on the behaviours of healthcare professionals (O'Sullivan 2017). Since the Covid-19 global pandemic the public have developed much more of an interest in the professionalism of healthcare professionals. According to O'Sullivan (2017), the rapid expansion of medical knowledge and skills and the technical revolution alongside the desire for more equitable engagement between patients and healthcare practitioners, multidisciplinary team working and the diversity of healthcare provision across the world are all seen to challenge the power which was originally held by doctors.

According to Chambliss (1996) who conducted his research in America during the early 1990s it is suggested that some nurses accepted their position as subordinate with the assumption that medicine is superior and that nursing is simply a lesser form of medicine. They also seek to enhance their own prestige by a 'drift to medicine' by pursuing a career in more medically orientated areas of nursing such as Accident and Emergency or theatres, or perhaps endoscopy. However, in reality the nursing role should be differentiated from the work of medicine, nevertheless the nursing role is still associated with the notion that nursing has a subordinate element to it and Chambliss (1996) argues that this is perhaps a more important aspect of the role than caring. However, nurses rarely work in isolation and the care of a patient is usually provided by practitioners from more than one professional group, and sometimes from more than one organisation or agency involved in care delivery. Although the range of professionals and practitioners will vary, it is unusual to find healthcare situations where nurses are not involved - including endoscopy.

Professional role identity

One of the biggest challenges in advanced nursing practice is professional role identity. There is no clear universal definition for a Clinical Nurse Specialist (CNS) and there is a wide variation between individual CNSs in the type of work they undertake, this is further compounded by the wide variation of role title including Advanced Practitioner, Nurse Practitioner and Specialist Nurse (Vidall, Barlow, Crowe, Harrison Young 2011). An inconsistent role standard can lead to role identity fragmentation and conflict across a group. It may precipitate individual role crisis, affecting optimum role performance (Machin, Machin and Pearson 2012). By having clarity in the nurse specialist role, it may go some way to achieving recognition of these roles both in nursing and medical professions.

As roles in healthcare continue to develop, the need for good inter-professional communication and collaboration to help coordinate patient care in an effective manner is critical (WHO 2010). Despite this need, research indicates that such communication and collaboration can be problematic. Studies have shown that effective inter-professional collaboration can be undermined by boundary infringements, a lack of understanding of one another's roles, limited communication, and poorly coordinated teamwork (George, Renjith & Renu 2015), (Hall 2005), (Pethybridge 2004), (Reeves 2004), (Skjorshammer 2001), (Hall & Weaver 2001).

Doctors and nurses have always worked closely together, and these disciplines are expected to work in close proximity to one another more than any other professional groups in healthcare (Sweet and Norman 1995). Doctors' and nurses' current roles are relatively new and have evolved over the years. In my experience I feel that the clinical nurse specialist (CNS) is stuck in a 'no-man's land' of practice and belonging and are not welcomed fully into the medical groups but at the same time no longer have a place in the traditional perception of nursing. I am proud to be a nurse and my

core values as a nurse are at the heart of everything that I do. I am also bound by my NMC (2015) code of conduct; however, the scope of my practice leaves me with a lack of identity at a practice level. I feel this is further compounded by the huge differences in role and title which can be confusing to both professional groups.

Inter-professional team working

Healthcare professionals such as doctors and nurses are increasingly encouraged to work together in delivering care for patients (Schot, Tummers and Noordegraaf 2020), this is particularly true of many specialist areas and endoscopy being one of these.

Inter-professional team working in healthcare is defined as the means by which different healthcare professionals - with diverse knowledge, skills and talents - collaborate to achieve a common goal (Scaria 2016).

The literature highlights that there are difficulties in initiating inter-professional educational efforts and suggest that undergraduate education largely fails to address key elements, such as the understanding of professional roles, authority, hierarchy and gender-related dimensions of teamwork (Zolnierekand, Dimatteo 2009), (Lapkin, Levett-Jones and Gilligan 2013), (Reeveet et al 2010). West et al. (2004) concluded that clear professional roles are essential, and that team members may benefit from a comprehensive understanding of not only their own role but also the professional roles of their colleagues. Inter-professional teamwork is also discussed by Reeves et al (2010) who suggested that the key features of inter-professional team work included common goals, shared team identity, shared commitment, clear team roles and responsibilities, interdependence between team members, and integration between work practices. Petri (2010) suggested that inter- professional teamwork is best achieved through activity that educates and promotes mutual trust and respect, helpful and open communication, and the importance of the awareness and

recognition of the roles, skills, and responsibilities of different participatory professional groups is highlighted.

The following section outlines the evolution and principles of gastrointestinal endoscopy which will help to give context to the complexities of endoscopy training.

2.4 Evolution of endoscopy

Endoscopy is one of the commonest diagnostic procedures performed in the UK, it is estimated that around 2.1 million (Siau, Hayee and Gayam 2021) are performed in the UK annually, however it is only in the last 40 years due to technical advancement in photography and monitors that this has been the case.

Several attempts have been made in the past for the scientific community to view body cavities using specialist instruments. The first documented instance of the use of a tube to inspect the rectum was in Hippocrates' time. Natural light was used to illuminate the field and the word 'endoscopy' has been used to describe the procedure ever since. The origin of the word derives from the Greek words *èndon* (meaning inside) and *skopê* (meaning 'to see'). The first endoscope was created in 1809 by Phillip Bozzini, a German urologist. The invention of a rod-lens optical system by Harold H. Hopkins in 1959 and the addition of fibreoptic light transmission by Karl Storz in 1960 marked a breakthrough in modern endoscopy. Further advances in technology have encompassed innovations in all parts of the circuit including light source, the endoscopy itself, camera processors and digital high-resolution monitors. The application of endoscopic technique has benefited from the digital world include the capture, sharing and achieving photographs and streaming video.

The beginnings of nurse/non-medical endoscopy

Endoscopy is the keystone to modern gastroenterology and gastrointestinal surgery and we take for granted the presence of endoscopic procedures to aid diagnosis in

our everyday practice, however it is advancements in technology which have allowed this method of imaging to rapidly evolve (Sivack 2006). As new technologies develop and become embedded in daily practice the role of the person performing the procedures changes in order to meet the service demands and gastrointestinal endoscopy is one such area which lends itself to developing skills of others professions besides medicine.

The Nurse Endoscopist role is one of many new nursing roles undertaking procedures that were previously considered the remit of the medical profession (Chapman & Cooper 2009). Nurse Endoscopy training and service delivery was first reported in the United States in the late 1970's. The basic concepts of competent endoscopic practice required thorough training both in technical and cognitive aspects of endoscopy, cognitive aspects include contraindications, pathology recognition and management, risks, benefits, alternatives and the ability to assess the implications of the information regarding the patient condition and subsequent diagnosis. The technical aspects refer to the ability to perform the physical aspects such as scope manipulation, intubation of oesophagus, manoeuvring the scope through the GI tract, performing biopsy and withdrawal of the instrument. (ASGE 2016).

In 1994 the British Society of Gastroenterology (BSG 1994) issued guidelines and recommendations suggesting that it would be appropriate for a suitably trained endoscopy nurse, with the full support of the gastroenterologist, to carry out uncomplicated upper and lower gastrointestinal (GI) endoscopy.

By 1998 we began to see the first nurses being appointed as Nurse Endoscopists in the local region. Initially this role faced criticism with medical colleagues suggesting the nurses lacked the cognitive ability to perform complex tasks or to make medical decisions. The hostility continued, interestingly not only from the medical staff but also from within the nursing profession. In the five years following the BGS publication of the Nurse Endoscopist (BSG 1994) various articles appeared examining the efficacy

of the role in relation to patient comfort, patient satisfaction and cost effectiveness in comparison to medical counterparts.

Both cognitive and technical aspects of endoscopy are taught through a national accredited training programme that supports the development of cognitive and technical skills. In the UK this is facilitated by the Joint Advisory Group (JAG). JAG on gastrointestinal endoscopy is principally a quality improvement and a service accreditation programme for gastrointestinal endoscopy. It supports and assesses endoscopy units to meet and maintain the JAG standards, offering patients and commissioners a badge of quality. Further to this is JAG Endoscopy Training System (JETS) which is for all UK-based endoscopists. Endoscopy training and certification is one of the key remits of the JAG and this system reflects the JAG's guidelines and quality assurance framework. JETS also provide an e-portfolio for trainees to record their endoscopic experience and demonstrate their performance and competencies, which will support the JAG certification process (JAG 2020).

As a nurse at the time working in endoscopy in a large city centre teaching hospital this belief was believed to be too forward thinking and the true implications of this had simply not been considered. In general, the literature echoed this sentiment and many hospitals have only recently appointed nurses to such roles. Unsurprisingly some resistance to development of the role was met with discussion from gastroenterologists, pathologists and surgeons alike that as nurses we are unlikely to have the cognitive ability to process complex tasks, decision making and management plan. Some speculated this this may be down to the differences in training philosophy or basic academic ability (Griffiths 1995). While this is a rather outdated view this discussion has surfaced again in some of the recent literature particularly from overseas where the role is still in development (Duffield, Chapman, Rowbotham, Blay 2019). To date, these roles remain controversial, in Europe these advance practice roles have yet to be established and in countries such as Australia

and New Zealand they have only recently begun exploring the development of such a role and the current literature somewhat reflects what was written many years ago in the UK.

This discussion has recently re-emerged in the UK with the implementation of an Accredited clinical endoscopist training facilitated by Heath Education England (HEE) and supported by JAG. This has condensed the training for Clinical Endoscopists into a seven-month comprehensive programme combining JAG- approved endoscopy training with a substantial academic component, this promised well-trained endoscopists in a much shorter period of time and has resulted in the demand of endoscopic procedures over the last few years and the predicted rise by 2020.

Principles of endoscopy training

Endoscopy training has traditionally been accomplished by an informal process in the endoscopy unit that parallels apprenticeship training which is seen in other areas of professional education. However, the process is now much more formalised with the introduction of a competency based trained training programme.

Trainees tend to begin endoscopy training with OGDs (although this is not mandatory), mastering the necessary motor skills to manipulate the endoscope before progressing to colonoscopy. OGD experience is easier to accrue as the procedure time is shorter and more procedures can be performed per list. The greater technical difficulty of performing colonoscopy compared with OGD, combined with a lower completion standard, may explain the focus in the literature on colonoscopy learning curves (Ward, Hancox, Mohammed, Ismail, Griffiths, Valori, Dunckley 2016).

There are set measure which the trainees need to achieve before certification is awarded. Each endoscopy modality requires different assessment and certification criteria, for clarity the process is outlined below. As this doctoral research is purposively examining trainees' experience during colonoscopy training the following

section will briefly include training to perform upper gastrointestinal endoscopy to serve as comparison to the skills acquisition and development of the learning curve required.

Upper gastrointestinal endoscopy or oesophago-gastro-duodenoscopies (OGDs) as it is often referred to, is defined as the examination of the upper gastrointestinal tract to the limit of the second part of the duodenum using an endoscope.

Endoscopy training programmes are required to assess the competency of trainees aligned with specific markers. These markers include completion of the procedures without physical assistance from the trainer and satisfactory scores in direct observation of procedural skills (DOPS) assessments (Ward et al 2016). The table below outlines the markers with their specific score requirements.

TABLE 2.1 TAKEN FROM JETS CERTIFICATION PATHWAYS – TRAINEE CERTIFICATION PROCESS FOR GASTROSCOPY

Criteria	Requirement
D2 intubation	≥95%
J Manoeuvre	≥95%
Unassisted physically (the trainer does not touch the scope	≥95%
Basic Skills course	Attended
Recommended Lifetime procedures	≥200
Procedures in previous 3 months	≥15
Lifetime formative upper GI DOPS Trainees are recommended to complete DOPS throughout training. 1 DOPS form for every 10 cases	≥20
5 most recent formative upper GI DOPS scoring 'competent for independent practice' DOPS forms must be completed within 12 months of application for certification. Up to 10% can score 'minimal supervision'. No item in the last 5 DOPS can be scored 'maximum supervision' or 'significant supervision'.	≥90%

The learning curve to achieve competency at OGD is shorter than for colonoscopy. This supports the notion that colonoscopy is a technically more challenging procedure to perform. The most difficult steps in performing OGD are said to be intubation of the oesophagus and passage of the scope through the pylorus. OGD is often the first endoscopic procedure to train in as it gives the trainee the opportunity to master scope manipulation before moving on the more technically challenging procedure of colonoscopy. The following section will explore the expectation of a colonoscopy trainee and the challenges experienced in this type of training.

Colonoscopy is an invasive investigation which involves using an endoscope to examine the large bowel. In the UK a medical trainee must have commenced their specialist training in a relevant speciality such as gastroenterology or colorectal surgery. Allied health professionals can also train to become a Clinical Endoscopist.

Colonoscopy certification in the UK is taken in two parts, provisional certification and full certification. The first application for provisional certification means if a trainee is successful in their application for provisional colonoscopy certification then they can perform colonoscopy independently as long as there is a trainer immediately available in the department. The trainee will need to apply separately for full certification which judges competency to perform colonoscopy fully independently. Trainees need to complete a minimum of a further 100 procedures and achieve certain criteria which are outlined in the table below before full certification is granted. According to Preistler, Svendsen, Svendsen and Konge (2017) there is a general agreement that the number of procedures are not equivalent to competence.

TABLE 2.2 TAKEN FROM JETS CERTIFICATION PATHWAYS – TRAINEE CERTIFICATION PROCESS FOR COLONOSCOPY

Criteria (Provisional)	Requirement
Caecal intubation rate	≥90%
Unassisted physically (the trainer does not touch the scope	≥90%
Basic skills Lower GI course	Attended
Total lifetime procedures count	≥200
Procedures in the last 3 months	≥15
Lifetime formative lower GI DOPS Trainees are recommended to complete DOPS throughout training. 1 DOPS form for every 10 cases	≥20%
5 most recent formative upper GI DOPS scoring 'competent for independent practice' DOPS forms must be completed within 12 months of application for certification. Up to 10% can score 'minimal supervision'. No item in the last 5 DOPS can be scored 'maximum supervision' or 'significant supervision'.	≥90%
Formative DOPyS (level1)	≥4
4 most recent formative lower GI DOPyS (level 1) scoring 'competent for independent practice'	100%

All endoscopy trainees are assessed and certified as per the criteria set out by the Joint Advisory Group (JAG). JAG was initially established in 1994 to standardise endoscopy training across specialities. JAG has spearheaded various quality assurance initiatives with the support from key national stakeholders such as the Royal College of Physicians (RCP) and the Royal College of Surgeons (RCS) among others, to provide the highest quality patient centred care. These have led to improvement of quality assurance in endoscopy in three major areas:

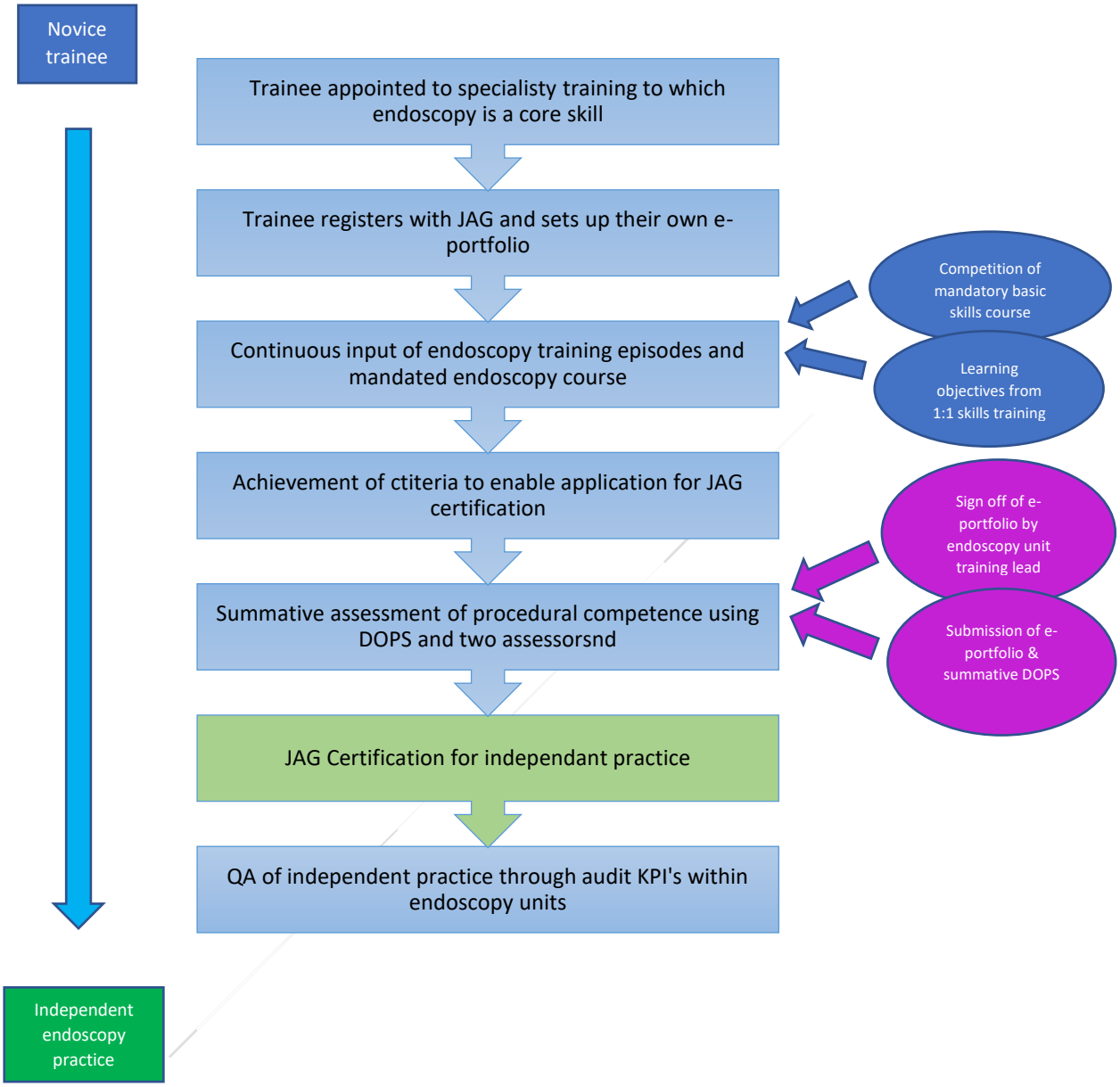
1. Endoscopy Training
2. Accreditation of endoscopy Services
3. Accreditation of Bowel Cancer Screening endoscopists

In 1999 a UK colonoscopy audit reported unacceptable standards of practice which raised the question of workforce competence. A review of endoscopy training identified the needs for a clearly defined method for defining standards for competent practice, assessing competence and a structured endoscopy curriculum. As a result, in 2009 the JAG Endoscopy Training System (JETS) was launched. This had four main proposals:

1. An electronic training record (e-portfolio) of procedural competence and assessment
2. A portal for accessing training courses
3. To provide evidence of trainees meeting JAG standards and competence
4. To provide feedback to course trainers and training course organisers.

This enabled trainee competence to be monitored and determined centrally (Siau, Green, Hawkes et al 2018).

FIGURE 2.1 JAG CERTIFICATION PATHWAY ADAPTED FROM ANDERSON (2016).



Skills acquisition in colonoscopy requires knowledge of key concepts and principles combined with technical handling skills. Training to perform any endoscopic procedure aims to optimise learning of both the cognitive and technical skills required to perform the procedure (Biswas et al 2017). Training to perform colonoscopy has its own challenges and the amount of procedures accessible for training can be a

significant barrier. Colonoscopy is a much longer procedure than gastroscopy, therefore this reduces the number of colonoscopies on a list by half. In a survey of UK trainees by Biswas et al (2017), it was found that the majority of trainee endoscopists have performed less than 50 colonoscopies by the end of their ST4 (second year speciality training) compared to 68% of ST4 trainees achieving full certification in gastroscopies.

Endoscopy training and skills acquisition is complex due to the multifactorial nature of the training process. It is clear from the literature that endoscopy trainees face significant challenges in acquiring endoscopic training. As explained endoscopy training is very much centred in the workplace, therefore the following section explores work-based learning and vocational training in a little more detail.

Work-Based Learning

For learners involved in vocational training, such as medical students, or in this instance the endoscopy trainees, workplace learning can be structured in a number of ways. Guile and Griffiths (2001) identified five different models of work experiences in their analysis of the relationship between work and learning within education:

1. *The traditional model* simply introduces students into work, with supervision aimed at adapting students to work practices. The outcome of this work experience is the acquisition of required skills.

2. *The experiential model* adds an element of reflection on experiences into the process for the understanding of experiences and realising relevance for students. Students are therefore instructed to make them aware of expected learning and to record experiences.

3. *The generic model* uses work experiences for students to learn key skills and competences. There are well-defined learning outcomes which students are assessed on. In this model, students' activities are managed by

supervisors who act as facilitators collecting evidence on learning through portfolios or logbooks (this is similar to how endoscopy training is accomplished).

4. *The work process* model focuses on students' holistic understanding of the work context. The primary focus in this model is to enable students to adjust themselves to the work context in order to become accustomed to work.

5. *The connective model* is proposed as an alternative to compensate for the limitations of the former four models. In this model, a reflexive connection is made between formal and informal learning as well as students' conceptual development and their ability to work in different contexts. This requires educational institutions and workplaces to work closely together to create environments for learning in order to empower students to make use of work experiences in their conceptual development.

The five models can be helpful when considering how workplace learning is arranged for learners. Each of these models can be attributed to endoscopy training to some extent.

In endoscopy training like most workplace-based postgraduate medical education programmes, trainees learn to work independently when providing patient care, with the goal of becoming independently functioning medical specialists. In the process of learning to work independently, trainees are supervised by trainers, who are educators for trainees, next to their work as patient care providers. In the process of supervision, trainers must balance the freedom they give their trainees in independently providing patient care, against patient safety. Trainers thus have to trust their trainee to provide good quality of care for their patients. (Bonnie, Mechteld, Visser, Kramer, van Dijk 2020).

The trainee has constant supervision from the trainer and is verbally and physically guided through the procedure in a step-by-step process (Waschke, Anderson, Macintosh, Valori 2016), (Mohamed & Raman 2016). The training is skills based, with accreditation through formative and summative assessment and completion of an e-portfolio. The training process is the same irrelevant of the background profession, therefore nurses undergo the same training and advanced Train the Trainer courses as medical staff. Endoscopy training in the literature mainly discusses how to enhance the training experience. It seeks to explore improving training through simulation, virtual reality and the practical aspects of improving training such as giving feedback and imparting practical skills in order for the trainee to understand and translate the verbal instruction into a practical and technical scope manipulation. It is very much medically focused and the research was conducted by medical staff. (Ekkelenkamp, Koch, de Man et al). Furthermore, the literature which concentrates on endoscopy training fails to acknowledge any non-medical disciplines in the literature altogether. When exploring the literature around Nurse Endoscopists, the papers are somewhat dated with a concentration in the early 2000's (Basnyat, West, Davies, Davies, Foster 2000), (Sprout 2000), (Pathmakanthan, Smith, Heeley, Donnelly 2001), (McCallum 2003) when the role was up and coming, with a slight resurgence in around 2010 (Chapman & Cooper 2009), (Williams et al 2009), (van Putten et al 2009), However, any recent work from the UK is limited (Duncan, Bonney, Au, Chalmers, Bennett 2017). I have been unable to find any research which combines endoscopy, endoscopy training and nurse endoscopy which uses IPA as a methodology or any similar literature to this research in my review.

Training using simulation

Training to perform endoscopy is a very practical skill which requires lots of exposure over a long period of time, usually over 1-2 years. It is usually performed on actual patients during normal working endoscopy lists, so the range of skills to become an

endoscopist can be acquired. While simulation can play a role, it is impossible to learn endoscopy with simulation alone. The literature suggests simulation can support endoscopy training and that outcomes have included faster overall time to sign-off, higher rates of D2 intubation and completion, DOPS scores and aggregate measures of competency (Siau, Hodson, Neville, Turner, Beale, Green et al 2020), (Grover, Scaffidi, Khan, Garg, Al-Mazroui, Alomani et al. 2017), (Khan, Plahouras, Johnston, Scaffidi, Grover, Walsh 2018). This may be the biggest advantage in early training, however, several studies show a 'saturation effect' after a certain number of simulated procedures, where additional training with simulators does not appear to offer increased benefit (Goodman, Melson, Aslanian, Bhutani, Krishnan et al 2019), (Jirapinyo, Abidi, Zaki, Tsay, Imaeda, Thompson 2016), (Koch, Ekkelenkamp, Haringsma, Schoon, de Man, Kuipers 2015). Simulation training is likely to be most useful when combined with other evidence-based interventions to improve the overall quality of endoscopy training, including hands-on courses, training for trainers and education on human factors, however, there is no evidence that could be found to support simulation training as a way of substituting for conventional training on 'live' patients (Ward, Mohammed, Walt, Valori, Ismail, Dunckley 2014), (Ward, Hancox, Mohammed, Ismail, Griffiths, Valori, et al 2017). The current guidelines recommend a minimum of 200 procedures to be performed on live patients and various Key Performance Indicators (KPI's) achieved before summative assessment can be applied for (JAG 2021).

Nurse endoscopists within the NHS

Over the years there has been increasing interest and growing demand for nurses to perform gastrointestinal endoscopy, with the first guidance from the British Society of Gastroenterology (BSG) published in 1994 and subsequently updated in 2005.

Throughout the UK Nurse Endoscopists have established themselves and are widely accepted as independent practitioners integral to endoscopy service delivery. Currently around 350 nurses are performing procedures such as gastroscopy and colonoscopy (BSG 2005), (Smale, Bjarnason, Forgacs, Mukhood, Wong, Ng, Mulcahy 2003), (Williams, Russell, Durai, Cheung, Farrin, Bloor, Coulton, Richardson 2008).

In 2015 the Department of Health (DH) and Health Education England (HEE) commissioned an analysis of the current Gastrointestinal Endoscopy workforce. The workforce at that time comprised 4603 NHS endoscopists of whom

- 40% are gastroenterologists
- 36% are surgeons
- 14% are doctors from other specialities
- 8% are nurses.

A further review was conducted in 2022 by Beaton et al exploring the endoscopy workforce, this demonstrated that there were 4971 endoscopist registered with

- 33% being gastroenterologists
- 32 % are surgeons
- 10% specialist trainees
- 12% doctors from other specialities
- 12% non-medical endoscopists (perform 23% of procedures).

Over the course of this doctoral thesis there appears to have been a limited increase in the amount of endoscopists nationally despite DH (2011), Bowel Cancer UK (2012) and Cancer Research UK (CRUK 2015) suggesting that there will be a substantial increase in demand in the future. Due to this demand for endoscopic procedures there is a growing pressure on endoscopy services to increase the workforce. Beaton et al (2022) concluded that it is widely acknowledged that UK endoscopy has insufficient

capacity and that a major constraint is the endoscopy workforce. The recommendation from this review suggests that one solution would be the expansion of the non-medical endoscopist workforce.

Nurse Endoscopists have also developed their skills further to become trainers in the techniques. They have been shown to be as competent, safe, acceptable and in some areas more thorough than medical endoscopists (Van Putten, Borg, Adang et al 2012, (Joseph, Vaughan and Strand 2015). However, it is argued that non-medical endoscopists lack the cognitive level of training undergone by their physician counterparts (American Society for Gastrointestinal endoscopy 2009), (Stephens, Hourigan, Appleyard, Ostapowicz, Schoeman, Desmond, Andrews, Bourke, Hewitt, Margolin, Holtmann 2015). The Nurse Endoscopist's practice is underpinned by the Nursing and Midwifery Council (NMC), 'The Code' (NMC 2015), which gives them clear guidance on their development, responsibilities and accountability. Nurses demonstrate clear understanding of the medico-legal implications of their role and it is clear that they have become deeply embedded and welcomed into the fabric of modern endoscopy (BSG 2005). The role of nurses performing endoscopy on the whole has been proven to be a positive development in advanced practice. However, in some aspects of the literature this remains a contentious issue. Even from within the nursing profession nurses taking on advanced roles are frequently perceived as 'mini doctors' who are more concerned with the biomedical and technical aspects of healthcare than with the holistic and psychological elements (Nevin 2005). In contrast most nurses working in advance practice feel that their background in nursing gives them the advantage of being able to combine both skills of the holistic care that underpins their profession and the advanced practical and biomedical knowledge acquired through their advance practice training.

The bulk of the research in Nurse Endoscopy is centred on the quality and cost effectiveness of the procedure carried out. Most of the literature suggests that while

endoscopy performed by a gastroenterologist is considered a gold standard, the quality and patient satisfaction of the procedure performed by a nurse is better than a procedure performed by a doctor (Williams, Russell, Durai, et al 2009), (Van Putten, Borg, Adang et al 2012), (Joseph, Vaughan and Strand 2015). The reason for this is multifactorial, it is suggested that nurses are much more protocol driven and tend to approach a technical skill in a methodical fashion. It could be also that nurses draw on their own learning from their profession and draw upon the holistic approach that underpins their practice.

2.5 Nurse-led clinics – a close comparison

Due to the limited variety of literature regarding the Nurse Endoscopist role I have looked at literature around nurse-led clinics which offers a close comparison.

The literature also suggests that this is the same for other specialities, for example there has been extensive work around the quality on nurse-led clinics in the community and specialists such as rheumatology. Duffin (2012) suggests that research evidence for nurse-led clinics is variable and that it can be difficult to measure their effect or benefit. Patient satisfaction was once considered a good measure, but is considered flawed by some academics as older people could give higher satisfaction ratings than younger people. Duffin (2012) also goes on to claim patients could also say they are satisfied with any new service, because they would rather have something than nothing. Furthermore, services provided by nurses do match those of other healthcare colleagues. Duffin (2012) also suggests it may be that the best results happen when initiated by a nurse enthusiast. We do not always know how well it would work after this nurse leaves. We need to know more about whether changes effected by nurse-led clinics are sustainable.

Hutchison et al (2011) describes sustainability of non-medically led clinics challenging due to factors such as single-handed Clinical Nurse Specialist practices and poor

succession planning. Organisations do not always support or value nurse-led clinics in the same way as medical clinics. Absence cover and service sustainability should be addressed before initiation of any nurse-led clinic. Hutchison's (2011) study also highlighted the lack of administrative support. This task was undertaken by the nursing staff, which could result in other aspects of the CNS role not being fulfilled.

Lewis et al (2009)'s study of a nurse-led versus physician-led follow up for patients with cancer found that cancer follow-up specialist nurses are feasible, but perceived outcomes should be evaluated. More research is needed before equivalence to physician-led follow-up can be assured in terms of patient survival and recurrence. If healthcare commissioners are to commission nurse-led follow-up it needs to incorporate an evaluation of the outcomes. Nurse-led follow-up also appears feasible in terms of cost, but further well-conducted economic evaluations are needed for evidence of cost effectiveness. (Lewis et al 2009).

Wong et al (2010) have carried out a study which adapts a disease management model that captures key features that have been identified in studies as important to support chronic care. The goals of chronic care are to control symptoms, prevent complications and promote a lifestyle that will delay disease progression (Rothman & Wagner 2003). Wong et al (2010) have consolidated these features in a four-C's model, consisting of comprehensiveness, collaboration, coordination and continuity. Being comprehensive means that the nurse specialist conducts a systematic assessment of the patient's condition (Wong et al 2010) including physical, psychological, and social, and is responsible for anticipating patients' health concerns (Hickey et al 2019); (Wong et al 2010). The design of care should include sustained follow up to ensure early detection of complications, and patients' concerns and to reinforce adherence behaviours (Wagner et al 2002).

A collaborative process requires an appropriately organised healthcare network linked with available resources if patients need care from other providers (Wagner et

al 2002). Collaboration not only occurs between healthcare professionals, but also between health providers and patients. Patients need to be involved as partners and active agents of care (Wong et al 2010). The ultimate goal is to empower patients to assume responsibility for their own health (Von Korff et al 1997). Coordination of services involves a delivery system designed to enable the case manager to operate across a spectrum of care in collaboration with physicians and the healthcare team in order to respond to patient's needs (Wong et al 2010).

Horrock's et al (2002) conducted a systematic review of eleven trials and 23 observational studies to compare the care provided by nurses and physicians. The results of the review suggested that patients were more satisfied with the care given by a nurse practitioner, and that nurse practitioners gave longer consultations. There were no differences in health status, prescriptions, return consultations, or referrals. The quality of the care provided by the nurse practitioners compared with doctors was better in the aspects of completeness of the records kept, amount of information given, and level of communication with patients.

Advancing nursing practice and Clinical Nurse Specialist Roles

The current challenges in healthcare have been instrumental in transforming the NHS workforce, with nurses playing a pivotal role by advancing knowledge and skills to establish new services to help meet the demand.

As a result, many Advanced Nursing roles have emerged. The creation of these specialist roles is controversial as they are also seen by many to deplete the core nursing staff within inpatient clinical areas with the most experienced nurses progressing in their career and taking up advance practice roles. This can lead to increased workloads, lower staff morale and an increased level of patient care provided by more inexperienced and unqualified staff (Duffin 2010).

Duke (2012) claims advanced nursing practice is evident by the nurse practitioners' highly developed and extensive knowledge in areas of diagnostics, therapeutics, the biological, social and epidemiological sciences and pharmacology, and their enhanced skills in areas such as consultation and clinical decision making. Nurses working at an advanced level use complex reasoning, critical thinking, reflection and analysis to inform their assessments, clinical judgements and decisions. They are able to apply knowledge and skills to a broad range of clinically and professionally challenging and complex situations (DH 2010).

Duke (2012) goes on to suggest that Clinical Nurse Specialists need to be aware that if they take on a task previously performed by a doctor, they must perform it to the same standard as a doctor. They must be aware of the legal boundaries relating to the advanced practice and be trained to practice competently. Professional law is governed by the Nursing and Midwifery Council, which focuses on ethics and autonomy, and employment law ensures accountability to employers (Tingle & Cribb 2007). NMC 'The Code' (2015/2020) is the basis for clinical nurse specialist's professional law - autonomy; beneficence, non-maleficence and justice are its main principles.

There is no clear definition of a Clinical Nurse Specialist (CNS) and there is a wide variation between individual CNSs in the type of work they undertake, this is further compounded by the wide variation of role title including Advanced Practitioner, Nurse Practitioner and Specialist Nurse (Vidall, Barlow, Crowe, Harrison Young 2011). Below are the current definitions of Advanced Practice. For the purpose of this research the NMC (2006) definition is best aligned with the CNS role which will be the focus of this research.

International Council of Nurses' (ICN) definition is aimed to facilitate a common understanding and guide further development of these roles (ICN 2001).

'A Nurse Practitioner/Advanced Practice Nurse is a registered nurse who has acquired the expert knowledge base, complex decision making skills and clinical competencies for expanded practice, the characteristics of which are shaped by the context and/or country in which he/she is credentialed to practice. A master's degree is recommended for entry level.'

The Career Framework for Health (DH 2006) provides steps on a structured career ladder that can be characterised as level 'benchmarks' to support consistency. The framework places the 'Advanced Practitioner' at Level 7, defining advanced practitioners as:

'Experienced clinical professionals who have developed their skills and theoretical knowledge to a very high standard. They are empowered to make high-level clinical decisions and will often have their own caseload. Non-clinical staff at Level 7 will typically be managing a number of service areas.'

From a nursing perspective this definition is clearly consistent with the ICN characteristics of an advanced-level nurse, however theoretically all healthcare roles can be mapped to a wide range of professional groups in the overarching definition of 'Advanced Practice'

The NMC revised their definition of advanced nurse practice in 2006 to make it more accessible to patients and the public:

'Advanced nurse practitioners are highly experienced and educated members of the care team who are able to diagnose and treat your care needs or refer you to an appropriate specialist if needed.'

This definition for a Clinical Advanced Nurse Practitioner role is concise. However, it is worth noting that it very much focuses on physical health and not inclusive to mental health and learning disability practitioners, and this has faced some criticism in the literature. Advanced practice is a level of practice, rather than a type or specialty of practice. Advanced practitioners are educated at master's level in advanced practice and are assessed as competent in practice, using expert knowledge and skills. They

have the freedom and authority to act, making autonomous decisions in the assessment, diagnosis and treatment of patients. (RCN 2018).

After considering the available definitions and documents the NMC (2006) definition seems best aligned with the CNS role which is the focus of this research and therefore this definition will be used throughout.

Advanced Clinical Practice Roles

The term of profession within nursing is notoriously ambiguous and is an interesting debate and one which continues to dominate today. It is challenging for members of a profession to analyse their own work. According to Allen (2007), at different points in nursing's history it has been unclear whether the route to occupational progression lay in assuming high status medically devolved work or in the pursuit of autonomous professional status, separate from but equal to medicine.

Nursing profession status is an inter-professional and intra-professional challenge, whether there is nursing professionalism or not is a challenge among nurses, sociologists, and historians. From the literature, for many years scientists considered nursing to be a semi-professional career, and up until the 1970s it was considered as female work and women were considered as barriers to professionalisation in nursing due to their high workload and part-time work. At that time, some factors such as slow formation of scientific fundamentals of nursing, disagreement in educational requirements for nurses, lack of academic education at the entry level of nursing courses, and lack of theory-based research were all considered to be barriers for nursing as a profession. However, in recent years the development of education standards and professional certificate led nursing to move to professional status. Having a stronger powerful basis for theory and practice and professional education in nursing discipline has brought about social cognition. Social understanding about

nursing made the society consider nurses as cost-benefit healthcare providers and independent decision makers.

Recently the rapid changes in value systems in society caused nursing to encounter more ethical and philosophical challenges to providing care to its clients. These changes also created new nursing environments that require professional nursing. Accordingly, nursing professionalisation definition and its attributes need to be clarified and adapted with rapid changes (Ghadirian et al 2014).

Whether nursing can be truly considered to be a profession on an equal bias with medicine remains largely unresolved. Professionalisation depends on times, contexts and disciplines. According to Ghadirian et al (2014) a concept analysis study found nursing professionalisation a multi-dimensional concept and it introduced cognitive, attitudinal, and psychomotor dimensions as the main features of nursing. However, they concluded that nursing professionalism has a complex nature with multi-dimensions, and this requires further theorising. Therefore, the debate continues.

The Nursing and Midwifery Council (NMC) acts as an independent regulator for nurses and midwives throughout the UK. Their role is to protect patients and the public through efficient and effective regulation. The core regulatory functions are maintaining a register of those eligible to practise as nurses and midwives in the UK, setting standards to join and remain on the register, and acting when there are concerns about the conduct or practice of a nurse or midwife. These functions must be carried out to a consistently high standard to command public confidence, and demonstrate fairness, transparency, timeliness and accuracy (NMC 2015 Strategy 2015-2020). It is fair to say that public expectations of regulatory bodies have changed in recent years. Additionally, the nature and context of nursing practice is rapidly shifting at the same time as the workforce responds to demographic trends and global mobility of both patients and professionals. In the UK the NMC in collaboration with the Chief Nursing Officers produced a document titled ‘Enabling

professionalism (2017)', it outlines principles to support and encourage professional behaviours through supportive practice environments. It describes and demonstrates what professionalism looks like in everyday practice through the application of the Code (NMC 2015).

It states that:

'Professionalism means something to everyone who works as a nurse or midwife. Being an inspiring role model working in the best interests of people in your care, regardless of what position you hold and where you deliver care, is what really brings practice and behaviour together in harmony.'

The aim of the document is to characterise professionalism and it defines it as *'characterised by the autonomous evidence-based decision making by members of an occupation who share the same value and education'.* It is realised through purposeful relationships and underpinned by environments that facilitate professional practice. The assumption that the professionalisation of nursing is beneficial to both society and to nursing is also under question. With this in mind nurses are at risk of becoming elitist and could subsequently compromise their inclusive, caring philosophies Despite this lack of consensus, there are some fundamentals of the nurses' professional identity that are clearly evident, with the most important of these being professional regulation and academic attainment.

2.6 Chapter Summary

The demands for diagnostic services in the NHS have risen in the last few years. This is related to the need to diagnose and treat cancers at an early stage to improve quality of life and life expectancy. As the need for services such as endoscopy increase it is clear more people need to be trained to perform these procedures.

In this chapter, through the process of examining the wider literature I have been able to illuminate key aspects of this doctoral research and the literature review has

provide context to this research but offering various insights and differing perspectives in to the research topic which serves as a sound background for the next stage of this doctoral study.

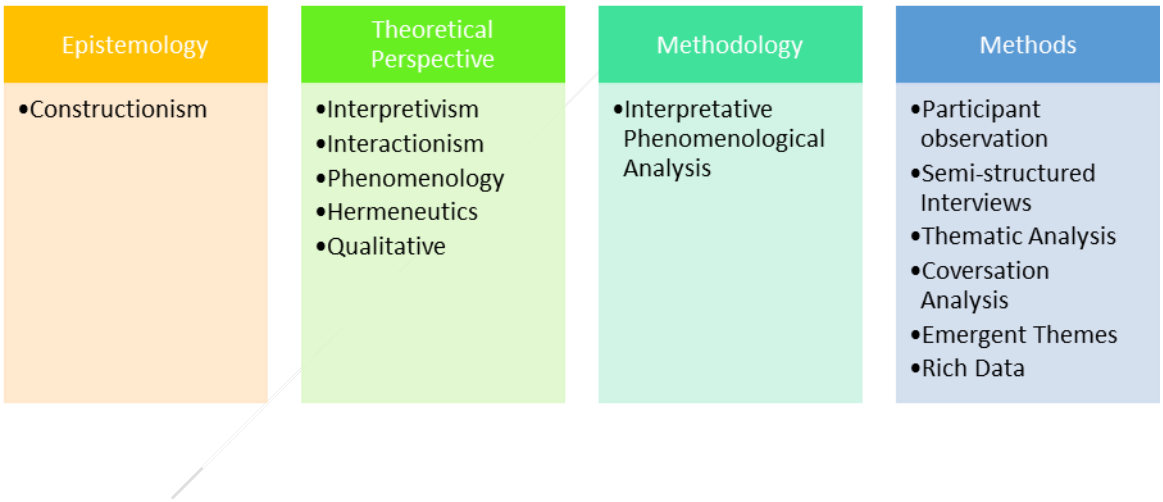
The following chapter will explore the research methodology chosen for this research and describe in detail the theoretical viewpoints and underpinnings.

Chapter 3 - Research Methodology

Introduction

The research presented in this thesis aims to examine the lived experiences of trainee endoscopists using Interpretative Phenomenological Analysis (IPA) as the chosen methodology. In this chapter I will discuss the theoretical underpinnings of the research and the rationale around choosing my methodology which is appropriate to the research.

TABLE 3.1 RESEARCH DESIGN FRAMEWORK



3.1 Paradigm

Research paradigms provide an essential framework for understanding, describing and justifying research strategies. Paradigms in health and social care research include empirical-analytical paradigm (quantitative research) and the interpretive and

critical paradigms (collectively known as qualitative research) (Creswell 2013, Silverman 2016). This research was conducted in the interpretive paradigm.

According to Crotty (1998), the philosopher Thomas Kuhn suggested that a paradigm includes 'the practices that define a scientific discipline at a certain point in time.' Paradigms contain all the distinct, established patterns, theories, common methods and standards that allow us to recognise an experimental result as belonging to a field or not. Polit and Beck (2012) suggest that a paradigm can be defined as a world view, influenced by questions about the nature of reality (ontology) and the relationship between the researcher and what is being research (epistemology).

3.2 Ontology and epistemology

Philosophy rotates around two core concepts, ontology and epistemology. Each of these proposes a theory which supports a particular approach to making sense in the world (Dibley, Dickerson, Duffy and Vandermause 2020).

The process of developing the research strategy for this study began with the researcher considering the ontological position. Ontology is the branch of philosophy which is concerned with concepts such as existence, being, becoming, and reality (Guba and Lincoln 1994). In its simplest form ontology is concerned with the nature of being and the interaction between social structures and individuals. Interestingly, Heidegger's ontology differs in that he argues that our understanding of being which is the ways in which humans reveal themselves to themselves and therefore understand themselves, is generally informed by temporality (non-chronological time) and historicity (past history and experience). Heidegger's ontology which underpins his phenomenology and informs the ways of doing hermeneutic research, proposes that temporality and historicity are core components in understanding how we experience our world. Our being-in-the-world is an experience, situated and unique perception informed by the personal understanding and experience of the individual

and their 'beingness' (Dibley et al 2020). The ontological stance adopted for this study is within the qualitative research paradigm. I understand that individuals will offer multiple social constructions of realities and as part of this doctoral research I wish to understand and interpret their experience both past and present which shapes their learning experience as a trainee endoscopist.

Epistemology is the branch of philosophy concerned with the study of knowledge. The epistemological stance of this study is social constructionism which is linked to a qualitative methodology. Ontologically, constructionists believe that reality is constant, dynamic and reproduced by people acting on their interpretations and their knowledge of it. This is supported by Gergen (2009) who identifies social construction as what we take to be the world, and this importantly depends upon how we approach it. How we approach it depends upon the social relationships of which we are a part. Social constructionists, Crotty (1998) argues, recognise the hold culture has on individuals, he argues that it shapes the way we see things and even feel about things and gives us a specific view of the world. Individuals develop subjective meanings of their experiences. These meanings are varied and multiple, leading the researcher to look for the complexity of views rather than narrowing meanings into a few categories or ideas. The goal of this research was to rely as much as possible on the participant views of the situation being studied (Creswell, 2007).

The topic of trainee experience aligns well with the philosophical view of social constructionism. Gergen (2015 p3) explains that '*social constructionist ideas emerge from a process of a dialogue, a dialogue that is on-going and to which anyone may contribute'*. Creswell (2014) clarifies that social constructionists believe that individuals seek understanding of the world in which they live and work and the goal of the research is to rely as much as possible on the participants' views of the situation being studied. The advantage is that the participants can construct the meaning of the situation typically forged in discussions or interaction with other persons. In this

way the emerging themes from transcriptions of interviews can be analysed and the core issues from the participants identified.

Constructionist researchers often address the process of interaction between individuals; they also focus on the specific contexts of lived experience to understand the historical and cultural settings of the participants. Researchers recognise that their own backgrounds shape their interpretation, and they position themselves in the research to acknowledge how their interpretation flows from their personal, cultural, and historical experience (Crotty 1998), (Richie & Lewis 2011), (Taylor & Francis 2013).

3.3 Social Constructionism

For the purpose of the research, it is worth highlighting that the epistemological stance is constructionism not constructivism (see table 2), the two are often used interchangeably, however, they are not synonyms. Social constructionism emphasises purposeful creation of knowledge. The focus is on revealing the ways in which individuals and groups participate in the creation of their perceived social reality. It involves looking at the way social phenomena are created, institutionalised and made into tradition by people. Socially constructed reality is seen as an ongoing dynamic process, the reality is reproduced by individuals acting on their interpretation and their knowledge (Thomas, Menon, Boruff, Rodrigues and Ahmed 2014).

According to Burr (2015), there is no single feature which could identify a social constructionist position, however there are assumptions among some who identify as such taking a critical stance towards a taken-for-granted knowledge, historical and cultural specificity, knowledge is sustained by social processes and knowledge and social action go together. The social context is at the centre of ‘meaning-making’ in the social constructionism and the attention is on the ‘knowing’ that is

created through shared production. Constructionism also ‘emphasizes the hold our culture has on us: it shapes the way in which we see things and gives us a quite definitive view of the world’ (Crotty 1998 p58). Burr (2015) suggests that social constructionists should not seek to replace empiricism and certainty in knowledge with realism and fallibilism but recognises that claims to know reality are socially constructed expressions of power.

TABLE 3.2 GLOSSARY OF TERMS RELATING TO CONSTRUCTIONISM TAKEN FROM REES, CRAMPTON & MONROUXE (2020)

Term	Explanation
Constructionism	While no consensus definition of constructionism exists, it can be thought of as a theoretical orientation with one or more of the following assumptions: 1. critique of taken-for-granted ways of understanding ourselves and the world; 2. understandings being influenced by place and time: 3. knowledge being constructed through social interaction, especially language; and 4. diverse constructions of the world eliciting diverse actions. (Burr 2015, Gergen 2009)
Constructivism	Typically associated with Piagetian cognitive constructivism, constructivism is a theoretical orientation related to how individuals understand and create their own meanings from events. The key difference between constructivism and constructionism is that constructivism focuses on the individual, while constructionism focuses on the social as controlling the processes of construction (Burr 2015).
Micro-constructionism	Micro-constructionism focuses on the minutiae of language employed in everyday social interaction (Burr 2015).
Macro-constructionism	Macro-constructionism focuses on the role of large-scale social and linguistic structures in shaping psychological and social life (Burr 2015).
Radical constructionism	Radical constructionism Radical or strong constructionism claims that nothing exists outside of discourse, thereby typically denying, for example, any material foundations to our experiences (Burr 2015)
Moderate constructionism	Moderate constructionism allows for the reality of some (social and material) things as existing independently of thought and language (Burr 2015).
Relativism	Relativism is an ontological position suggesting that reality is dependent on our consciousness and thus created through language (Burr 2015)
Critical Realism	Critical realism is an ontological position asserting that while our perceptions can only ever approximate reality, our perceptions do reference the real world and they are not entirely produced through language (Burr 2015)

Contrasting Constructionism and Constructivism

Constructivism which is often aligned to interpretivism reflects in principle a challenge to both the positivist and post-positivist paradigms (Creswell 2014), (Crotty 1998). Similarities between the interpretivist and constructionist paradigms can be drawn (Creswell 2014), (Crotty 1998). It is important to distinguish between constructivism and constructionism which are often used ambiguously within the literature (Crotty 1998). Crotty (1998, p58) alerts us to the distinctions between these two concepts highlighting that constructivism addresses the *'unique experience of each of us'* while constructionism *'emphasises the hold our culture has on us: it shapes the way in which we see things . . . and gives us a quite different view of the world'.* From an epistemological perspective constructivism is focused on 'how we know' and in essence by inference *'what meaning we place on this knowledge'.*

There is limited agreement in the literature on what separates the two perspectives of *'constructivism'* and *'constructionism'*. Furthermore, it could be argued that they are both ambiguous terms and there is evidence of limited agreement on what separates these two perspectives apart. The focus would appear to be on individual reasoning compared to social interaction or processes. Crotty (1998 p58) suggests constructivism places emphasis on mind and meaning-making as opposed to constructionism which places emphasis on *'the collective generation of meaning'.* This ontologically multifaceted approach towards gaining knowledge and understanding has potential within nursing research as it provides for the opportunity to expose both the subjective and objective fields of existence. Thus, meaning-making can be linked with subjective experiences giving it the potential to be explained with regards to the possible causative mechanisms that are shaping that experience. In relation to this doctoral research exploring the trainee endoscopists' lived experience and how this shapes their learning offers the nurse researcher the opportunity to acknowledge social context in conjunction with individual meaning.

Acknowledgement of this realist ontology with an interpretivist epistemology facilitates an opportunity for a pragmatic approach toward knowledge development.

3.4 Exploring the chosen methodology – Interpretative Phenomenological Analysis (IPA)

The following section outlines the chosen methodology of IPA. This methodology is a relatively recently developed and rapidly growing approach to qualitative inquiry, however its flexible approach has allowed researchers to analyse the meanings contained in the participant's experience of a phenomenon through a process of interpretative engagement (Willig 2008), therefore it is a well-suited approach to the researcher's study. IPA is concerned with everyday phenomena that take on a particular significance. There is a notion that interactions which take place during endoscopy training can be influenced by attitudes, assumptions and beliefs which can impact on the trainee endoscopists' learning experience.

Interpretative Phenomenological Analysis (IPA)

The chosen methodology is Interpretive Phenomenological Analysis (IPA). IPA is concerned with understanding lived experience and with how participants themselves make sense of their experiences which can be viewed as paralleling social constructionism's idea of mean-making via interaction or influenced by interaction (Smith, Flowers & Larkin 2009). According to Frost, Nolas, Brooks-Gordon, Esin, Holt, Mehdizadeh and Shinebourne (2010) IPA provides the researcher with a framework and a process for data analysis consistent with its theoretical underpinnings. At the same time the process of analysis remains flexible and open to adaptation. In terms of complementary and contradictions with other approaches, IPA has affinities with grounded theory and discursive psychology. Frost et al (2010) go on to say that IPA is also concerned with how meanings are constructed by individuals within both a social and personal world. Thus *'IPA endorses social constructionism's claim that*

sociocultural and historical process are central to how we experience and understand our lives, including the stories we tell about these lives'. (Eatough and Smith 2008: p184). Typically, phenomenology focuses on personal meaning, and so the relationship between person-and-world is operationalised at the individual level. Thus, in IPA projects, the most common research designs involve collecting qualitative data from a reasonably homogenous group who share a certain contextual perspective on a given experience (Larkin, Shaw and Flowers 2018), in this doctoral research the lived experience of the endoscopy trainee. Willig (2012) suggests that in everyday life individuals give meaning to things that happen very quickly without being aware, or with little conscious thought or deliberation. This means that often individuals may be unaware of their meaning-making or importantly alternative meanings.

There are a number of phenomenological methods which focus on rich descriptions of the lived experience and lived experience and meaning, but which do not explicitly subscribe to Husserlian techniques. IPA has gained momentum in the fields of qualitative psychological research, Smith (2004) argues that IPA is an ideographic and inductive method, which seeks to explore participants' personal lived experiences. The phenomenological paradigm allows concern for individuals' perceptions to be highlighted by the IPA researcher. IPA also identifies with hermeneutic traditions which recognise the central role played by the researcher, furthermore IPA advocates the use of bracketing (or epoché) which is central to Husserl's preliminary act in phenomenological analysis as the suspension of the trust in the objectivity of the world, it involves setting aside the question of the real existence of a contemplated object. Bracketing may also be understood in terms of the phenomenological activity it makes possible by deconstructing the phenomena being studied.

Bracketing

The origins of bracketing or *epoché* begin with Husserl who described it as the researcher's need to set aside their own personal experiences, as much as possible to have a fresh view of the phenomenon under investigation (Creswell and Poth 2018). However, in the literature this is a contentious issue with Heidegger, who was once a student of Husserl, having an opposing view in that the approach to bracketing is hermeneutical or interpretive. He considered the researcher to be fully immersed in the research as it was not possible or indeed desirable to 'bracket' oneself off from the participants (Gearing 2004).

Bracketing is a fundamental term within phenomenological research and is an important concept in IPA studies. The technique of bracketing is a method of demonstrating rigour in the phenomenological approach (Le Vasseur 2003), (Hamill & Sinclair 2010). Nevertheless, bracketing is still a poorly understood concept which can be difficult for researchers to apply to their studies. Bracketing is not to be merely applied during the stages of data collection of analysis but from the very initial stages of the development of the proposal. Hamill and Sinclair (2010) point out that many nurses participating in phenomenological research often adopt Heideggerian approaches due to the perceived difficulties in bracketing. Furthermore, according to Gadamer (1975) it could be considered that one's prior academic and professional knowledge is regarded as situated in tradition or foreknowledge and does not merely subject to prejudices.

However, bracketing personal experiences may be difficult, if not impossible, for the researcher to implement as interpretations of the data always incorporate assumptions that the researcher brings to the topic. In the case with my research, as I am a Nurse Endoscopist it was inevitable that I bring elements of myself and my lived experience to the research.

Tufford & Newman (2010) suggests that bracketing also facilitates the researcher in reaching deeper levels of reflection across all levels of the research, including the selection of the topic, interview design, collecting data and subsequent analysis and reporting findings. They go on to state that the opportunity for sustained in-depth reflection may enhance the insight of the research and produce a more in-depth analysis. Tufford and Newman (2010), also go on to say that bracketing is a multi-layered process which is meant to access 'various levels of consciousness' (page 84). It is these levels which prove to be difficult in qualitative research. Bracketing is not a one-time process but it can be considered a process of self-discovery.

The table below outlines the qualities required of the researcher when undertaking 'bracketing'.

TABLE 3.3 QUALITIES OF THE BRACKETING RESEARCHER ADAPTED FROM HAMILL & SINCLAIR (2010)

Qualities of the bracketing researcher
• Self-critical and reflective – being aware of their values and how this may influence question phrasing, data collection and analysis • Curious and quizzical – do I understand this phenomenon correctly as described by my participants? • Precise – do the use of words/terms/phrases mean the same to my participants and vice versa • Insightful -check understanding with research supervisor • Willingness to be wrong - check back with participants • Openness – to the alternative interpretation of peers • Organised • Honest and transparent (trustworthiness criteria) • Articulate, write up your study in the first person, take ownership of what your analysis indicates

Approach to bracketing in my research

The position of researcher in relation to the group under study has been a classical dilemma in qualitative research (McRae, 2007). The term positionality both describes

an individual's world-view (Holmes, 2014) and the position the researcher has chosen to adopt within a given research study (Holmes, 2014; Savin-Baden, 2012). According to Savin-Baden (2012) in order to examine positionality, it is important to continuously interrogate one's own beliefs, stances, and values.

The insider researcher is described as a member of the group, organization, or community where they are conducting the study and, as such, may be assumed to have greater access to information, respondents, and data than a researcher who is external to the research setting (reference needed). According to Saidin and Yaacob (2016) being an insider researcher could also help the researcher to have more understanding about their research and the phenomena being studied. Indeed, involvement of the insider researcher in their research can take two general forms:

- involvement as a professional who has worked with the population
- involvement as a person who has undergone a similar experience and can thus relate to the lived experience of the research subjects.

The knowledge, insights, and experience of the insider-researcher apply not only to theoretical understanding of organizational dynamics, but also to the lived experience of individuals within the researcher's own organisation (Brannick & Coghlan 2007). A key advantage of insider research is said to be the 'pre-understandings' the researcher brings to the design of the study (Brannick & Coghlan, 2007). With their knowledge of the present situation, insider researchers can often develop research questions based on rich understandings of the issues needing investigation, providing information about what a phenomenon is really like and what is likely to be significant (Fleming 2018).

I therefore needed to examine my own position, as having worked within an endoscopy department for many years, I was in many respects an 'insider', having gained significant experience and made connections with other professionals over

the years. I initially started my endoscopy career as a staff nurse and I eventually became an upper gastrointestinal nurse specialist with part of my role as a clinical endoscopist. Once I had gained enough experience I became a fully accredited trainer and in the last few years was appointed as endoscopy training lead. This also means I am also known in this capacity to other endoscopy units in the region. With this in mind I was acutely aware of the challenges, expectations, assumptions and beliefs faced by the trainee endoscopists and the requirements to run an efficient service ensuring waiting times and service provision is maintained.

One of the main challenges conducting insider research is to ensure that the research design has rigor and transparency in the methods of data collection. Being an 'insider' to endoscopy training it was important to minimize criticism of over influencing the research. Therefore, insider researchers need to be mindful of what more positivist researchers call 'bias'- when the researchers' personal values and experiences overly skew the research questions, design and data collection procedures (Chavez, 2008). This leads to the notion of 'bracketing' in IPA,

The concept of 'bracketing' is often portrayed as an important notion fundamental in phenomenological research. IPA subscribes to the researcher 'bracketing' themselves off from the phenomena as advocated by Husserl. That by setting aside the researchers own personal experience as much as possible the research can examine the phenomena under investigation with an untainted view. However, Heidegger had a slightly different view, that the approach to bracketing is hermeneutical or interpretive. He considered the researcher to be immersed in the research as it was not possible or indeed desirable to completely 'bracket' oneself off from the participants (Gearing 2004).

Thus, I was faced with a difficult dilemma of being an insider researcher with the task of bracketing off my personal beliefs in order to work within the theoretical underpinnings of IPA. According to Smith et al (2009) although the underlying

philosophy of IPA is just as important as the matter of procedure, researchers who familiarise themselves with the procedures will be able to produce a more consistent, sophisticated and nuanced analysis. Thus, I initially tried to follow the notion and process of 'bracketing' according to Husserl and to some extent promoted in some IPA writing).

According to Gadamer (1990/1960) in his work titled, Truth and Method, he is concerned with the analysis of historical and literary text. Gadamer emphasized the importance of history and the effect of tradition on the interpretative process. However, I feel it should be highlighted that the translation of some key words in Gadamer's text do not translate directly from German to English. Namely the discussion of "History" and "Tradition" with Gadamer using the terms Erlebnis and Erfah-rung. Historically, Gadamer is influenced by the works of Husserl, Heidegger and Schleiermacher. Gadamer reflects on Heidegger's views of hermeneutics and in particular between what Heidegger calls a "fore-structure" which is defined as the revealing the prior knowledge of Dasein (being) about entities in their world. Heidegger suggests that the fore-structure is forever present and it is in danger of presenting an obstacle to interpretation.

Gadamer suggests that rather than putting one's preconceptions at the forefront of the researchers mind before the interpretative process, the researcher may only begin to understand the preconceptions once the interpretative process in under way, hence, suggesting the process is multifaceted and dynamic. Thus, the phenomenon influences the interpretation which can in turn can influence the fore-structure which then influences the interpretation. According the Smith et al (2009) Gadamer allows the researcher to speak in their own voice and that some preconceptions can hamper the process, however, our preconceptions are inevitably present. These preconceptions can sometimes be identified in advance but often they emerge during the process and Smith et al (2009) go on to suggest that an element of openness is

required. Gadamer's work, in conjunction with that of Heidegger, represent a radical reworking of the idea of hermeneutics. As such it constituting a break with the preceding hermeneutical tradition at the same time as it also reflects back on that tradition

It is clear that IPA requires a combination of phenomenological and hermeneutic insight. The methodology is phenomenological in attempting to get as close as possible to the personal experience of the participant, but recognises that this inevitably becomes an interpretative endeavour for both participant and researcher. Smith et al (2009 page 37) state;

"Without the phenomenology, there would be nothing to interpret; without hermeneutics the phenomenon would not be seen"

Gadamer by no means censures or proposes to disregard our preconceptions, on the contrary, to foreground and appropriate them. IPA, however, opts for the former. Gadamer takes issue directly with this view of prejudice and the negative connotations often associated with the notion, arguing that, rather than closing us off, our prejudices are themselves what open us up to what is to be understood. Gadamer specifically notes that interpretation inescapably involves prejudices, but 'it is neither possible, necessary, nor desirable that we put ourselves within brackets' (Gadamer, 1979, p. 152). He goes on to propose: To try to escape from one's own concepts in interpretation is not only impossible, but manifestly absurd. To interpret means precisely to bring one's own preconceptions into play so that the text's meaning can really be made to speak for us. (Gadamer, 2004, p. 398). In the dialogue of understanding our prejudices come to the forefront of our minds, both as they play a crucial role in opening up what is to be understood, and inasmuch as they themselves become evident in that process. This means that as our prejudices become apparent to us, so they can also become the focus of questioning in their own turn. For me as

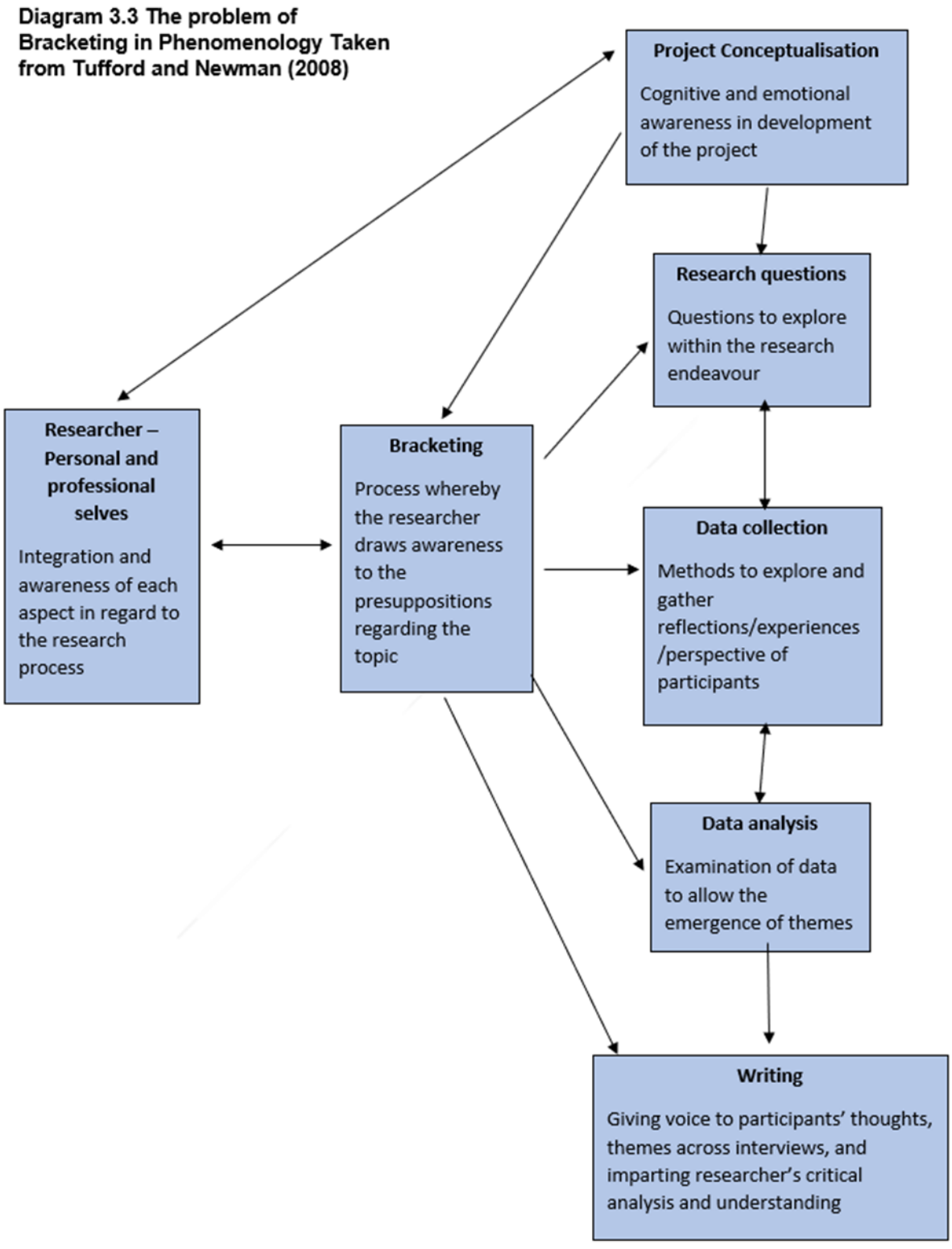
a researcher my so called prejudges or pre-judgements inevitably could influence my role as an insider researcher.

According to Brinkmann and Kvale (2018) in qualitative research the interview results can be considered as ‘biased’. They suggest that an unacknowledged bias may entirely invalidate the results of an interview inquiry. However, they suggest that a recognised bias or subjective perspective may, however, come to highlight specific aspects of the phenomenon being investigated and it could bring forward new dimensions which could contribute to a “multi-perspectival construction of knowledge” to Brinkmann and Kvale (2018 page 99). Interviewing allows the researcher and participant to engage in a meaningful dialogue whereby the questions can be modified in light of the participants responses, this gives the researcher the opportunity to enquire and question on interesting topics which might arise. When considering the standpoint of Gadamer in the interview process, the development of my questions for my semi-structured interviews stemmed from my understanding of the unique position of the trainee endoscopist and my role as a nurse endoscopist, trainer and training lead. I believed that my experiences would give me an advantage in helping to generate discussion and help draw out meaningful responses. It was thought that as a nurse rather than a doctor asking the questions that the respondents would feel more inclined to have a discussion around their thoughts and feelings related to their training and learning experience as I would be less likely to judge as I had not shared the exact same experience.

Thus, although I began by trying to maintain an approach to bracketing as proposed by Husserl (and to some extent in IPA texts) I realised over time that this was neither totally possible nor helpful. I realised that as an insider researcher my professional and academic knowledge and experience had assisted in my gaining access to the field. As I progressed my insider insights also came into play in the development of the interview questions and prompts and later in my interpretations and thematic

analysis of the data. Thus Gadamer's (1975) position gave a way of aligning bracketing with the surfacing and acknowledgement of my prior knowledge and insider status -so being situated in the endoscopy 'tradition' could be seen as not really meaning I was subjecting the research to prejudices.

DIAGRAM 3.1 THE PROBLEM OF BRACKETING IN PHENOMENOLOGY TAKEN FROM TUFFORD AND NEWMAN (2008)



Theoretical foundations of IPA

The following section will outline the theoretical underpinnings of IPA and the development of the phenomenological and hermeneutical narrative of the research.

IPA has been informed by concepts and debates from three key areas of the philosophy of knowledge; phenomenology, hermeneutics and ideography. The following section is a brief overview of each of the theoretical underpinnings and how IPA draws on key concepts from these.

Phenomenology

Phenomenology is a philosophical approach to the study of experience. It is concerned with what the lived experience is of 'being human', it is often considered central to the interpretive paradigm. Phenomenology is not only a description, but it is also an interpretive process in which the researcher makes an interpretation of the meaning of the lived experiences (Creswell and Poth 2018). The phenomenology aspect of IPA seeks to set aside assumptions and describe the phenomena by immersing oneself in the phenomena until its essential features are revealed. The hermeneutic aspect however, assumes that understanding is a matter of interpretation. In other words, using an IPA method necessitates the incorporation of interpretative processes. Phenomenological researchers generally agree that the central concern is to return to embodied, experiential meanings aiming for a rich description of a phenomenon as it is essentially lived (Finlay 2009). According to Creswell and Poth (2018), the basic purpose of phenomenology is to reduce individual experience with phenomenon to a description of the universal essence. Phenomenology has a strong philosophical component, its foundations are drawn heavily from the writings of Edmund Husserl (1859-1938) and those who expanded his views such as Heidegger, Sartre and Merleau-Ponty. These are considered to be four of the major phenomenological philosophers whose work has major grounding

of IPA. For the purpose of this section I will include a brief discussion of each philosopher within their relevant philosophical approach.

Husserl (1859-1938)

Edmund Husserl was a German philosopher who is considered to be the founder of phenomenology, and the following section outlines the key concepts of his philosophy.

The founding principle of phenomenological inquiry is that the experience should be examined in the way that it occurs, and in its own terms. Husserl first argued this as the basis of a programmatic system in philosophy, however the principle has been developed further in philosophy and psychology.

Husserl's central insight was that consciousness was the condition to all human experience. He was interested in finding a means by which someone might know their own experience of a given phenomenon (Smith et al 2009). According to Wojnar and Swanson (2007), an important principle of the Husserlian approach to science was the belief that the meaning of lived experience may be unravelled only though one-to-one transaction between the researcher and the objects of research. These transactions must include attentive listening, interaction and observation to create representation of reality more sophisticated than previous understanding (Wojnar and Swanson 2007), (Smith et al 2009). Bracketing (or epoché) which is a central component to Husserl's theory was presented as an ideal of transcendental subjectivity, a condition of consciousness wherein the researcher is able to successfully abandon his or her own lived reality and describe phenomenon in a pure universal sense, this is achieved by the process of bracketing. Bracketing involves consciously and actively seeking to strip away prior experiential knowledge and personal bias so as not to influence the description of the phenomenon.

Heidegger (1889-1976).

Martin Heidegger, a student of Husserl, sought to answer the question of the meaning of Being (or Dasein). His belief was that humans are hermeneutic (interpretive) beings capable of finding significance and meaning in their own lives. Heidegger acknowledged his intellectual debt to Husserl, however he was also seen to differ from him, it is important to note that his move was not considered to be moving away from phenomenology, in fact he was considered to be more phenomenological than Husserl (Smith et al 2009). For this reason, Heidegger's contribution will be discussed in both sections of phenomenology and hermeneutics.

Heidegger questioned any knowledge outside of an interpretative stance, while grounding this in the lived world. Furthermore, to Heidegger, this also includes the view of a world of objects, people, relationships and language (Smith et al 2009), (Pietkiewicz and Smith 2014). The main difference between Heidegger and Husserl's work is that Husserl was primarily concerned with what can be broadly classified as individual psychological processes such as perception, awareness and consciousness, conversely Heidegger was more concerned with the ontological question of existence itself and the practical activities in relationships which we are caught up in, and through which the world means to us.

Merleau-Ponty (1908-1961)

Maurice Jean Jacques Merleau-Ponty was a French phenomenological philosopher who was strongly influenced by Husserl and Heidegger's work. The core of Merleau-Ponty's philosophy is a sustained argument for the foundational role perception plays in understanding the world as well as engaging with the world. He shares Husserl and Heidegger's commitment to understanding the being-in-the-world, however he also reaffirms some of Heidegger's desire for more contextualised phenomenology. They both emphasised the situated and interpretative quality of our knowledge about the

world (Smith et al 2009). However, Merleau-Ponty developed his philosophy in a different direction, by describing the embodied nature of our relationship to that world and how that led to the importance of our own individual perspective on the world.

Merleau-Ponty suggests that, as humans, we see ourselves as different from everything else in the world. This is because our sense of self is holistic and is engaged in looking at the world rather than being incorporated within it. As a result, Merleau-Ponty's philosophy subscribes to the theory that while we can observe and experience empathy for another, ultimately, we can never share entirely another's experience, because their experience belongs to their own embodied position in the world.

Sartre (1905-1980)

Jean-Paul Sartre was a French philosopher and political activist amongst other things. He was one of the key figures in the philosophy of existentialism and phenomenology. He emphasized that we are action-orientated, mean-making and self-conscious which engages us with the world we inhabit. He indicates that we are always becoming ourselves, and that the self is not a pre-existing unity to be discovered, but rather an ongoing project to be expanded, his famous expression 'existence comes before essence' (Sartre 1948 cited in Smith et al 2009) illustrates this. The concern that what we will be rather than what we are, is another concept to which Sartre subscribes, things which are absent are just as important as those things which are present.

For Sartre, our experiences in the world will lead us to encounters with others and this can be a tense relationship as the world is not ours alone. Our perception of the world is shaped by others and others who have their own projects in which they are engaged in. The notion of perception can also work in the opposite direction, because for Sartre, human nature is more about becoming than being, in other words the

individual has the freedom to choose and be responsible for their own actions, however, he also stress that these are always complex issues which need to be seen within the context of the individuals life, the biographical history and the social climate in which the individual acts (Smith et all 2009), (Smith and Pietkiewicz 2014).

Summary

From the writing above, it can be seen that, Husserl, Heidegger, Merleau-Ponty and Sartre are the major influential philosophers in phenomenology. Through their work we can see that the complex understanding of 'experience' invokes a lived process, an unfolding of perspectives and meanings which are unique to the individual embodied and situated relationship to the world. In the next section hermeneutics will be explored, which focuses on the notion of interpretation itself.

3.5 Hermeneutics

Hermeneutics is essentially the theory and methodology of interpretation. Modern hermeneutics includes both verbal and non-verbal communication and is the second major theoretical underpinning of IPA. In Its original underpinnings, hermeneutics represented an attempt to provide foundations for the interpretation of biblical texts. It was further developed as a philosophical underpinning for the interpretation of a wider range of texts such as historical documents and literary works particularly the Homeric epic. In later years the most remarkable characteristic of the interpretative process was the so-called *accessus ad auctores* which is a standardised introduction to an author or book. There were many versions of the accessus, but one of the more widely used was the following typology of seven questions (Detel 2011) cited by Mantzavinos (2016).

TABLE 3.4 TYPOLOGY OF SEVEN QUESTIONS (DETEL 2011): CITED BY MANTZAVINOS (2016)

Who	The author
What	The subject matter
Why	The written text
How	The text was composed
When	Was the text written or published
Where	Was the text written or published
By which means	Was the text written or published

These questions are aiming to expose the phenomena at a deeper sense which is hidden under the surface. With hermeneutics it is important to distinguish carefully between two levels of analysis, the ontological and the epistemological. Heidegger has proposed a hermeneutic phenomenology that should replace traditional ontology: its centrepiece being an existential analytic of Dasein, ie human existence (Being), (Heidegger 1927/1993). The meaning of Being should be revealed as a result of analysing the unique features of *Dasein (*determining Being*)* and *Auslegung* (interpretation). Heidegger sought to use the concept of Dasein to uncover the original meaning of Being. Dasein is always a being engaged in the world, it is neither a subject, nor the objective world alone, but the rationality of Being-in-the-world. Gadamer (1960/1990 1986/1993 2000) partly adopted this view of ontology, thus the so-called philosophical hermeneutics emerged as a philosophical programme largely based on the work of these two philosophers. According to Mantzavinos (2016), although epistemological studies on hermeneutics can, they need not share these or any other commitments with respect to ontology. Epistemological approaches, either

descriptive or normative, can start with problems of interpretation and propose solutions to the problems independently of the ontological constitution and structure that underlies each problem area.

Heidegger

Heidegger was concerned with the ontological question of existence itself. He shifted the focus of hermeneutics from interpretation to existential understanding as rooted in fundamental ontology which is a more authentic way of 'being-in-the-world' than merely as a way of knowing. According to hermeneutics individuals need to comprehend the mindset of a person and their language which conveys their experiences of the worlds in order to translate their message (Pietkiewicz and Smith 2014).

Schleiermacher 1768-1834

Friedrich Schleiermacher was a German theologian, philosopher and biblical scholar known for his attempt to reconcile the criticisms of the Enlightenment with traditional Protestant Christianity. However, his philosophical point of view of hermeneutics was centred around human psychology, language and the theory of translation. Schleiermacher develops a more holistic concept of the interpretive process, he suggests that a text is not only shaped by the conventions and expectations of a writer's own linguistic community, but also by the work that a writer does with that language (Smith et al 2007). According to Foster (2002/2017), Schleiermacher theory of interpretation is not only a matter of following rules, but there is an element of intuition involved, it becomes a craft, combining a range of skills. As suggested by Smith et al (2007), part of the interpretative process is to understand the writer as well as the text and Schleiermacher believes that if one has engaged in a detailed holistic analysis of the text, they can ultimately understand the text better than the writer.

Gadamer 1900-2002

Hans-Georg Gadamer was a German philosopher of the continental tradition. Gadamer's philosophical project as explained in his 1960 Magnus opus 'Truth and Method' develops the concept of philosophical hermeneutics. He built on the work, which was initiated by Heidegger, with the goal to uncover the nature of human understanding. He argued that 'truth' and 'method' were at odds with one another. According to Maplas (2018) Gadamer takes up Heidegger's later thinking as well as the ideas of dialogue and phronesis (practical wisdom), to elaborate philosophical hermeneutics that provides an account of the nature of understanding in its universality and, in the process, develops a response to the earlier hermeneutics' preoccupation with the problem of interpretative method. As stated interpretation will focus on the meaning of the text and that meaning will strongly be influenced by the time in which that interpretation was made, however in qualitative research and for this project the conversation will be conducted in real time and the texts produced contemporaneously.

The Hermeneutic Circle

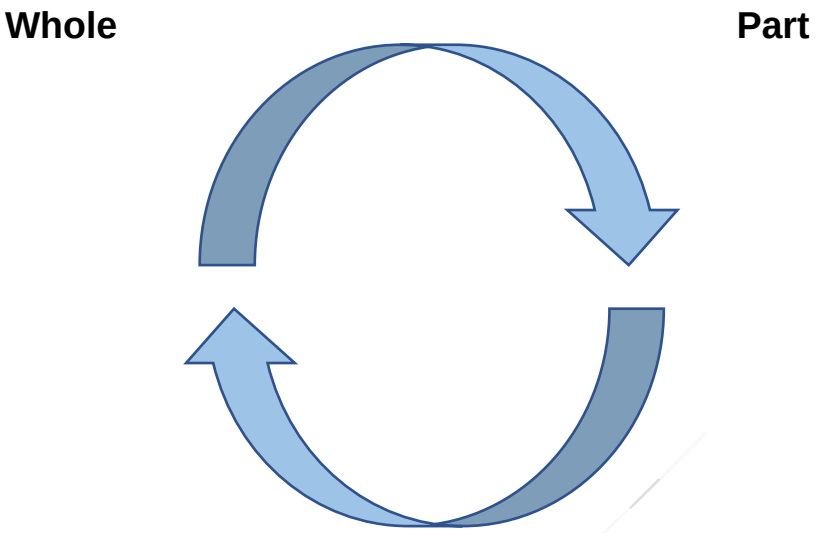
The hermeneutic circle describes the process of understanding a text hermeneutically. It refers to the idea that one's understanding of the text as a whole is established by reference to the individual parts and one understanding of each individual part by reference to their whole. Below is an example as adapted from Smith et al (2007).

TABLE 3.5 UNDERSTANDING THE HERMENEUTIC CIRCLE

The Part	The Whole
The single word	The sentence in which the word is embedded
The single extract	The complete text
The particular text	The complete works
The interview	The research project
The single episode	The complete life

The hermeneutic circle was first described by Fredrich Ast in the 19th century who drew attention to the circularity of interpretation: *'The foundational law of all understanding and knowledge'*, he claimed, is '*to find the spirit of the whole through the individual, and through the whole to grasp the individual'*. Later Schleiermacher adopts as a principle the concept that in the same way that the whole is understood in reference to the individual, so too the individual can only be understood in reference to the whole (1999: 329) Many philosophers follow the lead of Heidegger who conceptualises the hermeneutical circle as an ontological issue (1927/1962: 195). The 'circle' in understanding belongs to the structure of meaning, and the latter phenomenon is rooted in the existential constitution of Dasein, that is, in the understanding which interprets. An entity for which, as Being-in-the-world, its Being is itself an issue, has, ontologically, a circular structure. The circle becomes a metaphor for the procedure of transforming one's understanding of the part and the whole through iterative recontextualization.

DIAGRAM 3.2 THE HERMANEUTIC CIRCLE



Understanding the whole is helped by understanding the parts, understanding the parts is helped by understanding the whole

Summary

In the above section, it has been demonstrated that hermeneutics offers valuable theoretical insights into IPA, and it is clear that IPA draws ideas from phenomenology and hermeneutics, resulting in a method which is descriptive because it allows the researcher to see how phenomena appear for themselves. The following section outlines the role of ideography plays as the third theoretical orientation in IPA.

3.6 Ideography

Ideography is the third major influence upon IPA. Ideography is concerned with the particular. This refers to the in-depth analysis of single cases examining individual participants in their unique contexts (Pietkiewicz and Smith 2014). They go on to

suggest that the fundamental principle behind the ideographic approach is to explore every single case before producing any general statements meaning that IPA researchers focus on the particular rather than the universal. As IPA is a popular methodological framework in qualitative psychology, it is important to distinguish between ideographic and nomothetic research. Nomothetic research is about attempting to establish general laws and generalisation and its focus is to obtain objective knowledge through scientific methods, which we can use as a contrast to ideographic research methods.

According to Shinebourne (2011), individuals can offer a unique perspective on their engagement with phenomena, therefore, for researchers, individuals can become the unit of study. Shinebourne (2011) goes on to suggest that the ideographic commitment to IPA retains a focus on detailed examination of particular instances, either in a single case study or small group cases. In these studies, as with the researcher's own, the analytical process begins with the detailed analysis of each case, moving to careful examinations of similarities and differences to produce detailed accounts of themes, meanings and reflections on a shared experience, in the case interactions during the process of endoscopy training between two professional groups.

Summary

Ideography is the focus of the particular and forms one of the major theoretical underpinnings of IPA. Its importance allows us to re-evaluate a single case and allows IPA studies to adopt analytical procedures to move from a single case to more general statements.

3.7 Rationale for choosing IPA as a method.

The chosen methodology is Interpretive Phenomenological Analysis (IPA). IPA is concerned with understanding lived experience and with how participants themselves make sense of their experiences (Smith, Flowers & Larkin 2009). According to Frost, Nolas, Brooks-Gordon, Esin, Holt, Mehdizadeh and Shinebourne (2010) IPA provides the researcher with a framework and a process for data analysis consistent with its theoretical underpinnings. At the same time the process of analysis remains flexible and open to adaptation. In terms of complementary and contradictions with other approaches, IPA has affinities with grounded theory and discursive psychology.

For the purpose this research IPA can help develop insights regarding how endoscopy trainees feel about elements of their training experience.

As a novice researcher IPA was a new method for me. I see IPA as particularly suited to nursing research especially in inter-professional context, mainly because of the combination of phenomenology and hermeneutics as its theoretical underpinning and ideography as its focus. This gives the participants the opportunity to describe their individual experiences of a particular event or situation. It gives the participant the opportunity to freely describe their individual experience of a phenomenon through their own world view. It places them at the centre of the research, with the researcher being led by them through their own experience.

The interpretive phenomenological paradigm in qualitative research is most suited for my study of lived experience, as it is in my view that all individuals have unique stories to tell. Through developing an understanding and an interest in those stories it is my intention that from these stories, themes and shared experiences obtained from the participant I can interpret the ‘construct of experiences’ by giving it an ideographic focus.

Dialogism

IPA draws some similarities from dialogical methods. Dialogical methods aim to situate experiential and subjective research at the heart of qualitative research through an exploration of truth as lived. This echoes IPA's commitment to understanding the lived experience of individuals (Sullivan 2012). In particular, the ways in which the voices of others may constitute and create a sense of self may offer a fresh perspective. It is through the interactions between self and other that the self gives value both to itself, and to others (Sullivan 2012). This resonates with the concept of Dasein where being-in-the-world is explored. Dasein can be understood as a relational being where we exist alongside others. Within this context, the self is shaped through dialogical interactions with others in the world (Marková 2016).

How does IPA fit with social constructionism?

IPA has a direct empirical commitment to social constructionism (Smith et al 2009). IPA draws more on ideas from the symbolic interactionism and so aims to articulate themes representing the speakers as individuals with hermeneutic agency and importantly, with individualised, psychological life-worlds. The empirical interest of a researcher to gain insight into these psychological life-worlds will necessarily encounter the conditions of the 'double hermeneutics' (Smith 1996), (Smith and Nizza 2022), namely, that the participant is trying to make sense of what is being experienced, while the researcher is attempting to make sense of the participants' sense-making. However, in IPA, knowledge-claims are temporary, relative and always a contextualised function of the researcher's interpretations of the participants' own interpretations as they reflect and try to make sense of their experiences within research settings. Commonly, empirical applications of IPA principles tend to be sympathetic to social constructionism in that there is acknowledgment that the meaning-making processes involve the researcher utilising discursive resources.

There is an appreciation that participants' narratives are always already situated within, and therefore shaped, limited and enabled, by language and practices (Smith et al, 2009). The linguistic and social fabric of any given community in the context of this research, the trainee endoscopist, acts as a framework for potentially individualised production of meanings and offers socially valued formulations. The discourse analysis of narratives about the lived experience of the trainee endoscopist would involve a critical mapping of the established knowledge base that relate to endoscopy training in a wider cultural environment. However, in the context of this doctoral research IPA subscribes to a less singular empirical translation of social constructionism.

Frost et al (2010) describe that IPA is also concerned with how meanings are constructed by individuals within both a social and personal world. Thus 'IPA endorses social constructionism's claim that sociocultural and historical process are central to how we experience and understand our lives, including the stories we tell about these lives' (Eatough and Smith 2008: p184).

According to Colahan, Tunariu and Dell (2012) empirical applications of IPA principles tend to be sympathetic to social constructionism in that there is acknowledgment that meaning-making processes involve the speaker taking up and mobilising certain discursive resources. Following an initial literature review, combining interpretivist and constructionism research methods are frequently applied in areas such as adolescent research (Chen, Shek and Bu 2011), psychology (Colahan et al 2012), (McCann, Lubman 2009), and social work (Loo 2012).

Colahan et al (2012) combined both IPA and a constructionist methodological approach when examining the lived experience, and the socially constructed nature of satisfaction in long-term, heterosexual relationships. The researchers in this instance felt that IPA would emphasise the participants' understanding and sense of their subjective experience whereas the constructionist element would highlight the

social constructs associated with relationships. Colahan et al (2012) considered that whilst the dual focus approach has the benefit of allowing the exploration of the interplay between language, culture and experience, using both methodological frameworks within the study, there are some epistemological challenges. These challenges stem from the fact that both IPA and constructionism are concerned with the role of meanings, collective meaning and individualised meaning, subjective realities, however, do so in different ways. To overcome the challenges with this Colahan et al (2012) was to move away from relativistic forms of social constructionism, moving towards a position that can accommodate a notion of reality that differentiates between the real and the actual.

3.8 Early stages of research design

In the early stages of my research planning, my focus was geared very much towards phenomenological research methods, I was very interested in how to find out about the essence of my research, that unknown element of my chosen question, *'What is the lived experience of the trainee endoscopist?'* This was how I expected my research question to be phrased, however, throughout the course of this doctoral thesis it has been modified to be more interpretative and more in keeping with the research methodology

There are many different research methods which could be regarded as phenomenology, however I needed to find a method which allowed me to examine my chosen question in detail in order to obtain the rich narrative I was looking for. In research, phenomenology seeks to understand a phenomenon as it presents itself and it has been described by Cutcliffe, Joyce and Cummins (2004) as a human science, the purpose of which is to describe and understand particular phenomena as lived experience. Following my literature review I realised that my interest was more towards interpretative phenomenology and the work from hermeneutic philosophers including Heidegger and Gadamer, who argue for our embeddedness

in the world of language and social relationships and historicity of all understanding. According to Heidegger (1962, P37) *'the meaning of phenomenological description as a method lies in interpretation'.*

In the very early stages of planning my research proposal my initial reading was around Max Van Manen's method (1990), I found the reading very intuitive as he developed a method that was useful in understanding about phenomenological research, Van Manen's approach is sufficient methodologically to provide a robust theoretical framework, he takes an eclectic view of phenomenology by applying various concepts, however he maintains that the main emphasis is a lived experience. Van Manen's method involves:

1. Turning to the nature of lived experience
2. Investigating experience as we live it rather than we conceptualise it
3. Reflecting on the essential themes which characterise the phenomena
4. Describing the phenomena through the art of writing and rewriting
5. Maintaining a strong orientated relation to the phenomenon
6. Balancing the research context by considering the parts and the whole.

According the Van Manen (1990) the four aspects of 'lived experience' that are of interest to phenomenologists are:

1. Lived space (spatiality)
2. Lived body (corporality)
3. Lived time (temporality)
4. Lived human relations (relationality).

This, I thought would be a useful framework to begin my investigation as this fitted in very well with my enquiry. In healthcare and nursing research in particular, phenomenology is often used as the methodology of choice, this is mainly because of its epistemological and ontological underpinnings which offer the researcher the

methods to explore, interpret and explain phenomena in real-world contexts and settings (Rodrihuez and Smith 2018). It is my view that nurses can relate to the phenomenological approach because they see it as sharing the values of nursing. However, in exploring phenomenological literature, it is evident that the term 'phenomenology' holds rather different meanings depending upon the context. Phenomenology has been described as both a philosophical movement and an approach to human science research (Crotty 1998), (Dibley, Dickerson, Duffy and Vandermause 2020). In order to explore the various methods, I needed to 'unpick' my question to identify what was at the centre of my enquiry, as I was interested in the lived experience of the trainee endoscopist and what experiences impacted on the learning. It became apparent that interpretive phenomenology was the method which was going to provide the tools in order to answer the question. I further refined my literature search to include interpretive phenomenology. I initially explored the works of Heidegger. His book entitled 'Being and Time' (1927/1957/2010), outlines what 'being-in-the-world' means, which he calls 'Dasein' which directly translates literally to 'being there'. Heidegger differentiated Dasein from everyday consciousness in order to highlight the critical importance 'Being' has for our understanding and interpretation of the world. He states *'This entity which each of us is himself…we shall denote by the term 'Dasein" (*Heidegger 1927/1962, p27*).* It was my view that this was pertinent to my question of the lived experience of the trainee. This investigation through the literature leads me to investigate hermeneutics in more depth. As much of my data collection would be dialogical this would be completely fitting with hermeneutics as it is, by definition related to interpretation of texts. The investigations of both phenomenology and hermeneutics was the cornerstone of my research and through further exploration of the literature I eventually discovered IPA which resonated with me and I felt that IPA was particularly suited to nursing research and it would help the illuminate the lives experience of the endoscopy trainee. Thus, IPA became my chosen methodology.

3.9 Alternative methodologies which could have been employed.

The following section will briefly explore possible alternative methodologies that could have been employed instead of IPA.

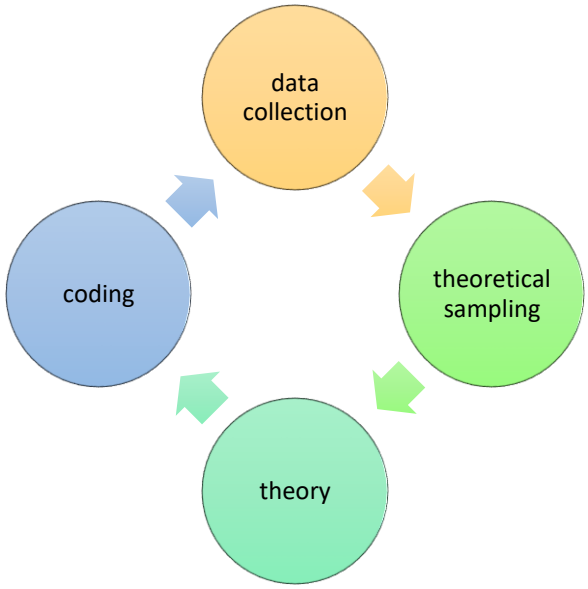
Phenomenological research is a qualitative research approach that seeks to understand and describe the universal essence of a phenomenon. The approach investigates the everyday experiences of human beings while suspending the researchers' preconceived assumptions about the phenomenon. Whereas IPA is a qualitative form of psychology research. IPA has an idiographic focus, which means that instead of producing generalization findings, it aims to offer insights into how a given person, in a given context, makes sense of a given situation.

When considering alternative methodologies which could be utilised to explore my research question, I investigated both Grounded theory and Thematic Analysis which I felt would both be suitable approaches which could offer the systematic inquiry into the phenomena of the lived experience of a specific event.

The following section will briefly explore the rationale behind choosing IPA over Grounded Theory or Thematic Analysis. Phenomenological research examines the stories told by participants, the intent of grounded theory (GT) is to move beyond description to generate or discover a theory (Cresswell and Poth 2018). Corbin & Strauss (2007 p107) go on to describe this as a ‘unified theoretical explanation’.

Grounded Theory originates in sociology and was initially developed by Glaser and Strauss in 1967. It sets out to discover or construct theory from data, systematically obtained and analysed using comparative analysis. In more recent years it has been developed and there are several grounded theory perspectives which build on the original work by Corbin & Strauss. For example, Charmaz (2014) offers a more constructivist and interpretive perspective on grounded theory.

DIAGRAM 3.3 ILLUSTRATING THE FOUR STAGE CYCLICAL PROCESS OF GROUNDED THEORY



According to Smith, Flowers & Larkin (2009) GT researchers tend to set out to seek a theoretical-level account of a particular phenomenon and this often requires sampling on a large scale in comparison to IPA where a much smaller sample is used. For my research I had only ever intended to utilise a small sample to gain an in-depth view into the trainee endoscopists' lived experience. This made IPA as a research methodology a more favourable choice. I was more interested in the detailed and nuanced analysis of a small number of participants rather than a larger sample group seeking to push towards a more theoretical claim.

Thematic analysis (TA) is one of the most common forms of analysis within qualitative research. It emphasizes identifying, analysing, and interpreting themes within qualitative data. It is also an appropriate method of data analysis seeking to examine experiences, thought or behaviours across a data set (Kiger & Varpio 2020).

Braun & Clarke (2006) set out six phases of thematic analysis:

- Familiarisation

- Coding
- Searching for themes
- Reviewing themes
- Defining and naming themes
- Writing up.

While TA can be a flexible methodology, I felt it offered more of an analytical method rather than a phenomenological qualitative approach. In my research as with grounded theory, I didn't feel I would achieve the same depth of analysis and enquiry that IPA offers. TA could be seen as a more superficial analysis which contrasts with what I am looking for and it would also lack the ideographic approach that IPA gives to my research.

IPA acknowledges that the researcher is involved with the research process and that this involvement will both inform and influence each stage of the research process (Willig 2012, 2013). This appealed to me as a researcher, albeit a novice researcher, as I felt I could bring various aspects of my own experience such as my knowledge of endoscopy, training, and my experience as an endoscopist myself to the task of analysing the rich, complex data. One other aspect to consider is IPA's emphasis on reflexivity allows for the possibility of genuinely creative exploration of the participants' subjectivity as long as this remains connected or 'true' to the meaning-making provided.

To summarise, IPA was considered to be most suited to this doctoral research. I was aware of having a particular interest and position with regard to endoscopy training and IPA also allows the integration of valuable pre-existing theoretical and empirical knowledge in the deeper interpretive phases of data analysis which to me was a vital aspect of this methodology.

3.10 Chapter summary

This chapter has explored the rationale and processes I have undertaken in order to choose IPA as the most suitable methodology for my doctoral research. The chapter has examined the theoretical underpinnings along with the ontological and epistemological viewpoints. The following chapter will explore the methods used in the process of data collection.

Chapter 4 - Data Collection

Introduction

The following chapter discusses the process of data collection for the study. It outlines the methods used including the rationale behind each method selected. The aim of data collection in phenomenological research is to gain insight into and hopes to reveal the meaning of a given experience as understood and experienced by the experiencing person, in this instance the trainee endoscopist (Dibley et al 2020). Therefore, as a researcher, the methods adopted would enable the voice of the trainee endoscopist to share those experiences through their own personal dialogue. The chapter also outlines the methods used in data collection, sampling, ethical considerations and informed consent.

4.1 Collecting the Data

In the planning stages of the research proposal, it was initially anticipated that the research would be conducted in my own organisation. However, following careful consideration it was thought that taking the research outside the organisation would give a more varied exposure to participants from around the region. There is also the factor that as the researcher is an experienced nurse endoscopist within the organisation, this may have impacted upon the quality of the data collected. The concern is also that being well known to the participants could influence the extent to which they may have felt able to freely talk during the interviews. Maximising openness is vital to obtaining quality data, this is also supported in the literature. According to Creswell and Poth (2018) the concept of studying in a researcher's own organisation is worth considering. It raises questions of whether good quality data can be obtained or it may raise issues of power and risk to the researcher, the participants, or the site. Although carrying out a study in one's own organisation can be convenient and it can eliminate many obstacles in developing data the researcher may be

hampered in reporting unfavourable data which may in turn impact on themselves or the organisation. This was a point that was taken into consideration when exploring my own data collection strategies, it was thought that by conducting my research at a different centre there would be more opportunity to be objective as I would be away from my own organisation. Creswell and Poth (2018) suggest that in your own organisation or with friends and colleagues this can produce 'dangerous knowledge' that could prove risky for an inside investigator and organisation.

It was initially thought that the views of both trainees and trainers of both professions could be explored as this would make an interesting comparison, by unpicking the experiences during the whole training episode, however it was decided that this was too ambitious and would generate too much data to examine in depth and could potentially confuse the issue. Therefore, the research focuses solely on the experience of the trainee and further work can be conducted in the future examining the interaction perceived by the trainer.

To widen the access to trainees from different regions the decision was taken to approach the Northern Region Endoscopy Training Centre which is an approved centre for delivering JAG accredited basic skills courses. It was expected that many of the trainees attending the courses would be from throughout the North of England, however the trainees interviewed came from many centres from across the country including Wales.

4.2 A phenomenological perspective

In a phenomenological study, the participants in the study must have all experienced the phenomenon being explored and can articulate their lived experiences (van Manen 2014). In a phenomenological approach to data collection the only time the researcher needs to bracket or keep their own preconceptions out of the process is during interviews of participants and collection of research data (Alase 2017). Smith

et al (2009) argue that the IPA approach to data collection is committed to a degree of open mindedness, so conceptions will have to be suspended or 'bracketed' off when it comes to designing and conducting interviews or other data collection events (as previously described in Chapter 3). The rationale behind this according to Smith (2009) is to *'enable participants to express their concerns and make their claims on their own terms'* (p42). According to Finlay (2009) some phenomenological researchers emphasise the process of rendering oneself as non-influential as possible. The process of bracketing their previous knowledge, past experience and assumptions to focus on the phenomena appearing is often misunderstood by the novice researcher as they consider this to be an initial step where subjective bias is acknowledged as part of the project to establish rigour and validity of the research. More importantly this setting aside is carried out throughout the research and is not just the first step.

On the other hand, hermeneutic researchers would suggest that it is not possible to set aside one's own experiences and understandings. They argue that researchers need to come to the research with an awareness of their pre-existing belief which makes it possible to examine the question being asked (Halling et al 2006), (Finlay 2008). Researchers need to bring critical self-awareness of their own vested interests, bias and subjectivity and be conscious of how this may impact on the research process and findings (Finlay 2009).

4.3 Ethical considerations

Ethics is a key aspect of any qualitative study. It is important to ensure the participants and their data in the research are protected. In the planning stage of this doctoral research ethical issues one might encounter were considered and how these might be addressed. According to Creswell and Poth (2018) ethical issues not only arise in the data collection phase, but also require consideration through different phases of

the research. For this research ethical considerations continued throughout the period of the study to ensure appropriate protection of the participants.

The researcher brings their own individual experiences into words in data collection, and then attempts to understand those experiences based on the statements, and to categorise the emergent themes in the next stage. In the final stage, the phenomenological researcher records the principle in writing, which results in a comprehensive description of the phenomena.

As a qualitative phenomenological study was taking place in NHS premises and with NHS staff as the participants, the project required not only university ethical approval but also needed to be approved by the Health Research Authority via the Integrated Research Application System (IRAS).

Obtaining IRAS NHS ethical approval

Any research conducted in the NHS requires ethical approval from the Health Research Authority (HRA) via the Integrated Research Application System. (IRAS). Documentation was written and submitted to the online IRAS system minor queries were initially identified, and these were responded to and ethical approval was granted on 22.01.2019. A copy of the queries and responses provided can be found in the appendix.

Obtaining university ethical approval

The purpose of gaining ethical consent from Northumbria University is to ensure that the research aims and research design are ethically acceptable and follow the institution's code of conduct. Ethical approval was sought and granted from Northumbria University.

Obtaining approval from hospital conducting data collection

In order to carry out my research I needed to attend a Basic Skills course which was being held at a neighbouring Trust. As I was not an employee of that organisation I also need to seek approval and permission to conduct the research on their premises. At the same time as applying for ethical approval from HRA, I submitted a request to the hospital's Research and Development department outlining my research and plans for data collection. Thankfully, this department was accustomed to having requests of this nature and this was fairly straightforward. I submitted a Curriculum Vitae (CV) and was provided with an honorary contract with effect from 19th February 2019.

Participants and Sampling

In IPA sampling must be theoretically consistent with the underpinning epistemological and ontological theoretical positioning and qualitative paradigm. This means that the samples are purposively selected. According to Smith et al (2009), this is so the sample can offer a research project insight into a particular experience. The selection of these participants should reflect and represent the homogeneity that exists among the participants (Creswell 2012). IPA researchers commonly choose a homogeneous sample for whom the research question will be meaningful (Smith et al 2009).

Originally in the early stages it was thought that the research would aim to have 6-8 participants considered by some authors as optimum number for IPA research (Smith et al 2009), (Pietkiewicz and Smith 2014). IPA researchers tend to concentrate more on the depth rather than the breadth of the study (Smith et al (2009), (Pietkiewicz & Smith 2014), and thus felt that larger numbers may reduce the potential for in-depth data collection and analysis through spreading of resources such as researcher time more thinly. However, following discussion at the initial project approval stage, it was

decided that slightly widening the sample size may be beneficial, as it would allow slightly more variation to be explored. Therefore, the sample was expanded to 8-12 participants, this number still fits within the requirements of IPA but also in a phenomenological research tradition, the size of the participants can be between 2 and 25 (Creswell 2012).

The participants were selected from delegates attending the Joint Advisory Group (JAG) mandatory basic skills colonoscopy course held at the Northern Region Skills Centre at Gateshead. They were asked to participate by means of a written invitation, information sheet and consent form. The participants on the course were all trainee endoscopists both medical and non-medical and all at various stages of their colonoscopy training.

Exclusion

• Consultants from any specialty will be excluded.

• Clinical Endoscopists from any allied profession other than nursing will be excluded.

The rationale behind the exclusion of the roles outlined above are due to the fact that the consultants are no longer in a training role and the purpose of this research is to explore interactions between junior doctors and CNS, other clinical endoscopists can be drawn from allied professions such pharmacy, radiography and biomedical science, however for the purpose of this research only Nurse Endoscopist was included.

Inclusion

• Clinical/Non-Medical endoscopists with nursing background

• Junior Doctors (Medical and Surgical)

Consent

Informed consent has been recognised as an integral part of ethics in research carried out in different fields. For qualitative researchers, it is of the utmost importance to specify in advance which data will be collected and how they are to be used (Sanjari et al 2014). In IPA informed consent must be gained not only for participation in data collection but also for likely outcomes of data analysis (Smith et al 2009). This would include publication of verbatim segments of the transcribed interview and this was made clear to the participants at the beginning of each data collection session. It is also considered good practice at the beginning of the data collection to seek further verbal conformation of consent and this was carried out at each stage of the data collection process during the observation stage and also at the beginning of each interview.

A copy of the information sheet and a consent form was provided (both of which can been seen within the appendices); the participants were free to withdraw from the study at any time. The respondents were required to read an information sheet and if happy to participate, complete the attached consent form. The observation would take place during their endoscopy training course and therefore would not impact on their personal time, the interview would require about an hour of their time which would be accounted for during the course (usually on day 2 and 3 when the formal classroom teaching had concluded).

Confidentiality

Some of the possible issues with regard to the ethical nature of the study concern the questioning of the participants. As the aim of the study is to obtain some personal views, the participants must have their views respected and maintained at the highest level of confidentiality. Whatever views discussed, no matter how contentious, there

would be no reprisals and all information would be kept in strict confidence and any transcriptions of one-to-one interview could be reviewed by the individual concerned. Participants would be clearly informed that withdrawal from the study could be done at any stage up to the point of data analysis. If a participant withdrew consent during the interview or observation stage then any data collected up to that time would be erased. At least seven days prior to the study I would ensure that a consent form was disseminated alongside an information sheet explaining the study and outlining consent to voice recordings of the sessions and transcriptions of the recording to be made. All data would be anonymised, their identity would be kept confidential and all measures possible taken to maintain that confidentiality of identity e.g. use of study codes on data documents, keeping identifying information locked in a separate location and restricting access to these documents, encrypt identifiable data, limit access to identifiable information, securely store data documents within locked locations; and/or assign security codes to computerized records.

Included in the consent would be provision that the data would be held securely up to a period of five years and may be subsequently involved in secondary analysis of the data for further research. It is important that with any form of research that the participants are aware of the purpose, aims and use of results and the likely consequences of the study, this process involves taking an informed consent, this requires those responsible to provide written information including the written agreement of the participants' willingness to participate. As a researcher we have a duty of care in relation to all participants. The data would be non-identifiable and stored on the internal hard-drive of the organisation which is secure and password-protected and have the power of free choice enabling them to voluntarily consent to, or decline participation in the research.

4.4 Validity and Reflexivity

In the literature there has been discussion among qualitative researchers about the assessment of quality of qualitative research. This has been brought about because of the reported dissatisfaction that qualitative research is often being evaluated according to the criteria set out for validity and reliability which are applied to quantitative research. There are many qualitative researchers who recognise that validity and quality are important considerations, however that qualitative research needs to be evaluated in relation to a criterion which is appropriate to it. Within the quantitative research tradition, the quality and rigour of research output is often measured in terms of validity and reliability. Given the diverse philosophical stances of qualitative research, the use of validity and reliability to determine quality and rigour is not necessarily suitable (Seale et al 2004). Bryman et al (2008) suggest that strong preferences for the traditional criteria of quantitative approaches, namely validity, reliability, replicability and generalisability to be restricted to quantitative research; although validity and reliability were also considered as valuable quality indicators for qualitative research. There appears to be much less of a consensus in quality measures in qualitative research, however Robson (2011) argues that the term 'reliability' requires reconceptualising in terms which are appropriate to qualitative research and suggests that this re-framing might include a transparent audit trail which allows others to gauge the extent of the thoroughness and honesty of the researcher's work.

Validity

There have been numerous attempts for authors to produce criteria for assessing the quality and validity of qualitative research both generically and across a range of disciplines for example nursing (Rolfe 2006) and psychology (Yardley 2000).

In IPA Smith et al (2009) particularly subscribe to the work of Yardley (2000) mainly because this is attributed to work in psychology which is the foundation of IPA. Smith et al (2009) advise Yardley (2000) as the recommended criteria as it is broad ranging and can offer a variety of methods for establishing quality also the criteria can be applied irrespective of the particular theoretical orientation of a qualitative study.

Yardley (2000) represents four broad principles for assessing quality of qualitative research.

1. Sensitivity to context
2. Commitment and rigour
3. Transparency and coherence
4. Impact and importance.

In contrast as part of an IPA study, Vicary, Young and Hicks (2016) argue that quality and validity are achieved in three ways - reflexivity, reflection and journaling. They go on to suggest that the journal produces its own audit trail evidencing not just transparency but also the personal rigour of the questioning and reflecting researcher. Robson (2011) supports the use of a transparent audit trail to ensure reliability of the study. Throughout the research I have maintained a research journal and this will act as my 'audit trail'. This will be discussed in more detail later in the thesis and this will provide transparency and rigour to the research.

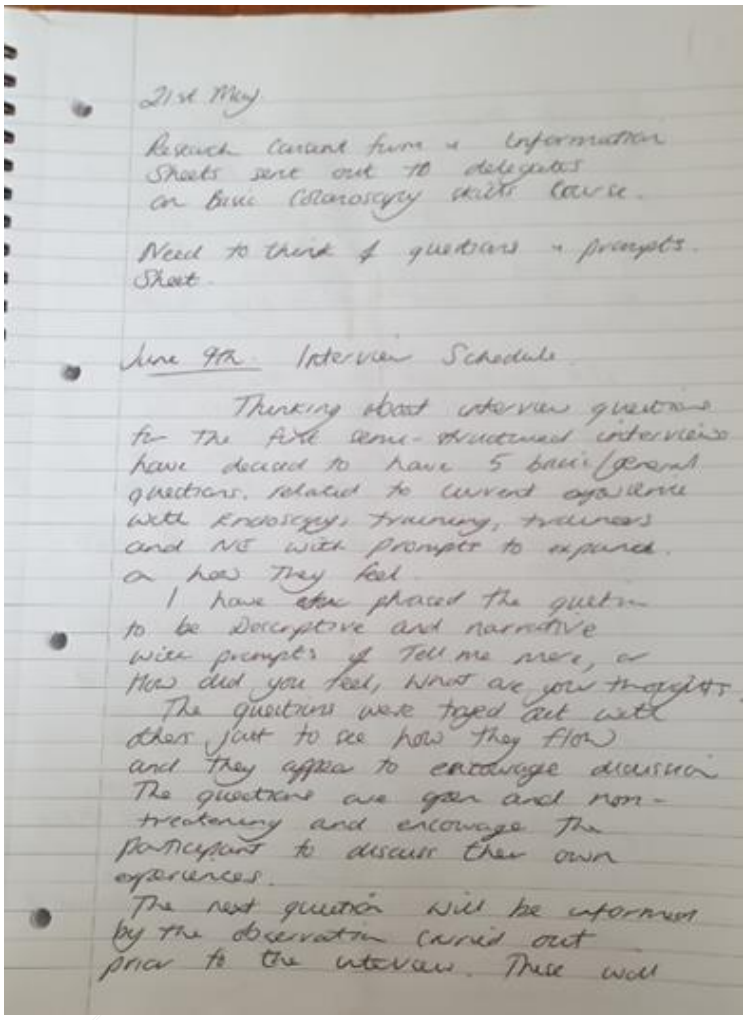
Reflexivity

The use of reflexivity in social sciences seems to most often focus on the self-reflexivity of the researcher (Munhall 2007). It is grounded in the epistemological belief that it is impossible for the researcher to remain external or apart from that which is being researched (Angen 2000).

Documenting one's thoughts and feelings in a journal is an established tool for learning both in higher education (Morrison 2006) and in specific professions such as nursing (Chirema 2007). Thus, supporting the value of using such a journal which includes the thought process enables active learning and reflection.

Throughout the research project and particularly during the data collection stage a handwritten research journal was kept reflecting upon the process and by means of documenting thoughts and ideas. My preference is to use a handwritten journal as I feel my thoughts can flow more freely with the connection with pen and paper. Below is an extract from my journal documenting my ideas and thoughts around the semi-structured interviews prior to the first round of data collection later that month. A further examination of the research journal can be seen in the section of the thesis which outlines the personal reflective processes in chapter 10.

FIGURE 4.1 EXTRACT FROM REFLECTIVE JOURNAL



21st May

Research Consent form + Information Sheets sent out to delegates on Basic Colonoscopy skills course.

Need to think of questions + prompts. Sheet.

June 9th Interview Schedule

Thinking about interview questions for the AHP semi-structured interviews have decided to have 5 basic/general questions related to current experience with Endoscopy training, trainees and NS with prompts to expand on how they feel.

I have also phrased the questions to be descriptive and narrative with prompts of Tell me more, or How did you feel, What are your thoughts.

The questions were typed out with others just to see how they flow and they appear to encourage discussion. The questions are open and non-treatening and encourage the participant to discuss their own experiences.

The next question will be informed by the observation carried out prior to the interview. These will

I am keen to acknowledge that qualitative knowledge is by no means less precise or less valid, as like quantitative research it is derived from systematic, rigorous and transparent criteria for ensuring quality in research as a scientific work (Bryman et al. 2008). For IPA, the basis of its systematic approach to ideographic enquiry is the requirement of examining *'each case in great detail as an entity in its own right'* before more general claims are made (Osborne and Smith (2006 p217). Furthermore, knowledge claims in qualitative research centre on the transparency which is largely

achieved through researcher reflexivity during the entire research process. Willig (2013) makes a valuable distinction between personal and epistemological reflexivity. According to Willig epistemological reflexivity encourages researchers to consider how the research questions, epistemological stances, and methodological choices have influenced assumptions about the participants' world and the type of knowledge gained.

4.5 Collection of the Data

The first round of data collection was carried out at the Endoscopy Northern Skills Centre at the Queen Elizabeth Hospital, Gateshead between 12 and 14 June 2019. The course consists of classroom-based teaching and one-to-one skills training on patients who had been consented in advance to take part on a training course. The course is mandatory for all endoscopists training to perform colonoscopy and is supported by the JAG (Joint Advisory Group) which is responsible for the Standards and Quality in Endoscopy Training in the UK.

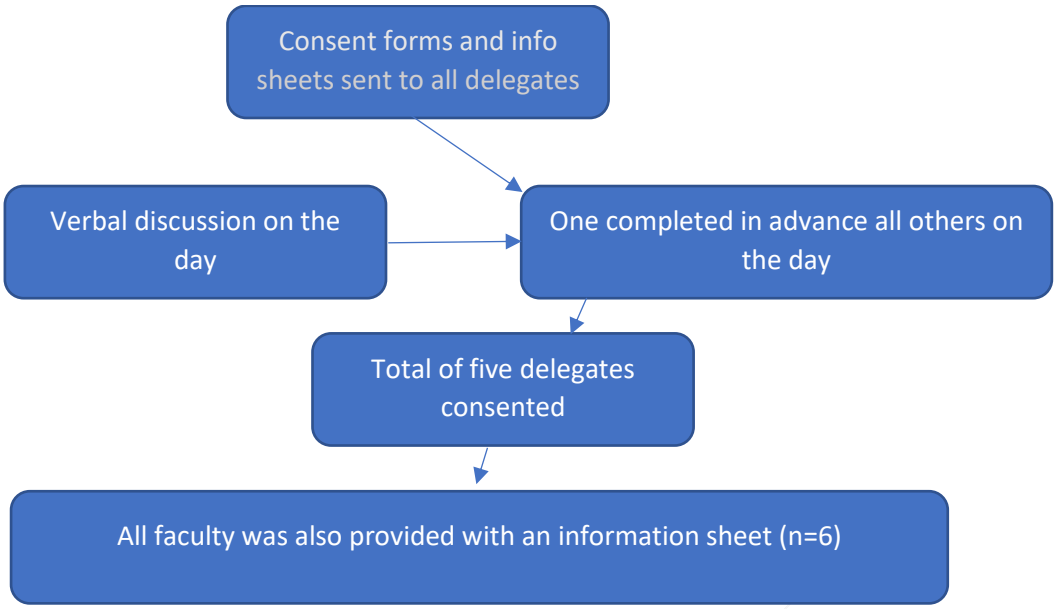
The course was a basic skills course in colonoscopy and had a faculty of five consultants which consisted of four gastroenterologists and one colorectal surgeon and one Nurse Endoscopist from various Trusts around the northern region.

There was a total of six trainees, and five consented to take part in the research, these were:

One Nurse Endoscopist from the south of England

Four trainee gastroenterologists with various experiences, one form the North and three from the South.

DIAGRAM 4.1 PROCESS OF CONSENT SESSION 1



A total of five delegates consented, the forms were collected and given letters from A to E and these were used to identify the respondents during the observation and interview. All members of the teaching faculty were also provided with an information sheet and verbal consent was given to be part of the observation process in the procedure room along with the participants.

The second round of data collection was carried out on 18 and 19 November 2019. There were five participants who were all sent out the information and the consent forms in advance of the course. None of the participants consented in advance therefore further copies of the information sheet and consent form were provided.

The participants were as follows:

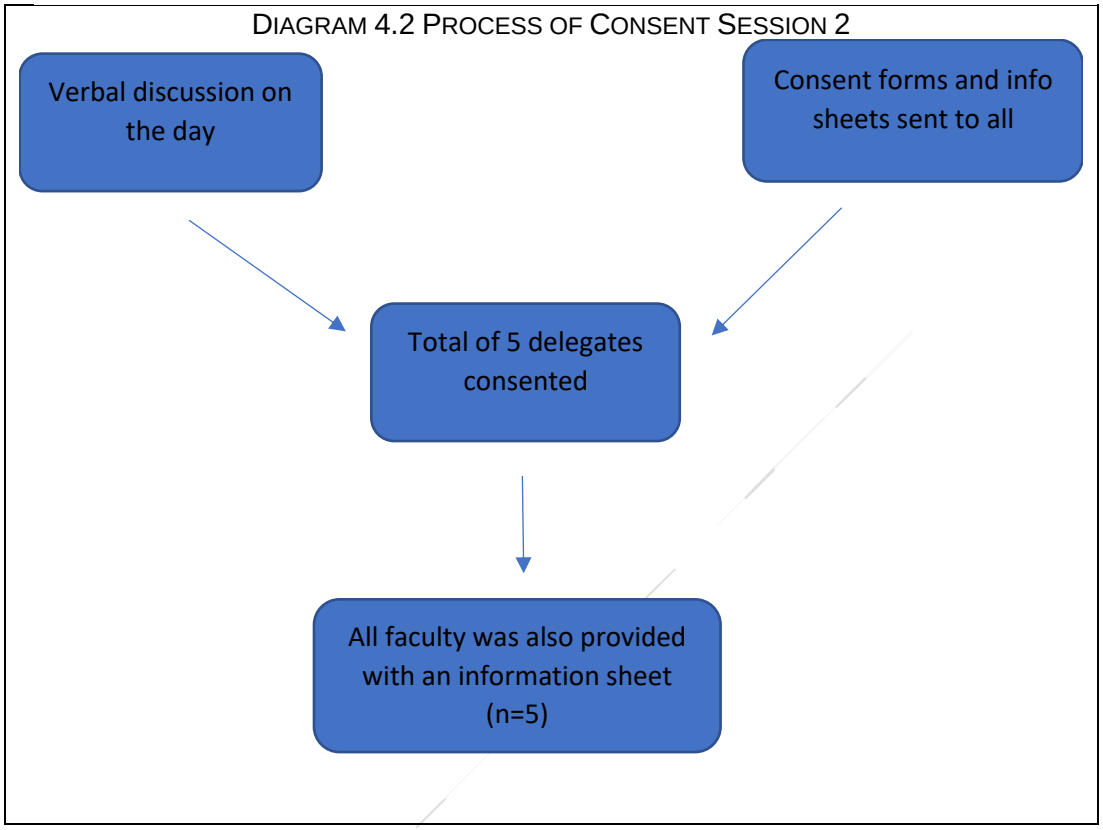
Two colorectal surgeons, staff grade, from the West

One Surgical Fellow from the North East of England

Two gastroenterology trainees from various regions around the country.

There were five faculties which included one Nurse Endoscopist and four gastroenterologists from Trusts throughout the northern region.

DIAGRAM 4.2 PROCESS OF CONSENT SESSION 2



The observation was carried out in the endoscopy department, (see attached photograph and figure to illustrate the room layout). The delegates were given a time limit of 30 minutes for their hands-on training.

All five participants consented to participate in the research and signed their consent form on the day, verbal consent was taken from the faculty members for the observations and all patients were consented as per the course requirements. Again, the forms were collected and given letters from F to J and these were used to identify the respondents during the observation and interview audio and transcription. The observation was again carried out in the endoscopy room (see figure 4.2).

Observation

As part of the data collection a participant observation was carried out in the procedure room, this involved observation of the interaction of the trainee and trainer in the live practical skills training. As this is a formal course all the patients were consented separately for their procedure. They were observed via video transmission to the seminar room where the rest of the delegates and faculty were located. I gained further verbal consent from the patient prior to the procedure to be present to observe the trainee.

It was thought that the observation would inform part of the interview and the fact that it was a colonoscopy course which is not my speciality meant I that I could fully engage in the process of the observation without becoming distracted by the procedure.

The anticipation was that during the planning stage of the research the observation of the training experience and the interaction between the trainee and the trainer could be used to inform aspects of the interview, for example body language and conversation. The researcher would be positioned out of the way so as not to interfere with any aspects of the procedure, patient care or training experience.

Observation is one of the tools for collecting data in this research. It is the action of noting a phenomenon in the field setting through the five senses of the observer (Creswell 2013). Although in IPA in-depth interviews are the best means of data collection, Smith et al (2009) acknowledge that other methods such as observation have a role to play as long as the activity being observed includes a discussion of the experience. The interviews can be supported with other methods, observation can help to form a basis of the interview but require some recognition of the problems involved in applying experiential analyses to more complex social activities (Reid, Flowers and Larkin 2005).

The observation at the Basic Endoscopy skills course would involve the interaction of the delegates and faculty during the practical component of the skills-based endoscopy training. During the observation period which would not be expected to last for more than 30 minutes notes would be taken by the researcher. The time limit would be placed on the trainer and trainee during the clinical session, for multiple reasons, first and foremost to reduce patient discomfort, to reduce trainer fatigue and minimise trainee stress and anxiety. This is well supported in the literature as an important aspect of endoscopy training (ref).

Leedy and Ormrod (2015) recommend that the observation be intentionally unstructured and free-flowing, the researcher then can shift focus as potentially significant objects and events present themselves. The observation will be recorded in detail with written notes, this aims to capture the complex interactions during skills-based training. From this a complex but integrated picture should emerge.

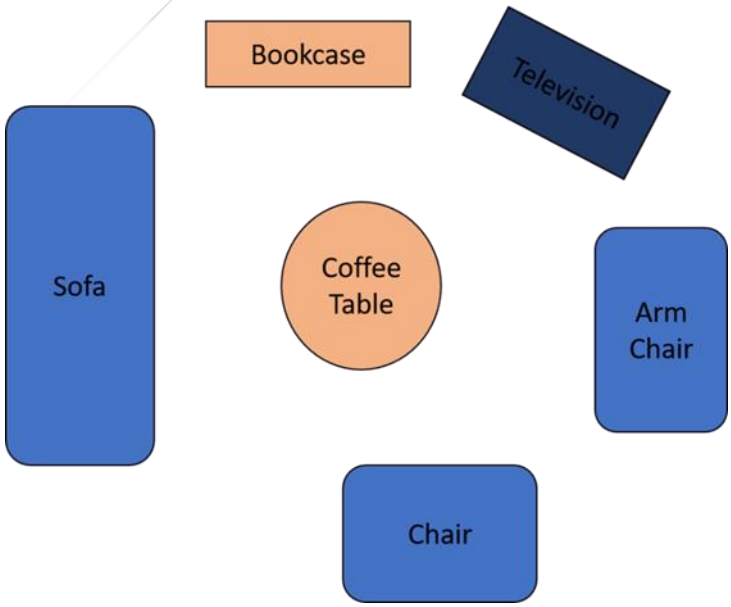
Observation can be very time consuming. However, it is more common in modern research to reduce the observation time substantially. An important potential disadvantage in conducting observational research is the ethical dilemmas inherent in observing real life situations for research purposes. While this research may not directly benefit the participants, it will be a benefit to future teams to help NHS staff in advancing practice and traversing traditional role boundaries. The intention is that this research will identify which aspects of the doctors and CNS interaction during endoscopy training influences inter-professional working, their perception of each other and how this interaction and professional discourse can be translated into more cohesive ways of working.

FIGURE 4.2 ENDOSCOPY PROCEDURE ROOM WHICH OBSERVATION TOOK PLACE (PHOTOGRAPH TAKEN WITH PERMISSION)

FIGURE 4.3 INTERVIEW ROOM (VIEW 1)

FIGURE 4.4 INTERVIEW ROOM (VIEW 2)

FIGURE 4.5 SCHEMATIC DIAGRAM OF INTERVIEW ROOM



Semi-structured interviews

Interviewing is the exemplary method of data collection for IPA, however it can be supported by other methods. The primary concern for IPA researchers is the extract-rich detailed first-person accounts of the experiences and phenomena under investigation. Semi-structured interviews allow the researcher and the participant to engage in dialogue in real time (Pietkiewicz and Smith 2014).

The phenomenological interview should be a reflective event as it involves researcher and participant in the co-creation of meaning (Flood 2010). This proposal is underpinned by Gadamer (2006) who identifies that during conversation a shared interpretation of experience is generated. This implies that the data generated from interview is a result of the interactions between interviewer and interviewee, within the inter-subjective context of that specific interview (Josselson, 2013).

The second part of the data collection was through semi-structured interviews. This would be in the form of a one-off audio recorded semi-structured interview lasting no more than 30 minutes. The interview would be informed by themes which were noted from the observation session, with the researcher being guided with a prompt sheet which is included in the appendix. The interviews would take place as soon as practically possible following the observation in order to gain the most optimum responses. As the interviews would take place on either day 2 or 3 of the course following the first day of classroom based and simulation training, it would give a good opportunity for the interviewer to build a rapport with the participant, as Smith et al (2009) recommends that this is one of the most important things which can be done in order to gain good data from the participant. One of the other main points when conducting an interview in IPA research is to be clear that the researcher is interested in the experience of the participant and that there are clearly no right or wrong answers to any of the questions. Although there is a schedule of questions there is

no pre-set agenda and the main interest comes from what the participant has to say. It is important for the interviewer to remember that during the interview phase of the study we are leaving the research world and coming around the hermeneutic circle (as outlined in Chapter 3) to the participant's world. Smith et al go on to say that the more focused you are on the participant's words the more likely you are to 'park' or 'bracket' your own pre-existing ideas or notions. However, Heidegger's view is more nuanced in that he suggests that it is impossible to bracket off completely the researchers preconceptions as the researcher needs to be fully immersed in the research(1963). Gadamer emphasized the importance of history and the effect of tradition on the interpretative process. He proports that *To try to escape from one's own concepts in interpretation is not only impossible, but manifestly absurd. To interpret means precisely to bring one's own preconceptions into play so that the text's meaning can really be made to speak for us.* (Gadamer, 2004, p. 398).

The interviews were conducted in a quiet, private environment with only the researcher and the respondent present. The data would be recorded using a digital audio recording device and notes would be taken by the researcher to support the data collection. The interview could be stopped at any time and fresh water would be available as required. Silverman (2016) suggests that qualitative interviews provide us with access to social worlds, as evidence both of what happens within them and of how individuals make sense of themselves, their experience and their place within these social worlds. Semi-structured interviews would allow the participants to express their thoughts freely, allowing the researcher to cover areas of interest identified in the literature review and delve beneath the surface of superficial responses to questions designed to obtain authentic meanings that individuals assign to events and past experiences. The aim is not to challenge the narrative of the trainee

endoscopist but to gain a clearer understanding of their true experience and the challenges and opportunities which can affect the learning experience.

As mentioned above the interviews took place in a separate quiet room away from the main group of course delegates. (see photographs of the room layout and room layout diagram). The choice of environment is an important aspect of the interview, the participant needed to feel at ease to encourage the sharing of in-depth thoughts and feelings. The room was comfortable and set out in a relaxed manner with a sofa and easy chairs around a coffee table, the participant was allowed to choose their seat first and the interviewer sat in a seat near to them but not directly next to them so as not to crowd their personal space. The digital recorder was placed on the coffee table along with fresh drinking water. All interviews were loosely structured around an interview schedule of semi-structured questions allowing room for discussion, a copy of which can be seen within the appendices. The initial interview questions were formed by published literature on what is known about the trainee experience. Each interview started with a 'thank you' for agreeing to participate but also a reminder that this is a discussion-based interview with no 'right or wrong answers'. This is particularly relevant in IPA as the participant needs reassurance that this is the case and that the interviewer is interested in the participant's own narrative (Smith et al 2009). The interview could be descried as a 'conversation with purpose' (Smith et al pg. 55) and should be opened up with broad questions, to find out a little bit about their own personal journey so far in their career, their chosen speciality and their current experience. This aims to build confidence that the interviewer was interested in their experience, the questions become more directed by encouraging discussion on a particular point but at the same time allowing space for participants to express their own views.

Interviewer – interviewee relationship

As a novice interviewer I needed to be aware of my own biases, I am coming from the aspect of an experienced nurse endoscopist with my own attitudes, assumptions and beliefs, however I needed to be mindful that I needed to set these aside for the purpose of the research. It is important that the participants felt relaxed and were able to discuss their own narrative freely and without constraint. According to Smith et al (2009) interviewing allows the researcher and participant to engage in a dialogue whereby initial questions are modified to account for the participant's responses and the interviewer is able to further question if interesting areas arise. The notion of the semi-structured interview would help give a fluidity to the conversation more than would a structured approach, Silverman (2016) discusses that in unstructured interviews the passivity of the researcher can act as a *'powerful restraint upon the interviewee to talk'*. It is well described in the literature that what an interviewee chooses to share or the narratives they co-construct reflects both conditions in the interview environment and in the relationship between the researcher and the participant (Roulston and Choi 2018). The flexibility of this approach allowed interviewees to raise issues important to them but not covered in the prompt sheet, thus giving them some power over what was included.

As the interviews were to take place following the theory and practical session on day 2 or 3 this gave the interviewer time to establish a rapport with the interviewees, and as Smith et al (2009) suggests, by gaining trust the interviewee knows what is expected and feels relaxed enough to have a truthful discussion.

The rhythm of the interview has to maintain the flow, but an inexperienced interviewer can interject too soon and interrupt the key points from the participants. When listening back to the interviews I realised that in the earlier interviews this was one of the mistakes I made as I was keen to expand on what was being said but was not

allowing the participant to explore the narrative themselves. Smith et al (2009), and others (Silverman 2013), (Creswell 2013) do acknowledge this as an issue with the inexperienced researcher, however the pre-prepared interview schedule could help with this and the novice interviewer can overcome the nervousness of the initial interviews. As the interviews progressed it was clear that my confidence grew and I was happier to leave the natural pauses in the conversation to be filled by the participant.

The influence of the researcher on the participants in the interview setting led me to consider my interview technique and the influences this had on those being interviewed. Each interview conducted became a learning experience, and each transcript an opportunity to consider the language used and the phrasing of the questions.

As a senior nurse endoscopist myself I was concerned that the participants would consider this as a barrier to the discussion and tailor their answers to fit with the questioning, however I didn't feel this as an issue in fact one of the participants commented:

'This has come very natural, I have not thought about it at all'.

I found this reassuring as it indicated that my interviewing skills were developing as the sessions progressed but it also suggests that the participant found this a cathartic experience and this will be discussed further in the analysis section.

Recording and storage of the data

So that a full and accurate record of the interview existed, all interviews were digitally recorded with a Dictaphone reserved only for the recording of these interviews. They were then subsequently fully transcribed verbatim by myself. This recording and transcription process ensured that the data captured during interview was maintained

in its entirety and ensured a true capturing of participants' given 'lived experiences'. This therefore provided the data required for interpretation during the process of data analysis (Polit and Beck, 2008).nThe recording and the transcriptions were anonymised and the participants' identity were kept confidential. This was adhered to as stated in the IRAS project ID 218517 and HRA approval dated 22.01.2019.

4.6 Chapter Summary

This chapter has considered the methods utilised to gather the data required to generate an understanding of the trainee lived experience of endoscopy training for this doctoral study. It has described the purposive sampling approach employed to recruit participants. It has also considered the observation process of the basic skills course to gain context and semi-structured interview to access 'lived experiences' in order to explore the phenomenon.

The next chapter leads on from this to describe the processes involved in the data analysis phase of the research.

Chapter 5 - Data Analysis

Introduction

The following chapter will explore the process of data analysis and examine the emergence of Super-ordinate themes and Sub-ordinate themes. The subsequent chapters will explore each Super-ordinate theme in detail separately.

5.1 Demographic of Participants

There was a range of participants and the demographics of these are outlined below.

TABLE 5.1 PARTICIPANT DEMOGRAPHICS

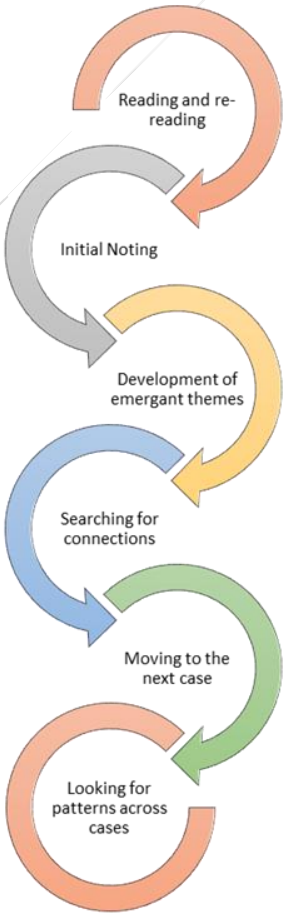
Participant	Speciality	Region
A	Clinical Endoscopist	South
B	Gastroenterology Trainee	North
C	Gastroenterology Trainee	South
D	Gastroenterology Trainee	South
E	Gastroenterology Trainee	South
F	Gastroenterology Trainee	South
G	Gastroenterology Trainee	South
H	Surgical Fellow	North
I	Colo-Rectal Surgical Trainee	West
J	Colo-Rectal Surgical Trainee	West

5.2 Analysis

The method adopted by IPA is a cyclical process where the researcher proceeds through several iterative stages:

- Step 1: Reading and re re-reading
- Step 2: Initial noting
- Step 3: Developing emergent themes
- Step 4: Searching for connections across emergent theme
- Step 5: Moving to the next case
- Step 6: Looking for patterns across cases.

DIAGRAM 5.1 SIX ITERATIVE STAGES OF IPA ADAPTED FROM SMITH ET AL (2009)



As a novice researcher, Smith et al (2009) suggests by following the steps outlined above in diagram 7, this will provide a guideline to follow which can be altered and adapted as the researcher gains on confidence or the data requires it.

IPA analysis involves close reading and re-reading of the text with notes made alongside the transcripts. After each interview, the recording was transcribed verbatim. The transcripts were then analysed in conjunction with the original recordings and interview themes identified (Smith et al 2009). In order to develop themes each transcript was annotated with initial comments then more closely examined, looking at the linguistic, descriptive and conceptual elements within each interview. Once this was completed I was then able to look for emerging themes and links between each case. In this method the themes were listed in chronological order and by reading this list and moving the themes around electronically I was able to form clusters of the themes. Patterns and connections were identified across the emergent themes, partly through the process of identifying what was important to the participant and partly letting ideas and connections naturally form. This, for me felt like a natural and intuitive process. This part of the analysis is very time-consuming; however, it is important that each stage is followed so the researcher can get a feel for the richness of the data emerging. Once the themes have been developed, these can be divided into Super-ordinate and Sub-ordinate themes. IPA analysis involves close reading and re-reading of the text with notes made alongside the transcripts. After each interview, the recording is accurately transcribed. The transcripts are analysed in conjunction with the original recordings and interview themes are identified (Smith et al 2009). As a novice researcher Smith (2009) et al suggest that following the suggested steps will provide a guideline to follow which can be altered and adapted and the researcher feels more confident or the data requires it.

According to Creswell (2013), he suggested that the participants' lived experiences are what helps and guides many of these qualitative approaches in making sense of

their research analysis. Creswell (2013) explicitly truncated the added advantage of phenomenological approach; he stated that '*The suggestions for narrative analysis present a general template for qualitative researchers'*. Smith's (2007) analysis has been described as an iterative and inductive cycle which proceeds by drawing upon the following strategies:

- The close line-by-line analysis of the experiential claims, concerns and understanding of each participant (Larkin, Watts and Clifton 2006)
- The identification of the emergent patterns (themes) within this experiential material emphasizing both convergence and divergence, commonality and nuances (Eatough and Smith 2008) usually first for single cases and the subsequently across multiple cases
- The development of a 'dialogue' between the researcher, their data and their psychological knowledge about what it might mean for participants to have these concerns in the context of the research (Larkin et al 2006), (Smith 2004). This could lead in turn to the development of a more interpretative account.

The development of a structure then follows, which provides a framework or a plan that illustrates the relationships between themes. What primarily emerges as a universally agreed strength of IPA is the creation of a richly interpreted, phenomenological account of the participant data, arising from the meticulous engagement between the researcher and a small number of participants (Wagstaff, Jeong, Nolan, Wilson, Tweedie, Phillips, Senu and Holland 2014). IPA as a methodology offers a flexible view of the analysis which is suitable for the experienced or novice researcher alike. The ideographic approach of IPA requires detailed focus on a person's subjective lived experience of a particular topic and the data from each participant to be fully analysed in their own terms (Smith and Nizza 2022). Supporting this notion, Love, Vetere and Davis (2022) suggest the analytical process of IPA is concerned with an inductive analysis of each individual's account, which has reached

some level of completeness (Gestalt) first before moving onto the wider group analysis.

Method

The following section explores the process of analysis. As IPA is interpretative in nature and double hermeneutic, meaning the researcher not only reports on the understanding of the participants description, but the participants reasoning about their experience rather than capturing the experience itself. According to Smith and Nizza (2022), your role as analyst is acknowledged and this should encourage oneself as a researcher to move beyond a merely descriptive reading of the data to more of an interpretative reading of the data. Therefore, any claims should be presented cautiously due to the interpretative nature of the analysis.

Once I had obtained the audio recordings of the interviews, I initially listened to each interview to become familiar with the speech and tone of the voice. I did this several times so I felt I understood the context of each interview. Each interview was transcribed verbatim by myself. Although this is very time-consuming I felt it was an essential aspect of the data analysis as it helped me to become more immersed in the data.

Once all the interviews were transcribed I spent more time reading each transcript and listening to the audio recording. I felt this helped me gain more of a perspective of what was being said and the possible meaning behind the dialogue of what the trainees were expressing. This also gave me a sense of the structure of the narrative of each interview and how the various components fit with each other. I realised at this point I could have expanded more on some of the questions to get deeper/richer responses. As a novice researcher I could see several missed opportunities during the interviews in which I could have gained more in-depth answers to my questions

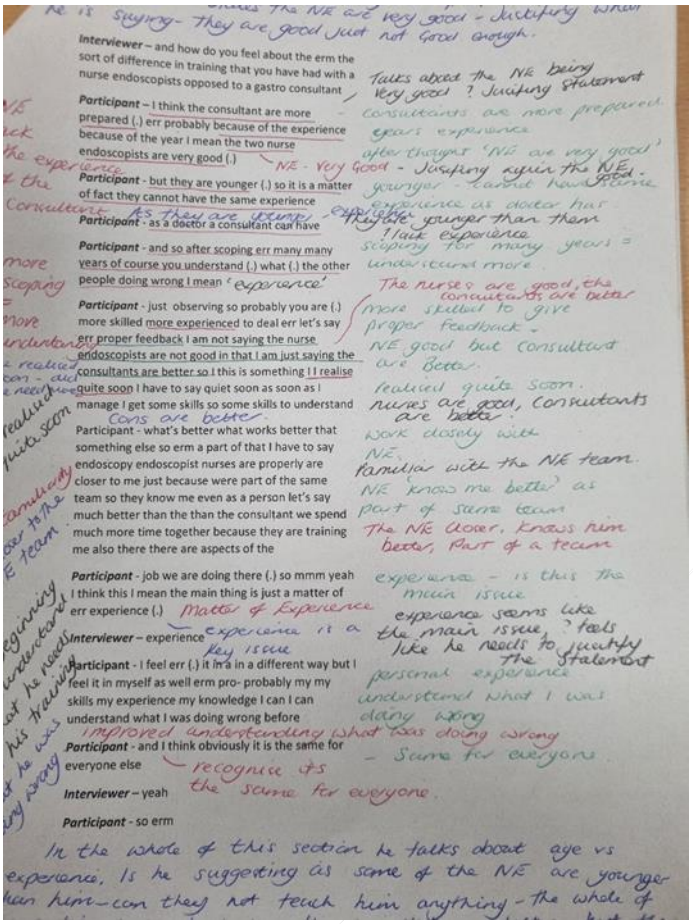
by using my probing questions more effectively. This is an aspect of interviewing technique I will develop in future research projects.

I continued to listen to the audio recording and this time I annotated each transcript with some initial thoughts. At this stage these were just ideas of what was said, the possible meanings, interpretations and what the respondent's personal experiences had been. This process made me think a bit more about the interview. I felt I was beginning to get a perception of each respondent's experience and how this could be broken down in the separate analytical sections as set out in IPA (Smith et al 2009):

- **Descriptive comments** – these are focused on describing the context of what the participant has said, the subject of the talk within the transcript
- **Linguistic comments**- these are focused upon exploring the specific use of language by the participant
- **Conceptual comments** – these are focused on engaging at a more interrogative and conceptual level.

While listening to the interview I annotated each exploratory comment. This was carried out on a case-by-case basis and I took time to reflect on each group of comments before moving to the next. This gave me the opportunity to begin to think about which themes may be starting to emerge from the data. In order to differentiate these on the transcription each annotation was in a different colour so it made a visual impact to me so I could easily pick out these. I prefer to be creative and by using the coloured pens it made it a more visual creative process for me.

FIGURE 5.1 ANNOTATION OF THE INTERVIEW TRANSCRIPTS.



Interviewer – and how do you feel about the erm the sort of difference in training that you have had with a nurse endoscopists opposed to a gastro consultant

Participant – I think the consultant are more prepared (.) err probably because of the experience because of the year I mean the two nurse endoscopists are very good (.)

Participant - but they are younger (.) so it is a matter of fact they cannot have the same experience

Participant - as a doctor a consultant can have

Participant - and so after scoping err many many years of course you understand (.) what (.) the other people doing wrong I mean 'experience'

Participant - just observing so probably you are (.) more skilled more experienced to deal err let's say err proper feedback I am not saying the nurse endoscopists are not good in that I am just saying the consultants are better so I this is something ! I realise quite soon I have to say quiet soon as soon as I manage I get some skills so some skills to understand

Participant - what's better what works better that something else so erm a part of that I have to say endoscopy endoscopist nurses are properly are closer to me just because were part of the same team so they know me even as a person let's say much better than the than the consultant we spend much more time together because they are training me also there there are aspects of the

Participant - job we are doing there (.) so mmm yeah I think this I mean the main thing is just a matter of err experience (.)

Interviewer – experience

Participant - I feel err (.) it in a in a different way but I feel it in myself as well erm pro- probably my my skills my experience my knowledge I can I can understand what I was doing wrong before

Participant - and I think obviously it is the same for everyone else

Interviewer – yeah

Participant - so erm

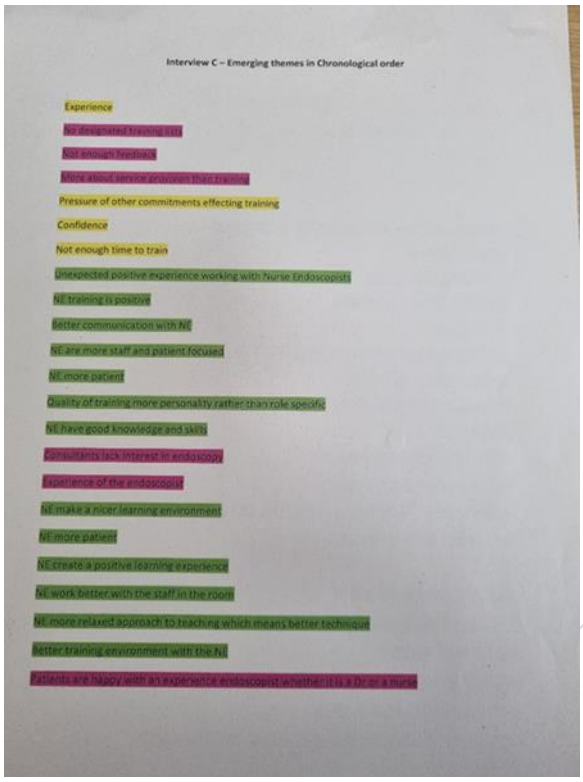
In the whole of this section he talks about age vs experience. Is he suggesting as some of the NE are younger than him – can they not teach him anything – the whole of

The identification of Super-ordinate and Sub-ordinate themes from the emergent themes was a process that closely followed that of Smith, Flowers and Larkin (2009), where they outline two ways of making connections between emerging themes. The first way was to print out the themes and move them around physically where convergent themes are grouped and divergent ones are placed at the opposite ends of the spectrum. This method didn't appeal to me as I felt it was not conducive to my way of thinking. The second method was to type the lists in chronological order then, by reading the list and moving themes around electronically, to cluster related themes (Smith, Flowers and Larkin 2009 p96). Patterns and connections were identified across emergent themes.

Similar themes were colour coded and grouped together in chronological order and the rearranged into groups and can be seen by the example below. For me the visual impact was important to help me make connections between the themes. This method felt more natural and intuitive, as the electronic format of the emergent themes could easily be moved by copy and paste. Since much of the work is computer based (transcripts), this method was more comfortable as it is closer to normal working practices, I normally work with two computer screens so this made the process more efficient.

I completed this process for each individual case before moving on to the next transcription. Photographs (Figure 5.8 and Figure 5.9) illustrate how the process looked between grouping the themes in chronological order and then grouped together the themes.

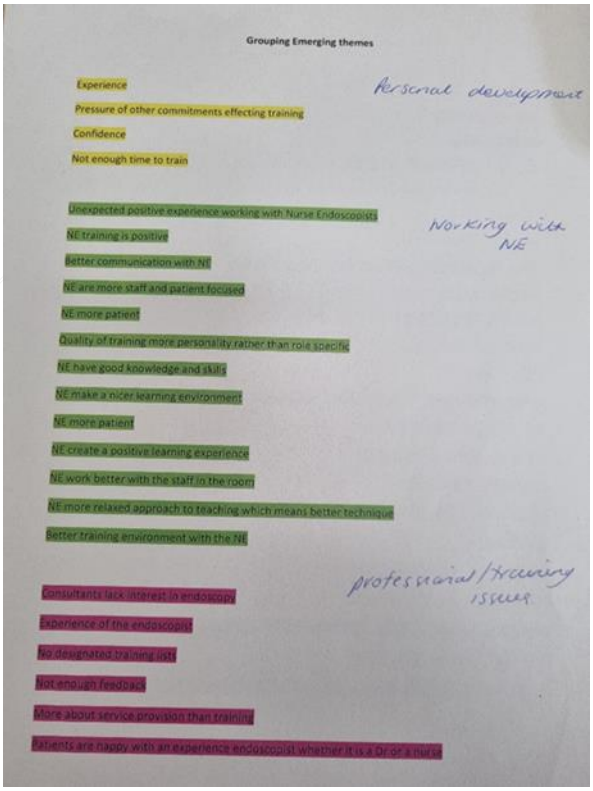
FIGURE 5.2 GROUPING THE THEMES IN CHRONOLOGICAL ORDER



Interview C – Emerging themes in Chronological order

Experience
No designated training lists
Not enough feedback
More about service provision than training
Pressure of other commitments effecting training
Confidence
Not enough time to train
Unexpected positive experience working with Nurse Endoscopists
NE training is positive
Better communication with NE
NE are more staff and patient focused
NE more patient
Quality of training more personality rather than role specific
NE have good knowledge and skills
Consultants lack interest in endoscopy
Experience of the endoscopist
NE make a nicer learning environment
NE more patient
NE create a positive learning experience
NE work better with the staff in the room
NE more relaxed approach to teaching which means better technique
Better training environment with the NE
Patients are happy with an experience endoscopist whether it is a Dr or a nurse

FIGURE 5.3 GROUPING EMERGENT THEMES



Grouping Emerging themes

Experience
Pressure of other commitments effecting training
Confidence
Not enough time to train

Personal development

Unexpected positive experience working with Nurse Endoscopists
NE training is positive
Better communication with NE
NE are more staff and patient focused
NE more patient
Quality of training more personality rather than role specific
NE have good knowledge and skills
NE make a nicer learning environment
NE more patient
NE create a positive learning experience
NE work better with the staff in the room
NE more relaxed approach to teaching which means better technique
Better training environment with the NE

Working with NE

Consultants lack interest in endoscopy
Experience of the endoscopist
No designated training lists
Not enough feedback
More about service provision than training
Patients are happy with an experience endoscopist whether it is a Dr or a nurse

professional/training issues

The same process was carried out for each of the ten participant interviews which is in keeping with IPA ideographic focus. Themes were chosen not simply for their prevalence within the transcripts but also for their richness in meaning and their qualities in illuminating and explaining the phenomenon. According to Pettican and Prior (2011) continuing reflection and re-examination of the interview transcripts needed to be undertaken in order to ensure that the emerging themes were refined constantly.

The next part of the process was to view the data in a more interpretative manner and think about the connections that could be made between the themes and ultimately reduce the list of themes to what they would eventually become. The identification of these recurrent themes was not through their frequency in which they occurred with each participant, but that many participants expressed the theme within their transcripts, and it was interpreted as being important to them.

When considering the phenomenon, or the lived experience of the individual, IPA allows a deviation from a true phenomenological standpoint by focusing on the personal experience of the participant, rather than the phenomenon or event. In contrast, the phenomenologist wants to explore the inceptual meaning structures or aspects that describe the singular meaning of a certain phenomenon or event (van Manen (2017). With this in mind the creation of the super-ordinate and the sub-ordinate themes developed from a more nuanced approach. Van Manen (2017) argues that there exist many methodological programs and paths that are branded as interpretive, descriptive, or hermeneutic phenomenology and that are supposed to engage phenomenological method and phenomenological practice. However, he argues that IPA is not strictly phenomenological in its nature but is more aligned with a psychological inquiry. This means for the purpose of this research, the themes were developed through the participants description of their experience how they then

make sense of their experiences and then how the researcher makes sense of the sense of that experience.

My initial Super-ordinate themes were labelled as:

- Personal development
- Working with the Nurse Endoscopist
- Professional or training issues.

The initial theme titles are somewhat descriptive but according to Smith et al (2009) this is really common for the novice researcher, once the themes were developed they will be re-titled in a more interpretive manner which reflects the context of the research.

There are some fundamental principles in the analytical process of IPA. As previously described interpretation is central, with a particular focus on understanding the participants point of view and how they make sense of their own experience. It is also important to maintain the idiographic approach so the data for each participant is analysed on their own terms and free as possible from theoretical constraints. (Smith and Nizza 2022). The flexible nature of IPA gives an opportunity for the researcher find a more fluid and personalized style of engaging with the data. Therefore, the research can deviate from a strict phenomenological position.

Analysis during the writing: finalising findings

In the following section I will set out the findings and how the three Sub-ordinate themes emerged from the data.

I found the process of data analysis was on-going throughout the writing of the chapters. I felt I needed to continually go back and forth between the transcriptions, the themes, the actual audio recordings of the interviews and the relevant literature.

I found this process essential to my thinking and working through the themes, my research journal was crucial in this process to help me understand how my thinking had begun to evolve.

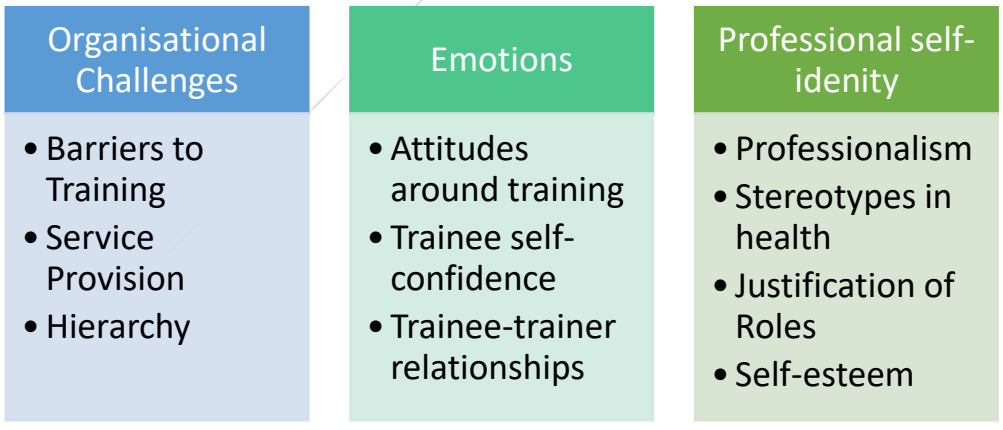
I began to examine the themes in more detail, the titles of each of the Super-ordinate and Sub-ordinate themes began to transform from being the original descriptive theme headings to become more interpretive.

The Super-ordinate themes evolved into:

- Organisational Challenges
- Trainee Emotions
- Professional Self-identity.

To me these felt more in tune with the research, and encompassed the Sub-ordinate themes which can be seen in the diagram below.

TABLE 5.2 TABLE OF SUPER-ORDINATE & SUB-ORDINATE THEMES



It is important that the theme chapters will be written in this particular order as they lead the reader through each theme consecutively. It will eventually conclude with the

final theme which explores professional self-identity. These themes would appear to be pivotal in the trainees' lived experience of their endoscopy training. The themes that have emerged are very much connected to each other and many of the Sub-ordinate themes are intertwined. In my view this highlights the complex multi-faceted nature of the trainee endoscopists' lived experience and the impact it has on both practical and emotional elements of their learning.

5.3 Chapter Summary

This chapter has detailed the process of data analysis and how the analysis phase has progressed with the development of both Super-ordinate and Sub-ordinate themes. The process of analysis will continue during the writing of the thesis.

The following 'themes' chapters 6, 7 and 8 deal with themes and their identification, the presentation in these chapters is on a theme-by-theme basis as employed by Flowers (2009) and Coutsoudis (2011). There is the option when presenting findings from IPA studies to present the individual findings on a case-by-case basis (Phillips et al 2015) and their relationship to the themes identified from the research. However, for the purpose of this research it was decided to present the themes in this manner to highlight the relationship the trainees have with each theme and how the themes are intertwined with each other.

Chapter 6: Super-Ordinate Theme - Organisational Challenges

Introduction

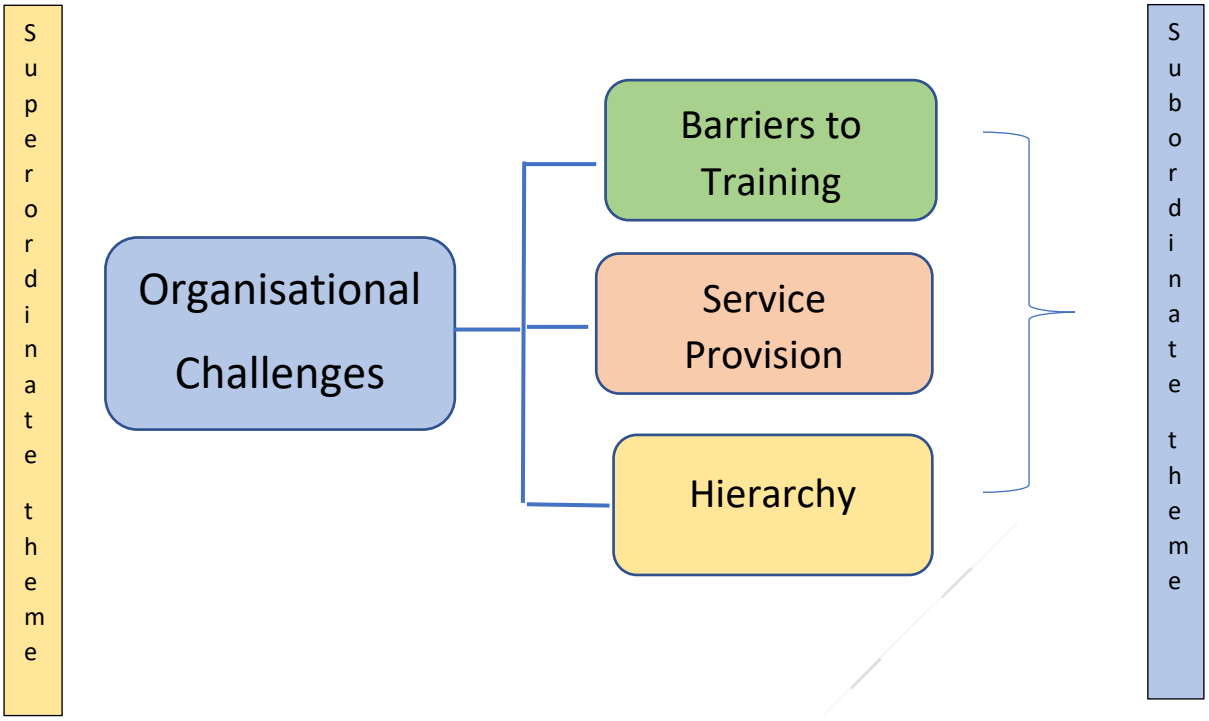
The following chapter covers the Super-ordinate theme of organisational challenges and the linked Sub-ordinate themes of:

- Barriers to training
- Service provision
- Hierarchy.

While traditional science doctorates tend to present findings separately from any discussion or consideration of literature, this thesis did not evolve in such a linear way. During the process of data analysis, I found myself beginning to naturally consider the narratives and themes emerging from participant accounts, both in terms of the literature already encountered, and also in terms of new and emerging interpretations. Therefore, in order to respect and recognise the iterative development of the analysis and interpretation there will be a discussion section at the end of the chapter covering an initial exploration of a selection of relevant literature. However, the main threads and overall interpretations emerging from the finding's chapters will be pulled together and discussed in full in chapter 9.

This chapter gives an insight into the challenges faced by the trainees on an organisational and service level and how these can impact on the training experience.

DIAGRAM 6.1 THEMES - ORGANISATIONAL CHALLENGES



6.1 Super-ordinate theme - Organisational Challenges

The diagram above provides a visual representation of the Super-ordinate themes and the Sub-ordinate themes.

It is clear from the transcripts that in an organisation like the NHS, there are significant challenges involved with providing training opportunities. The Sub-ordinate themes support and clarify the Super-ordinate themes. Postgraduate medical education is currently facing significant pressure due to increasing service demands and conflicting priorities training. As a consequence, the expansion of medical education has failed to keep up with these challenges (Roberts, Howarth, Millott, Stroud 2019), resulting in a reduction of training opportunities and endoscopy is a good example of this.

6.2 Sub-ordinate theme - Barriers to training

In the following section the barriers the trainees experienced will be explored and supported by the quotes from the participants and contemporary literature. The section will be broken down in to sub-headings which will explain each perceived barrier to training.

Complexity of Training

Training to perform endoscopy can be a challenging time for everyone involved in the procedure. This is illustrated by the participants in the study. For the trainee it is not only about learning a complex psychomotor skill. Endoscopy training is much more than that with aspects which include endoscopy non-technical skills (ENTS), pathology recognition and management, technical knowledge pharmacology and management of the treatment/procedure room and the patient. Some of the participants alluded to the challenges they face.

An issue the participants discussed was how stress and the atmosphere around them in the procedure room can significantly affect the trainee's performance.

> *'Stress is something that I have been dealing with since I started my training.' (Interview A)*
>
> *'When you are more relaxed my technique is a bit better and things do go smoother than when you are a bit stressed and having a bit of tension around you, it definitely does affect the trainee.' (Interview C)*
>
> *'A couple of the consultants as you can imagine are more top down so therefore the room becomes a bit more tense, and less easy to train in.' Interview B*
>
> *'The Nurse Endoscopists care a bit more about the nurses and people in the room so I think there is more of a better atmosphere in the room or a better environment to work in.' (Interview C)*

These statements, illustrate how the reality that training to perform endoscopy is a demanding undertaking which requires the development of skills on multiple levels. When participant C discusses the 'tension' around them they are describing other

influences in the procedure room and this can come from nursing staff, the trainer themselves or if the particular procedure was complex or the patient had a complicated medical history which can affect the procedure. However, participant B discusses the effect hierarchy has on working relationships and mentioned the consultants being 'top down'. Several of the participants acknowledge that the dynamics in the procedure room can have a direct bearing on the trainee's experience. Participant E talks about how nursing staff morale is particularly low due to lots of staff shortages and nurses leaving their posts and they suggests that their training is secondary to this issue.

> *'We are sort of told to keep morale up amongst nurses and not ask for too much so that means it's a vicious cycle because that means you don't get much training.' (Interview E)*

It is interesting to see the participant uses the phrase 'told'. This would suggest that this is a command or instruction. While it is not the trainee's responsibility to 'keep morale up', this statement demonstrates that endoscopy training also impacts on the nursing staff's way of working. For them it's about managing patients' expectations, delivering safe and effective care, reducing patient anxiety, discomfort and assisting with the technical aspects of the procedures such as biopsy-taking. It is suggested by this comment that staffing issues are crossing the boundaries and affecting training opportunities.

The statement fails to address why there is an issue with the nursing staff morale, this might have been explored better during the interviews and in hindsight, this topic could have been explored further. In early chapters the stereotypes in nursing were discussed and it was suggested that nurses or females in the matriarchal role can be more 'emotional', I found this an interesting comparison to draw upon when the male doctor made this statement.

The comments below describe how some of the trainees have felt during their training in relation to delayed endoscopy lists:

'I felt as a trainee you are always slowing down the list.' Interview E

'Everyone is so focused on finishing on time.' Interview D

"'f we do run late you very often felt a dissatisfaction from the nurse.' Interview G

Participant B explains really well how they have to juggle multiple elements of the procedure room in order to acquire training, they talk about trying to maintain the status quo while maximising learning opportunities, they are very conscious of how valuable the training experience is:

> *'The last thing you want to do is to upset nurses as well, as a trainee you are trying to get your training, and to get as much out of your trainers as possible you need the right list, you need to keep nurses happy, it is a very stressful few hours.'*

The trainee has given a personal perspective of what a training list must feel like for the trainee and it sums up the complexities of a training list in their own experience. It is obviously very challenging and it must be very difficult for the trainee to receive any meaningful learning in this situation.

Given that endoscopy training relies on established communication skills with each member of the endoscopy team, it is one of the areas in healthcare that could be considered as an inter-professional environment. The ability to create a positive and supportive learning environment is key if we are to develop the future workforce. Therefore, trainees need to feel supported and comfortable during the training episode.

Trainees need dedicated endoscopy lists which have the appropriate case selection, and have reduced numbers accordingly and this is the national guideline for

endoscopy training (JAG 2020). The rationale behind this is to make the most of the session allowing for training, feedback and reflection.

During the interviews there was a discussion around the suitability of training lists. In theory, training lists should be dedicated lists and they should have reduced numbers of procedures to allow adequate time for training. In the quote below participant D talks about how the service pressures significantly impact on the trainee ability to train. In the first part of the quote they discuss trying to make sure they have the appropriate procedures on their list with the service managers:

> *'You go to the booking office to reinforce what type of patients or which procedures you want on your lists.' (interview D)*

This is important, for example if someone is training to perform colonoscopy and the list is populated by patients needing different procedures, then the training opportunity is wasted for that individual.

During the interview participant D goes on to explain that when they attend their training list that there are inappropriate procedures on the list and this is mainly due to service pressures, leading to ineffective learning:

> *'You can go to a list that is meant to be all colons (colonoscopy) and you find you have four Flexi's (flexible sigmoidoscopy) or four OGD's (Oesophago-gastro-duodenoscopy), and because of the nature of things people [management] are trying to reduce the number of things including the number of people [patients] waiting and the time people [patients] are waiting [for procedures].' (Interview D)*

The trainee describes this situation and how frustrating that can be, suggesting that training is low on endoscopy management priorities.

Participant G also discusses the same situation regarding suitable training lists:

> *'The booking office doesn't understand my learning needs, I have told the consultant but 30% of the time I would turn up to a list and it had all Gastroscopies on, I am already signed off for gastroscopy so it is a complete waste of a training list.' (Interview G)*

They continue:

> *'The booking office don't understand the trainees' learning needs.'*

When asked why they thought this happened they responded:

> *'[The booking office] they don't understand, it's just to fit in an appointment and it is completely useless [for training].'*

The patients are at the centre of the care pathway and service pressures are a priority especially with patients requiring procedures for suspected cancer diagnosis. However, the trainees are clearly frustrated by the lack of exposure to dedicated training lists, and in some cases the disregard for training completely:

> *'It's weird, the 'higher ups' want to get the list done but they don't understand that training that gets done quicker and with more experience the lists get done quicker.' (Interview E)*

Participant F explains how difficult it is to achieve 'sign off' of qualification as the lists are not dedicated to training:

> *'On my training list I do get one or two colonoscopies but unfortunately it is a mixed list.'*

They resume this topic further on in the interview:

> *'It is difficult to get the amount of numbers to get signed off and become independent.'*

From reading and listening to the transcripts it became clear that there are many dynamics which contribute to the training experience. The next section goes on to explain some of the negative viewpoints the trainees have experienced during their journey.

Negative attitudes that impact on training

While this is not one of the selected Sub-ordinate themes, I feel that this adds context to the rest of the themes and is an important factor to consider in relation to the Super-ordinate theme of organisational challenges.

Some participants discussed negative attitudes in relation to the challenges they faced. These challenges can come from various staff groups including nursing staff, administration and list booking staff, consultants or trainers. Some of this has been covered in the following chapter examining the Super-ordinate theme of 'Trainee Emotions'. However, the following quote from Participant F demonstrates the difficulties the trainee has in booking dedicated training lists with the appropriate mix of procedures and complexity of cases:

> *'It is a mixed list, it is difficult for the booking manager to give me more colonoscopies on that list.'*

The next participant talks about how the list schedule is not reduced so it makes the training less valuable and more stressful due to time constraints:

> *'The issue is that there is never a reduced list so what will happen is there is lot of time pressures.' Interview B*

From the trainee's perspective, these are difficulties they undergo before they enter the training environment and these additional stresses will contribute to the overall training experience or episode. It could be argued that the administration of training lists needs to be facilitated by someone who understands the training needs of the trainee or understands professional education and the criteria that must be met. Most endoscopy units have an endoscopy training lead, who is an endoscopy trainer. This is a training standard outline by JAG (2020). The role of the training lead is to help facilitate the trainees' experience and ensure adequate access to dedicated training lists. It is suggested at least twenty dedicated lists per year with the opportunity to

attend ad hoc service lists is appropriate. One of the main implications of trainees not achieving this benchmark is that some trainees will have completed their speciality medical training, thus seeking consultant posts without being able to perform endoscopy. This ultimately has a direct impact on service delivery and patient care. Unfortunately, the trainees interviewed didn't seem to have support in this regard, therefore, it would be interesting to follow this up as a further piece of work.

This section certainly overlaps with some of the other sections identified and often the quotes from the transcripts apply to many sections identified. The following section again is not an identified Sub-ordinate theme but requires some exploration.

Expectations of training requirements

From the data there seems to be a disconnect between the need for training, training requirements and limitations of training from an organisational point of view. There is a conflict of interest between service provision and maintaining the training opportunities. However, it is understood that service needs are the priority to ensure patient waiting times are met. It is apparent that there are many difficulties associated with endoscopy training that the trainees face. These are different to the stressors actually training to perform the procedure.

The issue of the trainee's own expectation of their training can impact on the training experience itself. Some of the trainees have the view that the trainer expects a level of performance which is outside the trainee's actual skill set. In the quote below the trainee discusses how they, as an inexperienced trainee, are concerned about complications occurring. However, as they become more experienced they realise this complication is rare. This quote also overlaps the quality of the training as the trainer is absent much of the time which compounds the trainee's anxiety. The trainee (participant G) discusses feeling scared and nervous:

'It can be quite nerve wracking and it is scary and also at the very early stages if you are doing a biopsy that you worried that you might cause a complication and the expert is not there.' (Interview G)

They go on to say later in the interview:

'You do feel nervous, but as you go along you realise that the complication is quite rare.'

Participant G discusses how they feel about their colonoscopy training, mentioning the complexity associated with the training. This is something that is explored further in the trainee emotions chapter:

'Very steep learning curve.' (Interview G)

Participant A talks about how they feel when they are training and how this can impact on their own wellbeing:

'Stress is something I have been dealing with since I started.' (Interview A)

From the transcriptions the trainees seem to put demands on themselves and that they maybe have unrealistic expectations of what is expected of them.

Trainee expectations

The relationship that occurs between the trainee and the trainer and the trainee's own expectations is something that also needs to be considered at this point. We have already established that endoscopy training is stressful and there needs to be a certain amount of trust between the trainee and the trainer. However, sometimes the trainee seems to have unrealistic expectations of what is expected from them and their performance. This results in added pressure, stress and anxiety about the training process. In the following quote from participant E this point is illustrated well:

'It makes me feel a bit rubbish. I would say they always say it's very difficult and stuff, it sounds really bad but I feel better about myself when they struggle

to get around [the colon] it makes me feel like I wasn't doing something completely stupid.' (Interview E)

The trainee is explaining how they have reached a difficult part of the procedure (in this case a colonoscopy examination of the large bowel) and needs physical assistance from the trainer and talk of their relief that the trainer also struggles with the procedure which suggests the procedure was difficult in the first place and was not due to inexperience of the trainee. In reality trainers completely understand that these procedures can be difficult and require a huge amount of skill, and the expectation of the trainee to complete even the most difficult procedures is mostly self-imposed.

The following section explores the external aspects that impact on the trainee which effect their training experience.

External commitments that affect training

External barriers affecting training are generally related to other medical commitments such as on-call, theatres, ward and out-patient commitments. The trainees often find it difficult to negotiate these other commitments to attend their endoscopy training lists. This was frequently cited by trainees when discussing the challenges, I feel in the quotes below the trainees talk about how these issues contribute to the difficulties of training. In the interview with participant B the challenges faced are particular to their stage of training:

'The issue is it's never a reduced list so what will happen is there is a lot of time pressures a lot of the time.'

'I am sort of at the spot where they are happy to kind of leave the room and often come back at the end.'

Following this comment the trainee suggests that this leaves them feeling they are 'missing out' and goes on to explain what would be an ideal training list for them,

which is indeed the minimum requirement for a dedicated training list as outlined by JAG (2020):

> *'I would quite like an 8-point training list once a week'*

In this statement the same trainee talks about their ward commitments and how this affects their training:

> *'I think ward commitments take a lot away even if I am scoping on the unit I am often called away to deal with things on the ward.' (Interview C)*

This is a very difficult situation for them as they should perhaps only be concentrating on endoscopy training and not their ward responsibilities. This explains the challenges the trainees face where they often had to choose between receiving quality training via dedicated lists or caring for patients on the wards, it would appear this trainee is unable to have both.

> *'There is a problem with the GI commitments and on calls I might not be able to attend these lists.' (interview C)*

Participant H explains their experience over the last few months and the lack of training has been compounded by 'service issues' although they don't expand upon what those issues are. On reflection this is something as an interviewer I should have tried to encourage the trainee to expand the point a bit more:

> *'So, in the beginning it has been a bit of a rough ride and being a Friday afternoon when I do the list doesn't help, the worst list of the week and there have been I think a lot of service issues so I think training opportunities have been in the last six months really not very good.' (Interview H)*

Participant H talks about Friday afternoon as the 'worst list of the week', this is because the pressure is often on the units to 'mop up' any inpatient cases that require endoscopy before the weekend and there is frequently no senior cover in the hospitals if anyone needs support. The nursing teams are often keen to finish the lists on time so they can go off duty without the need to stay late.

In the next quote participant C discusses how their training is hampered by other responsibilities. However, they highlight that it is not only other commitments such as on-call but how trainee responsibility or annual leave can also impact on the availability of training lists:

> *'There is a problem with GI commitments and on calls, I might not be able to attend lists or they may get cancelled because the trainer is on annual leave or up on the wards so there has been you know probably at least four weeks in a row where I am not getting any endoscopy training at all.' (Interview C)*

The following section is from a transcript from a surgical trainee (Participant I) which has a slightly different experience from the gastroenterology trainees. In this quote they explain how their operating theatre schedule prevented them for doing any endoscopy training at all:

> *'I didn't have any chance to participate in training, for example in my last job the hospital only had a limited list and while I was in theatre for 6,7,8 or 9 hours you don't have any chance to start any endoscopy list, it was a very busy hospital with a very long list of very complex operations.' (Interview I)*

In the interviews the trainees give a sense of the challenges faced by meeting the needs of a complex service. They need to prioritise their own workload and organise their own training experience. From the transcripts this often leads to loss of training episodes which for them seems to translate into a sub-optimal training experience.

Appropriateness of Training lists

Trainees often mentioned or raised the issue of the appropriateness of training or endoscopy lists, meaning that the endoscopy lists should be populated with the right type of cases that they are to be trained in. For example, all of the trainees interviewed were learning to perform colonoscopy (endoscopic examination of the large bowel/colon). It is therefore in the trainee's best interest to have a list which is purely populated by patients undergoing colonoscopy, making the most of the valuable training time and experience. However, for various reasons this was not the case and

caused frustration among the trainees. This is not an issue confined to the respondents in my research, it seems to be a widespread issue that is also identified in the literature (Siau, Hawkes and Dunkley 2018). (Biswas, Alrubaiy, China, Locket, Ellis Hawkes 2019), (Radcliffe 2022) which will be explored further in the discussion section.

When talking about their exposure to dedicated training lists with the appropriate mix of cases, Participant C said:

> *'So, it was meant to be at least one dedicated training list which is in colonoscopy each week and that would usually have four colons.' (Interview C)*

The respondent goes on to say

> *'Not only it's never one colon sometimes we have DNAs (Did Not Attend) or incomplete procedures so it's usually between two and three [Colonoscopies].' (Interview C)*
>
> *'I have had one session of official training list for the last year and before that it was a supervised list not actually a training list.' (Interview C)*
>
> *'On my training list I do get one or two colonoscopies, unfortunately it's a mixed list so I do get OGD (oesophago-gastro-duodenoscopy), however, I do get little numbers per week it is difficult to get signed off (summative assessment) and become independent.' (Interview F)*

In the quote above participant F is explaining how difficult it is to have a dedicated training list and they go on to explain that there is an inappropriate mix of cases. It would seem that the reasoning behind this could be a lack of understanding from an administration perspective. One of the other reasons is to make sure cancer wait targets are met and to achieve these patients need to be seen within two weeks of referral (DH 2010). In order to meet these targets patients need to be allocated appointments at the earliest opportunity, which may result in the use of training lists to hit these targets.

Competition for training lists

Competition for training lists is an important issue highlighted by the trainees, and can affect their access to training opportunities. It can also be considered as another stressor to their endoscopy training. It could be argued that this represents a lack of fairness and equity in the distribution of dedicated training lists among the trainees. Indeed, literature suggests that surgical trainees are often disadvantaged when it comes to access of lists, and can be regarded as less of a priority for allocation of training. This issue of allocation fairness will be explored later in the chapter in the discussion section. Participant G highlights the issue of competition and some of the difficulties experienced:

> *'There is another registrar who is the same level as me, we are both having the same aim towards the end of our career so there is competition with him.'*
>
> *'For the both of us together [the other registrar] there is competition from the surgical trainee to find lists.' (Interview G)*

When discussing the impact trainee Nurse Endoscopists have on list competition participant B and D both suggest that the priority is slightly more in the Nurse Endoscopists' favour which is something I will expand upon later in the section:

> *'The priority [for training] was slightly more with the Nurse Endoscopist.'*
>
> *Interview B*
>
> *'I would say we were down at least four ad hoc lists per week that we could have joined [due to the Nurse Endoscopists training].' (Interview D)*

Trainee E explains in their interview that they are currently working as a Research Fellow and although endoscopy training is still part of their role they are seen as less of a priority when it comes to training list allocation.

> *'If there is a trainee who needs to scope they will always take precedence over me.'*

Participant F talked about how the protection of even dedicated training lists was very difficult. They also explained that the learning that takes place can be limited because the time between each list means that when they attend the next list they feel they will have to start again, this is explained in the second statement:

> *'I have found it a bit disappointing and I have kept trying to protect my training however, I was not very successful and I was a bit disappointed I can't do more'*
>
> *'By the time I learn something by the next time for the procedure I might forget things and have to take things more or less from the beginning.'*

The following quote from participant H talks about the difficulty experienced as a surgical trainee, they feel that the gastroenterology trainees have a priority over the allocation of training lists:

> *'The gastro ones [trainees] where it is their bread and butter so obviously they have all the formal training, where as we as surgical trainees never got the opportunity to train properly.' (Interview H)*

From the quotes above it seems the trainees experienced some difficulty in accessing dedicated training lists. This could be due to a variety of reasons and as participant H discussed there seems to be a disconnect between gastroenterology trainees and surgical trainees. This is a phenomenon that has also been discussed in the current literature and this will be explored later in the chapter (Radcliff et al 2022).

In a few of the trainee responses they have alluded to the fact that the Nurse Endoscopist can be given a priority over training lists. Some suggest there may be the perception that the NE is a more viable option for training as they tend to demonstrate more commitment to the organisation, in that they will be in post much longer than a medical trainee whose time is very limited before they move off to another post. In effect the investment in training in endoscopy is for the benefit of the next organisation. It needs to be noted at this point what training is essential in order to develop the future workforce. The Trusts should have a vested interest in providing

the core trainees with a good quality training experience. When thinking about developing a future workforce this means that these organisations who offer a poor training experience are less attractive when new consultants need to be appointed.

Another reason could be that the NE has fixed clinical sessions and can easily attend more training lists than the trainees and can therefore complete their training at a faster rate. There is also the perception among some trainees that suggest the NE's have more protected time to train. The following trainee suggests that by training nurses to perform endoscopy, their medical training opportunities are lost.

When reviewing the transcriptions, I highlighted a section of dialogue by participant H who explains their own view of the Nurse Endoscopist and how they impact on medical/surgical training:

> *'I just feel that if they [nurse endoscopist] are able to train then it is not a bad idea at all but if they are not able to train then the training opportunity is lost because lots of doctors want to get trained…'*
>
> *'If you have four or five NE who don't want to train and just put you off 'oh we have been told we can't train' I don't think it helps doctors as the doctors have had those lists taken away by them [nurse endoscopist] for service provision but we don't get any training opportunity.'(Interview H)*

The same participant (H) goes on to say later on in the interview:

> *'If you are kind of creating a crop of them [Nurse Endoscopists] without training opportunities for the trainees [doctors] then you will find after a ten-year period then no doctors will get trained and it will be totally taken over by Nurse Endoscopists, which is fine if that's what you want.' (Interview H)*

It is clear that this particular trainee has a different viewpoint, but nevertheless, a point to be considered. In actual fact NE's are allowed to train any other endoscopist either medical or non-medical as long as they have successfully completed the JAG-accredited Train the Trainer course in each relevant modality JAG (2020). This point was brought up by other trainees with regard to competition for lists. While it didn't

appear to be a huge issue I feel it is worth considering as a point as it was an aspect of the trainee's lived experience:

> *'What I would say at my unit they train a lot of nurse endoscopists at my last hospital it was annoying because we were both competing for the same lists.' (Interview B)*
>
> *'My feeling is they [Nurse Endoscopists] get more training because we do the ward and on calls and that takes time.' (Interview C)*

In the interview below participant E raises the point that the Nurse Endoscopists' training lists are protected and they even use the word 'untouchable' which suggests the NE's are given total priority above all other trainees. One could argue that this also indicates a perceived degree of favouritism towards the nurse endoscopists:

> *'As a gastro registrar you have loads of different things you could be doing, you have got the wards, referrals or the consultant wants you to do something, but the Nurse Endoscopists is just training in endoscopy they have got no other commitments so when they do have a list that list is untouchable.' (Interview E).*

There is obviously anxiety and concern over the impact Nurse Endoscopists have on the training opportunities available to all trainees, irrelevant of their professional background. There would appear to be some misconceptions associated with the role of the Nurse Endoscopists and this will be explored further in this thesis.

This links to the next section regarding service provision, as it would appear that service pressures may be influencing the motivation to train nurses in endoscopy.

6.3 Sub-ordinate theme - Service Provision

As with any diagnostic service, endoscopy service provision is at the forefront of the needs of the department and often, training is seen as an afterthought or something that may reduce the number of patients who can be seen on each list. Before

discussing the data, it is important I give a little background with regard to the referral processes in endoscopy as this will give context to the quotes from the participants.

Referral Process

Patients are referred to endoscopy from a variety of sources, these can be from

- Primary care – as two-week cancer waits, urgent, routine or open access (direct referral)
- Secondary care – direct consultant referral from outpatients
- Surveillance procedures – patients require regular endoscopy for certain conditions.

As a result, there are approximately two million endoscopic procedures performed in the UK on a yearly basis in around 500 JAG accredited-endoscopy units, with approximately 4100 endoscopists practising in England alone. (Lee, Siau, Esmaily, Docherty, Stebbing, Broughton, Rogers, Dunkley, Rutter 2019). There is a huge demand on endoscopy services at the time of writing, healthcare departments are under pressure in light of the Covid-19 global pandemic. The need for extra Personal Protective Equipment (PPE) and also for increased cleaning measures have increased the downtime between patients which has in turn reduced the patient throughput on each list. This of course has had a negative impact on training.

The data for this doctoral research was collected on two occasions, the first being in June 2019 and the second in November 2019, which was in the months before the pandemic. Many of the trainees felt that the pressure of meeting targets and waiting times meant that this directly impacted the ability to have scheduled training lists. This could be argued is a short-sighted view as it is essential we meet the training needs of our future endoscopists if we are expected the meet the increased amount of endoscopy that is expected in the coming years.

When asking participant E what was the biggest barrier to training they replied:

> *'Service pressures is one of the biggest things more than anything else I would say.' (Interview E)*

In the quotes below the trainee make the comments when explaining how outside influences can affect the quality of the training list. It is clear from the quotes that this not only demonstrates the impact that delays have on the other staff members but also how the confidence of the trainee can be affected by negative comments. The endoscopy staff in the procedure room are verbalising their dissatisfaction regarding finishing late. However, this may be a symptom of wider service pressures rather than the trainee's actual performance itself, this undoubtedly makes the training in these circumstances very difficult for the trainee, causing a conflict between gain the training experience while not wanting to delay the staff.

> *'If we do run late you very often felt a dissatisfaction from the nurses just throwing some comments like 'We are finishing late again today' or something like that or let's say if we are suctioning things and the suction gets full 'Ah it's the end of the day do you want me to change it?' So it's just comments like this which makes the room makes it not a very nice environment to work in if you do run late for unforeseen circumstances.'(Interview G*)

In this first part of the interview the trainee explains how the nursing team comment on the late finish and how that makes the trainee feel. In the second part of the quote the trainee explains that the suction liner from the scope is full and may require changing. Suction is an essential aspect of endoscopy and a full suction liner means the endoscope will not function correctly, therefore asking the question 'Do you want it changed?' is really a pressurising statement from the nursing team.

> *'If you hit one kind of bad one in the morning suddenly the nurses aren't happy the HCAs aren't happy and then the consultant will just take the scope.' (Interview B)*

In the above statement participant B is explaining how the training list will be in effect ended by the trainer just taking the endoscope. This implies that there is very little

communication and as soon as there is a ‘sense’ of dissatisfaction the training is clearly over, thus leaving the trainee disappointed.

Participant E also discusses other factors that can impact on the training environment, which can be patient-related but they also say *‘The nurses can’t wait to leave’* this would suggest that this trainee is also anxious about the time and causing delays:

> *‘The problem is there are a lot of other factors there is not only the patients but sometimes the nurses can’t wait to leave or something.’ (Interview E)*

The following quote, I feel is very honest and nicely explains the difficulties the trainees have when attending the list. It is not just about learning the new skill but navigating a difficulty pathway, managing their own training experience, the trainer, the patient, the procedure and nursing teams:

> *‘Last thing you want to do is to upset nurses as well, as a trainee you are trying to get your training, and to get as much out of your trainers as possible you need the right list, you need to keep nurses happy, it is a very stressful few hours.’*

When exploring these experiences of the trainee, training seems low on the endoscopy agenda and lacks importance. This may be seen as a distinct lack of understanding of the role of training and how this affects the future workforce and subsequent patient service. However, on a human level, the trainees have experienced a process of degradation, where their own personal thoughts and feelings do not seem to have been considered by the staff in the procedure room. The negativity of this experience will without doubt, have in some way affected the trainee’s performance. However, one can argue that the problem is a result of the training lists not being planned appropriately which then has a knock-on effect. In particular this can impact on staff finishing time or delays to the following endoscopy lists which means the patients will have their procedure delayed which is not

acceptable when patients have fasted for these procedures. This leads into the following section which outlies the sub-ordinate themes of hierarchy.

6.4 Sub-ordinate theme - Hierarchy

Some of the respondents discussed hierarchy as a definite barrier to their training experience and quality of training. it is true to say that most hospitals have a hierarchical approach to the clinical/medical structure. What became clear during the course of the interviews is that the larger teaching hospitals, particularly in London, have a very defined chain of command with the consultant very much at the top. It appears to be a consultant-lead environment. The respondents referred to hierarchy by using terms such as *'top down', 'higher ups', 'old school'* and *'boss':*

> *'It's weird the higher ups want to get the lists done but they don't understand that if training actually gets done quicker and more experience with it actually get lists done.*' (Interview D)

In the statement above the respondent is suggesting that if training is supported then the trainee will achieve sign off (formal JAG accreditation) quicker, thus being able to then provide service lists to help support the needs of the service.

When talking about training and service commitment participant H discusses how doctors are much more productive than Nurse Endoscopists for example:

> *'I have noted and this is quite a critical comment actually but one of the consultant's service list I was scoping, a doctor's lists could be 12-14 points (two points per colonoscopy = 6-7 patients) where as in a Nurse Endoscopist list there aren't as many points so the cost effectiveness to the Trust is not there.' (Interview H)*

Further on in the interview they go on to say that:

> *'If you compare five nurse endoscopists and five doctors then definitely the NHS gets more out of the doctors because they are doctors.' (Interview H)*

When asked to expand a bit more about their views the trainee (H) said:

'Certain professions have more protection than other professions.'

This trainee would appear to feel very negative towards their training experience and I have included their thoughts in the hierarchy session as I believe this is the section in which it is best suited. However, I feel that there is a connection between service provision, Nurse Endoscopist impact on training and competition for training lists. Many of the comments are interwoven with other sections with no clear distinction between them.

> *'A couple of the consultants who are as you can imagine more top down so therefore the room becomes a bit more tense.' (Interview B)*

In the above comment participant B paints a picture of the consultant's behaviour by describing it as 'as you can imagine' and the fact they are more 'top down'. This would suggest that the whole atmosphere and working relationships can be negatively affected by this clearly hierarchical attitude. The trainee describes the room as being 'more tense' and as the reader reading this quote you can imagine the anxiety that this will bring to the training and working environment. While the trainee didn't mention about the patient's feelings in this, it could be argued that this will also have a negative impact on their experience.

In the following discussion section, the exploration of the themes will be introduced in relation to the relevant literature. Further, more detailed discussion will take place in chapter 9.

6.5 Discussion

The following section brings together the current literature which seeks to clarify some of the issues raised from the transcripts.

6.6 Sub-ordinate theme - Barriers to training

Throughout the interviews the trainees describe a degree of frustration around the challenges they face to negotiate endoscopy training. It is accepted that endoscopy training is a necessary aspect of their core training, however, this is not willingly accepted at a service level.

From the initial set up of the NHS in 1948 there was a focus on educating the medical profession meaning that the specialists of the future were educated in the environment in which they would be working. With the increasing amounts of patients, the NHS is expected to treat in the coming years training remains high on the agenda.

There have been various workforce studies within different specialities examining the expected staff levels required to deliver care and provide diagnostic testing (CRUK 2017, BSG 2018). All this has a direct link to training and developing the future workforce. The Shape of Training Review (GMC 2013) is expected to have a major impact on how training is delivered and has acknowledged that training opportunities can be limited. However, it aims to ensure that all medical staff are trained to meet the needs of the changing population and how that training can be delivered. One of the main disadvantages for doctors in training is the competing nature of training and meeting service needs, there has always been a tension and this was apparent in various aspects of my research. There are clear tensions and one of the main factors could be due to the reduction in junior doctors' working times and rota commitments which in turn reduces the contact with dedicated endoscopy training.

A recent piece of work examining the impact on endoscopy training also suggests that there are major difficulties in accessing training, whether this be due to service

pressure including increasing endoscopy list capacity, difficulties in accessing appropriate lists or other competing clinical commitments such as ward work, clinics and theatres. (Radcliffe et al 2022)

Difficulties of Training

Training to perform any invasive procedure such as endoscopy is a stressful event. High quality endoscopy begins with high quality training and much of this training depends on an effective training programme which is designed to support the needs of the trainee in developing the knowledge, skills and behaviours in a safe clinical learning environment where the trainees must demonstrate effective and professional performance and development (Wells 2010), (Siau, Hawkes and Dunkley 2018).

From the transcripts, the trainees' experience can be variable ranging from a very good, meaningful hands-on training session with valuable feedback to a session with an absent trainer with the trainee performing the procedure without any guidance whatsoever.

Training is often considered a negative aspect of the endoscopy workload. However, it is essential in building the future workforce. The negativity trainees feel can come from various sources, including nursing staff, trainers and management. Unfortunately, this negativity translates into a less-than-positive training environment and we can see the impact of this in the following chapters.

6.7 Sub-ordinate theme - Service Provision

From the interviews the impact of service provision appears to be a major issue in hampering training opportunities. The difficulties with service provision are mainly around the other commitments the trainees have as part of their role such as on-call, clinics, theatre or ward work. The obstacles trainees face in accessing training are further supported in the literature where a large-scale review was conducted to

assess the trends in UK endoscopy training on behalf of the British Society of Gastroenterology Trainees' Section (Biswas, Alrubaiy, China, Locket, Ellis Hawkes 2019). This review demonstrated that 74% of junior trainees were committed to attend general internal medicine related activities (for example, ward work) for at least a third of their week which significantly impacted on their availability to access endoscopy list. One of the other major findings of the research by Biswas et al (2019) was the access to appropriately scheduled training lists with the correct composition of cases on the list, with 12.5% of trainees unable to access a designated training list. However, 61% of respondents stated that their training lists were appropriately adjusted to meet their training needs. This literature supports the findings within this doctoral research. There seems to be a disconnect between providing the service lists to meet patient waiting times and targets and meeting the training requirements. This would appear to be one of the biggest barriers. The Shape of Training Review (GMC 2013) which examines the quality of speciality medical training will bring the speciality training from five years down to four years and as a result this will have a significant impact on the amount of training that will need to be provided. There is a plan in place to overcome the projected shortfall in training lists, to establish regional academies which aim to provide access to high quality training and immersion opportunities which will allow the trainees to be released from service, ward and other clinical commitments to have a block of endoscopy training at one of the established academies (Radcliffe et al 2022).

6.8 Sub-ordinate Theme - Hierarchy

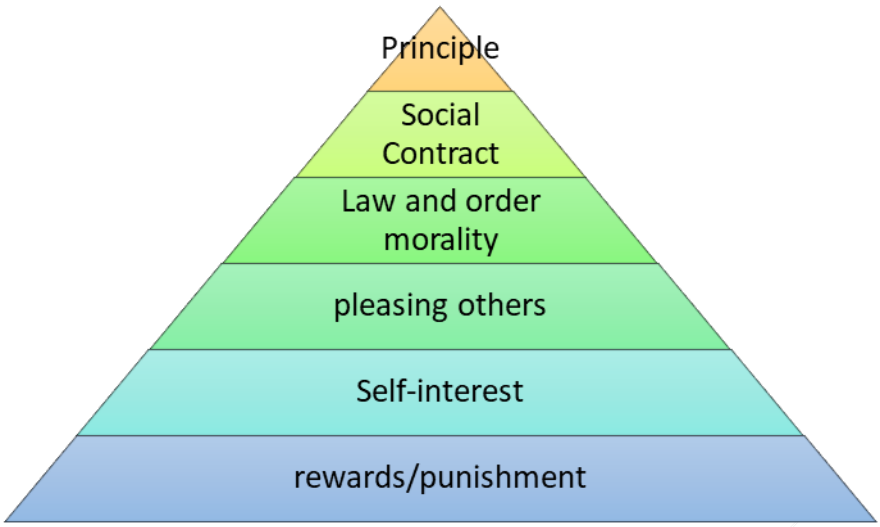
Hierarchy in healthcare is described by Braithwaite, Clay-Williams, Vecellio, Marks, Hooper, Westbrook, Westbrook, Blakely & Ludlow (2016) as layered social structure which conceptualises superior and subordinate relationships transitively, in rank order, often depicted graphically.

In a large historic organisation like the NHS with a huge variety of professions working together it is inevitable that there will be some rivalry and hierarchical structure evident. In the modern NHS the evolution of inter-professional working and education has seen professions come together to work and learn and understand more about each other's role. Endoscopy is one of those fortunate places within the hospital that sees truly inter-professional working and a true team approach to patient care, service provision and teaching and training.

In a study by Rabani, Key, Morrissey, Ball (2021), examining if hierarchy existed in inter-professional learning discovered that the majority of student respondents identified that hierarchy existed; popular themes were responsibility, salary, and equality and discrimination. It would appear that socioeconomic status influenced the existence of institutional hierarchy.

Inter-professional teams have always worked together in healthcare, they can be considered to be the 'salve in today's complex and knowledge-intensive world' (Fox and Comeau-Vallée 2020). However, a system of professionals is traditionally very hierarchical. Bringing together different professionals which belong to a system such as healthcare can bring together significant power issues. This can be seen in the power struggle which has been identified by the trainee in their experience.

DIAGRAM 6.2 KOHLBERG STAGES OF MORAL DEVELOPMENT (MATHES 2021)



While this was adapted from Jean Piaget's theory of moral judgment for children, it resonates with self-esteem and hierarchy. Kohlberg's theory focuses on the thinking process that occurs when one decides whether a behaviour is right or wrong, thus the theoretical emphasis is on how an individual decides to respond to a moral dilemma, not what one decides or what once actually does.

As can be seen by the diagram, Kohlberg's theory consists of six stages arranged sequentially in successive tiers of complexity and these six stages are organised into three general levels of moral development:

Level 1: Preconventional level

Level 2: Conventional level

Level 3: Postconventional or principled level.

Each of these stages can be adopted in hierarchy in healthcare and in some regards, medical education. The trainees demonstrate during the interviews that it is relatable to their experiences with members of the clinical hierarchy in endoscopy. Hierarchy in healthcare groups can lead to the trainee having negative or stressful experience

of training. Ratcliffe et al (2021) found during a survey of reciprocal feedback that many trainees were unable to raise concerns about providing constructive criticism during formalised trainer feedback due to a perceived hierarchy. We know from the interviews that feedback is an important aspect of the trainee being able to develop and acquire the knowledge and skills to become competent in endoscopy.

Hierarchy as a Sub-ordinate theme is clearly interwoven with many of the other themes and can have a direct impact on trainees' confidence, self-esteem and performance.

6.9 Chapter Summary

This chapter has explored the Super-ordinate theme of Organisational Barriers. This theme brings together the experiences of the trainees in relation to barriers to training, service provision and hierarchy, these formed the Sub-ordinate themes. These challenges are external factors which hamper the trainee's progression and this leads to stress and frustration as explained by the literature and the trainee interviews.

The following chapter discusses the Super-ordinate theme of Trainee Emotions. We can see in that chapter how the organisational challenges that the trainee encounters have consequences which can lead to difficulties with their training such as confidence, stress and anxiety.

Chapter 7: Super-Ordinate Theme - Trainee Emotions

Introduction

The following chapter explores the Super-ordinate theme of emotions. This theme explores the emotional aspects that the trainee has experienced during endoscopy training. The Sub-ordinate themes will be explored and supported with the trainee's own thoughts and views through quotes from the interviews.

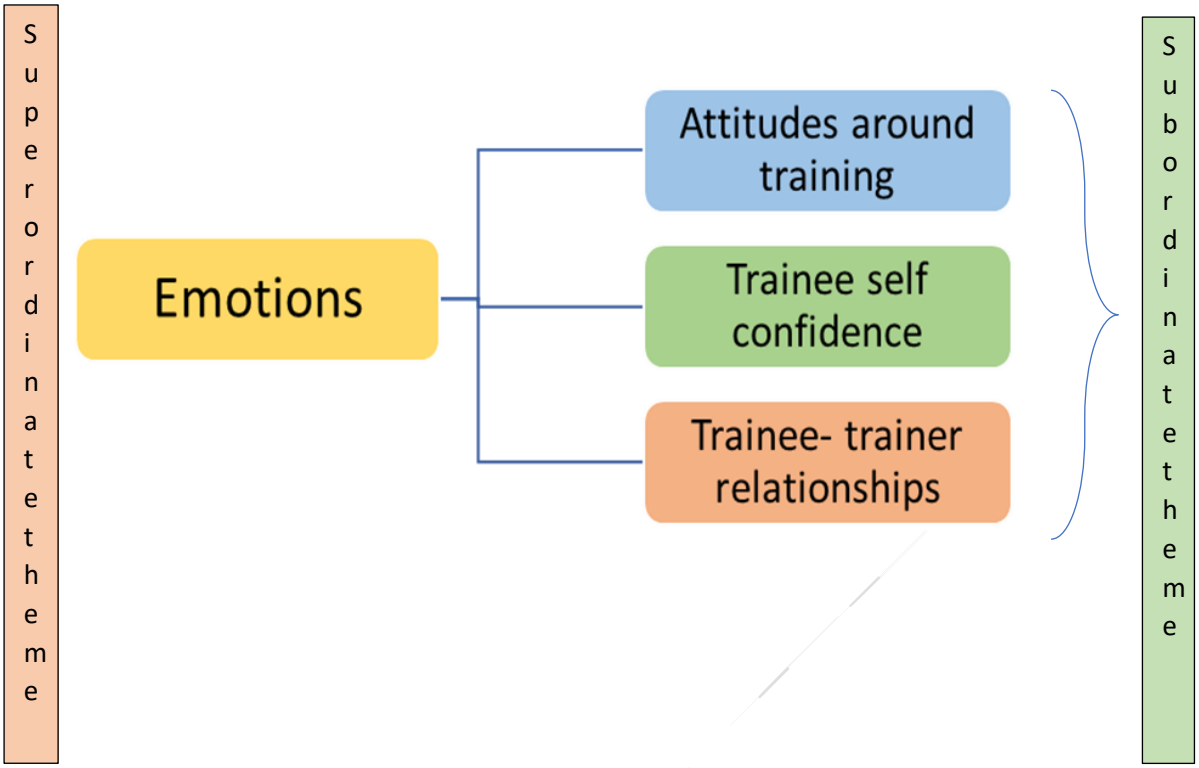
The aim of this chapter is to unpick the aspects of the trainee's emotional experiences and explore how these go on to influence the training journey.

The Super-ordinate theme in this chapter is Trainee Emotions with the Sub-ordinate themes being:

- Staff attitudes that influence training
- Trainee self confidence
- Trainee – trainer relationships.

Diagram 7.1 below demonstrates the connections these themes have with one another and many of these links together.

DIAGRAM 7.1 THEMES - EMOTIONS



7.1 Super-ordinate theme - Trainee Emotions

During the data analysis it was apparent that there were strong emotional perspectives to the trainees' experiences. The trainees expressed some personal narratives as they make sense of their personal training experience. The super-ordinate theme of emotions developed through several iterations of the development of the themes. It could be argued that this these was the most complex, but I feel the most insightful. Smith et al (2009) suggest that the researchers totally immerse themselves in the data or in other words, try step into the participants' shoes as far as possible. IPA aims at giving evidence of the participants' making sense of phenomena under investigation, and at the same time document the researcher's sense making. The working through my notes of the transcripts and my linguistic, discursive and conceptual comments was essential in the analysis, Pietkiewicz and Smith (2012) suggest that the researcher tries to formulate a concise phrase at a slightly higher level of abstraction which may refer to a more psychological

conceptualization. Nevertheless, this is still grounded in the particular detail of the participant's account. Although I was still heavily influenced by having annotated the transcript as a whole, I feel this represents the hermeneutic cycle which has been previously described in the thesis. Thus, the super-ordinate theme of "emotions" evolved from the process of examining the data, the annotations, the recording and the tone of the answers. Elements of my own experience helped me interpret the themes which subsequently evolved.

The next section will seek to examine the challenges experienced by the trainee during a training list in relation to the attitudes and understanding of the nursing staff working within the endoscopy procedure room.

7.2 Sub-ordinate theme - Staff Attitudes which affect training

This theme refers to the attitudes of staff members involved in the endoscopy procedures. This includes nursing staff, trainer's management, and booking and administration staff. There are elements of this theme that will have been discussed in the previous chapter examining organisational challenges as many aspects of each theme are interlinked.

As previously mentioned, the endoscopy department operates with inter-professional approaches and collaboration. The working relationship between each team member is vital for effective service provision and patient care.

However, during the interviews some of the participants talked about how they were made to feel by the nurses working in the treatment room and how having a trainee present hampers the progress of the endoscopy lists. The following quotes which happen to be all from gastroenterology trainees explain how they are made to feel during some of their training lists. It is obvious from the narrative that these trainees have experienced these feeling at some point during their training:

'I felt as a trainee you are always slowing the list down.' (Interview E)

'I felt it was the fault of the trainee because it is a training list, that's why we are finishing late.' (Interview G)

Participant G goes on to suggest that more can be done to help the trainee during the list:

'Everyone [each staff member] is very important rather than putting it down to the trainee being just slow… there is a lot that can be done to avoid any unnecessary pressure on the trainee.'

I can't help but feel that these are striking statements and probably mirror the thoughts of many of the trainees interviewed regarding how their presence in the procedure room is perceived by other members of the team. It is sad to think that the trainee is made to feel that way especially when every healthcare professional has been through training at some point and should have empathy for the individual undergoing training.

Trainee self-confidence is something which I will explore in more detail later in the chapter, however, I felt it was important to include these quotes at this point. It is apparent that many of the quotes will fit with several themes and sometimes there is no clear distinction between them.

The statements from the participants indicate a disconnect between the professional groups or this may well be a symptom of wider working pressures in the NHS which include staffing issues and waiting list pressures. On a human level this type of behaviour can be really demoralising causing unnecessary stress and anxiety. Several of the participants also discuss the feeling of the nurses when it comes to the end of the lists or session:

'Sometimes the nurses can't wait to leave or something.' (Interview E)

Participant G also explains the similar situation about endoscopy lists over-running due to the impact of training:

'If we do run late you very often felt as dissatisfaction from the nurses just throwing some comments like 'We are finishing late again today'.'

'So, it's just comments like this which makes the room makes it not a very nice environment to work in if you do run late for unforeseen circumstances.' (Interview G)

In the following quote participant E explains that they were having a discussion with one of their colleagues who is also an endoscopy trainee and they told him that a healthcare assistant (HCA) had said:

'Is it him doing the next case because I need to have lunch?' (Interview E)

The HCA is clearly suggesting that the case would be delayed because the trainee would be performing it but also said it in front of the trainee which would obviously undermine their confidence.

Participant B also confirms this situation when talking about how unsupported they feel by other staff groups during their training lists:

'I have had a couple of days where it has been lovely we have a nice easy endoscopist, I have done 11 colons [colonoscopy] in a day which has been great but if you hit one kind of a bad one in the morning suddenly the nurses aren't happy, the HCAs aren't happy and then the consultant will just take the scope.'

Later in the transcript they recollect:

'I notice the Nurse Endoscopists get on better with the room which makes it a slightly nicer learning environment.' (Interview B)

And:

'With the new consultants I don't think they realised that they upset the room quite a lot.' (Interview B)

In this particular trainee experience, the learning environment is significantly impacted by the attitudes of other staff groups, interestingly not only the nursing staff but also the trainer.

The reason for this is often multifactorial. Endoscopy requires a complete team approach and is very inter-professional in its care delivery. This means that each profession whether medical or nursing has a contribution to play and neither can work without the support of the other.

For example, participant E also explains that the Nurse Endoscopists have *'a different way'* with the nurses in the room and they go on to suggest:

> *'I feel the way the Nurse Endoscopists control the room with the nurses is different, maybe because they have had a unique perspective of being a nurse so they have a different way of doing it and probably are a bit more efficient.' (Interview E)*

In their interview participant E discusses that the nurses in the treatment room would not behave in a particular way if a Nurse Endoscopist was present. This is an interesting consideration as I find it difficult to understand why the nurse's behaviour towards the trainee would be different depending on the profession of the endoscopist as trainer.

The following trainee explains how some comments would never be said if the Nurse Endoscopist was present. Participant F discusses this point during their interview, they explain:

> *'They have got a different way with the nursing staff in the room, their interaction with the nursing staff is interesting, I feel they have better control of the room in terms of the nursing staff.'*

Further in the interview they go on to explain when the nurses in the room say things like *'Well I need to have lunch'* they explain that the Nurse Endoscopists would:

> *'Never let that be said.' (Interview F)*

This quote gives a sense that the trainee could feel a lack of belonging, suggesting that nurses would group together and support each other making the trainee feel excluded. In healthcare teams it is vitally important that teams share the common

connection. The following section explores in more detail the notion of 'belonging' by examining the participants' quotes.

Belonging

When listening to the interviews and transcribing the data there was an element that struck me and I have called this a sense of 'belonging'. It has already been established that endoscopy is an inter-professional department but there are already fixed teams that operate in the unit. Trainees are considered to be a transient member of the existing team as their rotation is limited to six or 12 months, therefore they have a very limited time to establish themselves as part of the team. In the quote below participant G is discussing how stressful a training list can be and they state that:

> *"'f you are working in the hospital for a year the last thing you want to do is upset the nurses.' (Interview G)*

This would suggest they want to ensure a close working relationship during their rotation at a particular unit. It also suggests that the nurses have influence over whether the trainee will have a good or bad experience.

Another trainee talks about how some consultants are *'very welcoming'* (participant C).

Participant A, who is a trainee Nurse Endoscopist, also talks about the sense of belonging or acceptance:

> *'So, members of my team are very supportive, I have to say they have been supportive since my first day probably because they knew me.' (Interview A)*

They go on to say:

> *'Every time I go back to my former unit they are always so keen to see me, they are expecting me to go back to scope so it feels like it's my big family over there.' (Interview A)*

This supports the point that some of the trainees bring up about the relationship Nurse Endoscopists have with the endoscopy nursing teams. There was a perception that the Nurse Endoscopist had the ability to form a closer, more relaxed relationship with the endoscopy nurses. The trainees describe this as a *'unique perspective'* (interview E), that the Nurse Endoscopist have had the additional experience of being an endoscopy nurse prior to becoming a Nurse Endoscopist.

The trainee explains:

> *'I feel it's the way the nurse endoscopists control the room with the nurses is different, maybe because they have had a unique perspective of being a nurse so they have a different way of doing it and probably a bit more of an efficient way I would say.' (Interview E)*

Many Nurse Endoscopists do begin their career in endoscopy, however, a large proportion come from other specialities such as gastroenterology nursing or colorectal nursing. There is a differentiation element of role understanding which will be explored in the following chapter.

These comments can clearly affect the confidence of the trainee, the following section discusses the trainee's thoughts and feelings related to the Sub-ordinate theme of self-confidence as expressed in their interviews.

7.3 Sub-ordinate Theme - Trainee Self Confidence

The next section with explore the Sub-ordinate theme of trainee self-confidence and how the trainees have experienced this during their training. I will also be supporting aspects of this theme with supporting evidence in the discussion section at the end of the chapter.

During the interview with participant E the interviewer asked if having a trainee as part of the endoscopy team was a positive thing, the participant replied:

> *'It never is.' (Interview E)*

It would appear that before the trainee even attends the training list they are feeling that this will be a negative experience.

By the time a trainee is ready to commence endoscopy training they will already be an experienced professional practicing at a high level within their existing roles. It can be intimidating learning a new complex skill such as endoscopy, however, the trainee suddenly finds themselves back to being a novice and this itself can bring its own challenges. The trainer needs to provide an appropriate learning environment which considers and respects their potential anxieties and professional position.

It is well known that endoscopy training can be demanding, learning to perform endoscopy is a cognitive and physical process. There are several competing factors that can affect how the trainee feels about this. This Sub-ordinate theme was identified as a common theme across most participants' interviews.

The quotes reflect these themes and demonstrate the trainees' lived experience of endoscopy training. It is interesting to see how attitudes of others around the trainee can affect the training experience. It would appear from the analysis that there is an element of describing the trainees' own progress of their learning and that confidence can act as barrier to their own progression of training.

Participant A illustrates the point particularly well, the trainee explains how their progression through their training was hampered due to their lack of confidence:

> *'For me at the beginning one of my main problems or obstacles stopping me improving was a lack of confidence.' (Interview A)*

Participant H discusses how a colonoscopy technique affects their confidence:

> *'My main problem is looping technique and how to resolve the loops, usually looping happens in the sigmoid (left side of the colon) so it is very early on in the test so as a result confidence building doesn't happen.' (Interview H)*

Participant A explains how peer support to them is an important factor of developing confidence:

'Training with a team is useful to establish your confidence.' (Interview A)

During the transcription participant C was discussing how cancelled lists, annual leave and ward commitments have a detrimental impact on confidence, they said:

'There can be four weeks in a row where I do not get any training at all.' (Interview C)

When the interviewer asks if this impacts on confidence the participant responds by saying:

'Absolutely I mean even after missing a list or two you go back to training and it's like going back to square one.' (Interview C)

It is known that stress can affect training and learning outcomes, and confidence is one of the common themes that came out of the data.

In the following quote the trainee discusses how the Nurse Endoscopist helped with their confidence which seems to be down to the fact the NE is more encouraging in their approach as a trainer:

*'The NE she was brilliant she gave me much confidence in my skills which doesn't happen with my trainer, she encourages me more.' (*Interview F)

The trainee goes on to say further in the interview that as a result of this approach to training they complete more of the procedure than they would normally do with their current trainer. The participant mentions again further along in the interview about the NE saying:

'They gave me a lot of confidence, they are more relaxed.' (Interview F)

Participant G discussed training in a different environment and when the trainer is not always present which is not good practice. They discuss the anxiety of missing a serious pathology but also the worry of causing complications when taking a biopsy:

> *'It can be quite nerve-wracking and it's scary.' (Interview G)*

There is a perception that the trainee endoscopists are reasonability confident as many of them are experienced practitioners (either medical or non-medical) in their own right. However, endoscopy is a completely different skill and I feel this quote exemplifies how the trainee must feel when attending a training list. Support from the whole team and close supervision are essential, in some hospitals across the country it would appear that this is not always the case.

Sometimes the lack of support also comes from how the trainees are spoken to by senior consultants. A very experienced surgical trainee (participant H), explained an encounter with a consultant when it was suggested that if they couldn't perform endoscopy they could not become a consultant, the trainee said:

> *'I think that was very detrimental and I still remember it and then it makes you lose your confidence because you are such a skilled doctor and you are not getting the support to learn.' (Interview H)*

This illustrates particularly well that when the trainee reaches a point in their career when they learn endoscopy they are already a skilled autonomous professional and becoming a novice in a new skill brings with it new challenges which affect confidence levels.

I feel at this point it is important to explore further the trainer and trainee relationship, the next section briefly discusses the importance of this relationship and how the participants viewed this experience within their own training.

Trainee – Trainer relationships

In the following section the concept of trainee and trainer relationships will be explored. This is a very important point for consideration and this could be argued as one of the key attributes for successful training experience.

In the following quotes from the transcriptions, the trainees explain how the trainee/trainer relationship can have both a positive and negative effect on their training experience.

Some of the trainees stated in their interviews that sometimes the trainer didn't 'actively' train or instruct the trainee about the procedure. This means the trainer just seems to stand by and let the trainee perform the procedure without communication or verbal direction. If there was a problem the trainer would take the endoscope from the trainee and solve the problem and just hand the endoscope back without a thorough explanation of the techniques used. The quote below illustrates that point particularly well:

> *'It is usually a difficult bit when it's [the endoscope] taken off you but they [the trainer] don't always explain what they actually did.' (Interview G)*

When asked if they had obtained any learning or feedback after the procedure the participant responded:

> *'By that time, it is a bit too late I think.' (Interview G)*

Participant G explains the value of a good trainer, but they also shared their experience of a trainer who was less interested in training, this can be seen in the second statement:

> *'When you get good trainers, you will see yourself progressing every single scope, every single patient you will see yourself learning something and it will click, it will make sense.' (Interview G)*

They go on to say:

'There are trainers I have come across that when they are not scoping they are not in the [procedure] room.' (Interview G)

In this situation the trainee is receiving no meaningful training at all, they are just left to perform the procedure without support or instruction, they go on to say:

'You are doing a list in something you are not confident in doing, part of your brain is thinking if I find something, where is he? Is he in the staff room? Is he in the secretary office? So, it is less focused training that way.' (Interview G)

This type of training experience is not at the standard that is expected to be provided. With many endoscopy units requiring to meet national standards as outlined by the Joint Advisory Group (JAG 2020), all training should be consistent with these standards.

The relationship the trainee and trainer have can depend on lots of factors, some of which might be due to the patient selection for the list, complex procedures, list over-running, late starts, any of which can impact on a good learning environment and most of these cannot be predicted.

This trainee (participant E) is discussing how external elements can impact on the training lists such as late starts or the nursing staff having lunch, they explain:

'I try to get the patient in the room but then I still haven't got the nurses in the room and I am sort of waiting, you are already on the back foot.' (Interview E)

When asked why this might be they go on to explain:

'I guess you haven't got as much time to do stuff and the patient is a bit stressed.' (Interview E)

This means that before the procedure has even started there have already been factors which have caused stress to the trainee, the trainer, the nurses and even the patient who should not be affected by the situation.

Participant B also outlines what can happen to the training experience when unexpected delays occur:

> *'If you hit one kind of bad one [procedure] in the morning, suddenly the nurses aren't happy, the HCA's aren't happy and then the consultant will just take the scope.' (Interview B)*

The quote below is from participant G who discusses when they are aware of a 'tension' in the room, either the trainer takes over the procedure or they hand the endoscope over of their own accord to not to '*upset the nurses':*

> *'I am more inclined to pass my scope over if I struggle, if I can't get past a bend [in the colon] rather than trying to problem-solve myself because of the tension in the room, the consultant will tend to take the scope [endoscope] away or I will pass the scope over. If you are working in a hospital for a year the last thing you want to do is upset the nurses.' (Interview G)*

These quotes also highlight how the attitudes of the rest of the team can significantly impact of the quality of training.

In order to establish the foundation of a good training list the literature suggests the setting of ground rules can help limit stress for both parties. This relationship can have a negative impact on the nurses within the procedure room illustrated by the quote below in which the trainee explains how this can make a difference to a successful training environment:

> *'Getting good trainers, you will see yourself progressing every single patient, you will see yourself learning something and it clicks, it makes sense and the trainers are quite dedicated and they are a lot more patient than just getting through the list.' (Interview G)*

Although we have discussed hierarchy in the previous chapter as part of how service challenges can impact on training, it also is relevant when examining the trainee and trainer relationship. The perception of hierarchy can influence the training experience, for example in the quote below participant B (a gastroenterology trainee) is describing

the trainer, who in this instance is a consultant, and how they have presented themselves in the procedure room:

> *'The new consultants I don't think they realised that they realised that they upset the room quite a lot, they are very kind of they come in as the consultant, I don't know if it is necessary just training also just being there for a while also the new consultants are very kind of, I don't know what the right word is, very top down.' (Interview B)*

We can begin to get a sense of what the list will be like and how the team as a whole will be feeling in the presence of this trainer. It would be fair to suggest that very little training will take place in this kind of stressful atmosphere. One of the other trainees, again a gastroenterology trainee, discusses why they think this behaviour may be displayed and they suggest it might be due to the complexity of the cases being performed.

Further on in the interview with participant B, they were discussing how hierarchy affects their training environment they state that:

> *'I guess doing endoscopy and colonoscopy is a bit different to ERCP (Endoscopic Retrograde Cholangio Pancreatagram) or complex polyps (colon polyps).' (Interview B)*

By saying this the trainee is suggesting that the trainer is more likely to be less than supportive during the session if the procedure is more difficult or complex, I feel this is more of a reflection on the trainer and their own confidence. However, we still need to consider how stressful being a trainer can be as endoscopy training is performed on live patients.

From examining the transcripts one of the observations is that it seems to be a common thread of training experiences in large teaching hospitals in the south of England.

Feedback

One of the important factors about the trainer and trainee relationship is around the issue of feedback. While good quality feedback is essential for the trainee to learn and develop their skills the trainer needs to have feedback in return in order to develop their skills as a trainer, it is also an important aspect of developing mutual respect for each other.

The subject of feedback arose during the course of the interviews and some of the trainees described their experiences. Participant A talked about the difference between trainers and they suggest that the quality of the trainer and skills they have can vary:

> *'The difference for me is just the richness, it is about the variety of skills and feedback.' (Interview A)*

Participant C also discusses the impact of lists being too full or overbooked as this reduces the amount of feedback or meaningful training support:

> *'Getting enough feedback or enough training, the main focus on them [the trainer] is getting the patients or the list done.' (Interview C)*

Participant B discusses training with the Nurse Endoscopist related to feedback:

> *'I started my training with a Nurse Endoscopist I find them much better at giving you a regimen.' (Interview B)*

In the next interview participant F discussed their training experience with a new consultant and how the trainer's lack of confidence impacts on the training experience:

> *'He is a very good trainer, with very good tips, however I have found that he doesn't give me enough space and time to finish the colonoscopy.' (Interview F)*

This would suggest that the trainee and trainer need to establish ground rules and set objectives for the session. When the participant was asked why they thought this happened they responded:

> *'He is a bit anxious about the patient.' (Interview F)*

They went on to say:

> *'He is a bit anxious in general and maybe he wants to try and avoid complaints from the patient.' (Interview F)*

This would indicate that the trainer lacks confidence and having a trainee exacerbates this. However, in contrast, when the participant talked about having training from a Nurse Endoscopist they had a different experience. The quote below demonstrates how failure to provide adequate supervision or understanding the needs of the trainee can hamper progression but can also lead to a lack of confidence in the trainee:

> *'The Nurse Endoscopist she was brilliant, she gave me much confidence in my skills which doesn't happen with my trainer, she encourages me more.' (Interview F)*

On reviewing the transcription, the same participant was discussing their experience with another Nurse Endoscopist and said:

> *'I found it quite useful the tips, and they [nurse endoscopist] gave me a lot of confidence and are more relaxed during the procedures.' (interview F)*

For that particular trainee it could be indicated by their interview that the most important factor for the trainee and trainer relationship is to have their confidence instilled by the trainer.

The next section discusses the themes in relation to some of the reviewed literature.

7.4 Discussion

The following section discusses the emergent themes within the Super-ordinate theme of Trainee Emotions and the relationship these themes have with the current literature.

7.5 Sub-ordinate theme - Staff Attitudes around training

During the transcriptions the trainees have remarked upon how the response of the other staff attitudes has impacted on their own personal training experience. They shared some of their own personal experience and what had been said directly to them by the nursing staff, trainers and other key members of the team.

Many of the comments are related to service provision and the efficiency of the lists, whether staff are able to have their lunch break or indeed finish work on time. From the interviews the trainees suggest that this can lead to a breakdown in working relationship between the trainee and the nursing staff. The trainees allude to a feeling of discomfort and the idea of avoiding 'upsetting the nurses'. This gives the trainee a sense of being a hindrance or burden to the smooth running of the endoscopy lists. It is apparent that these opinions can negatively impact on confidence which in turn leads to an inadequate training episode.

I feel while there are some elements related to a lack of understanding between each other's roles (which will be examined further in the next chapter). There are also contractual implications and financial aspects which need consideration. I feel that this may help to explain some of the nursing comments.

The nursing staff are rostered on with a start and finish time as per the pay structure Agenda for Change which came out in 2006 and replaced the previous Whitley pay scale (Agenda for Change 2004). The rationale for this was to remunerate staff in a fairer and more equal fashion. However, lots of work in nursing is done by 'good will' and if a nurse was kept behind at the end of the day due to a list over-running they could use those extra hours as 'time owing' or 'time off in lieu'. This could be taken at

a later date, in some cases staff could claim overtime if they were behind for several hours.

Unfortunately, since Agenda for Change this is only allowed if more than 30 minutes are worked and no overtime payment can be claimed. This contract does not apply to medical staff and they are paid per session, which means they are paid no matter how fast or delayed the lists may be. The endoscopist, whether nurse or medical, can leave the department once the patient procedure has ended, however, the nurses need to recover the patient from the procedure and ensure safe discharge, clean and disinfect the endoscopes and also wait for the cleaning cycle to end before leaving, which normally takes about one to two hours once the procedure has ended.

This can lead to a disconnect between the staff especially if the medical staff fail to understand that the nurses would have to stay behind without any recompense. This suggests that more understanding of each other's roles and commitments may help to achieve a more supportive training environment. The nursing staff would also benefit from understanding the complexities of endoscopy training and how training is an essential aspect of workforce development by creating our endoscopists of the future. The understanding of the pressures of training is an important aspect of supporting the trainee.

7.6 Sub-ordinate theme - Trainee Self-confidence

One of the issues identified throughout the interviews was the trainee's own confidence in their ability. Confidence and self-belief appear to resonate with most of the trainees. On reflection during the interviews training experience has been affected by confidence, this can be related to both positive or negative experiences.

There are various factors which can impact the trainee's confidence, and the literature draws attention to the differences in learning curves between trainees, Siau et al

(2018) found in their research that there are several factors that impact on the training and learning curve, these can include:

- Trainee factors e.g. inherent abilities
- Attitudes of others e.g. other staff groups
- Trainer factors e.g. quality of teaching methods
- Training programme factors e.g. intensity of training
- Appropriateness of lists e.g. case difficulty.

> *'For me at the beginning one of my first, main problems obstacles let's say stopping me to proceeding to improving was a lack of confidence.' (Interview A)*

In my research I found similar factors relating to trainee confidence, with how trainer factors can influence training outcomes. Faculty training can improve quality of feedback which is associated with positive outcomes and the JAG 'Training the Trainer' course or faculty participation is associated with improved performance, however, the influence of trainer factors on trainee outcomes is lacking (Rahman, Boger, Patel 2016).

According to the literature, confidence is a quality often associated with successful individuals, and it may be described as an assurance arising from a belief in yourself and your abilities. Doctors are widely regarded as members of an above-averagely confident group of professionals. Gottlieb, Chan, Zaver, and Ellaway, (2022). For any trainee, having confidence in one's own abilities and limitations is key to a successful training experience and what is essential to becoming a good endoscopist is good quality training. Mason, O'Keeffe, Carter, Stride (2015) suggest that confidence and competence in undertaking clinical tasks, are important considerations in postgraduate medical training.

7.7 Sub-ordinate theme - Trainee – Trainer Relationships

When reading the transcriptions, the trainees remark on what the trainee and trainer relationship means to them and how this can be translated into a valuable training episode. It is clear from these experiences that the trainer attitudes and behaviours are key to the success of training.

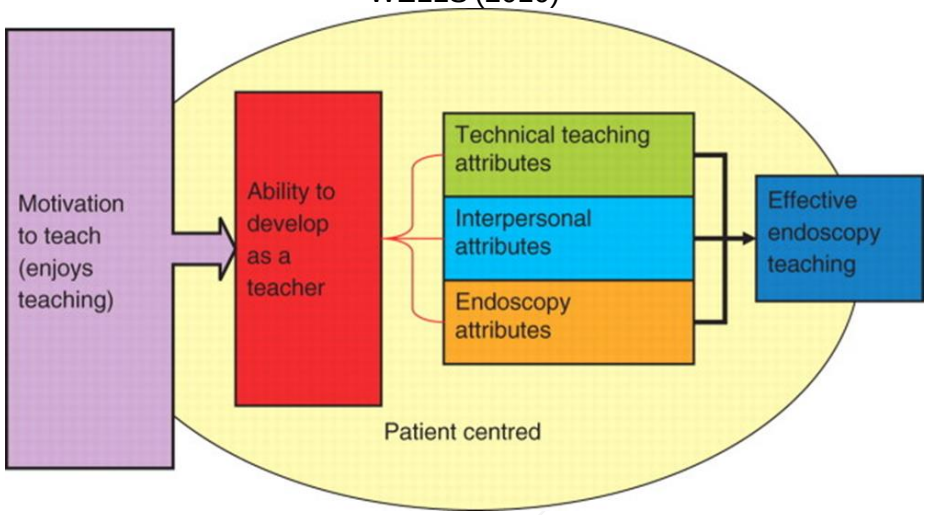
Some trainees do acknowledge the difficulty that individual trainers have with a trainee present and they contemplate the trainers' experience of the training session or episode. The skill of performing endoscopy is an intuitive technique which requires careful concentration and it is well documented that trainees are particular vulnerable to cognitive load. Cognitive load refers to the short-term memory, this can be detrimental to endoscopy performance and it is vital that trainers are aware and recognise this in their trainee (Siau et al 2018):

As endoscopy training is not something that can be taught over a few lessons, the trainer needs to conceptualise training in terms of the individual lesson (or endoscopy list) and the longer term. It is important that each lesson is incorporated into this long-term plan so that the goal of independent practice for the trainee can be achieved in the most efficient manner. The endoscopy trainer needs to have specific attributes. According to Wells (2010) these can be divided into six domains:

1. Interpersonal attributes
2. Endoscopy attributes
3. Technical teaching attributes
4. Developing as a teacher attribute
5. Motivation to teach
6. Patient centred.

The first three domains are necessary to be able to directly deliver effective endoscopy teaching while the latter three are needed to ensure excellence is maintained. This is illustrated in the diagram below:

DIAGRAM 7.2 EFFECTIVENESS AS AN ENDOSCOPY TRAINER FROM WELLS (2010)



Endoscopy training for the trainer is about safely managing the procedure, observing pathology, ensuring the procedure is completed safely and managing the trainee while verbalising the technical aspects of performing a procedure. We can see from some of the quotes in the sections above that this is not always the case and some trainers fail to take on a structured approach to their training technique.

Having a good relationship with the trainer is key to having successful training experience. Training to perform endoscopy requires a good deal of trust between both parties. As previously mentioned, endoscopy training is usually performed on actual patients from the very beginning which also compounds the stresses for both the trainer and the trainee. We can see from some of the trainees' experiences that trust is an expectation which takes time to develop, if at all.

In order to become an accomplished endoscopy trainer, endoscopists need to be an excellent endoscopist, confident in their own ability but also highly motivated to teach. Unfortunately, in the trainee's experience, some of the trainers appear to be novice trainers who lack confidence in their training ability. However, in contrast, there are trainers who lack interest and just 'want to get the job done'. Nevertheless, the training is sub-optimal which causes additional stress, anxiety and frustration for the trainee.

We have previously discussed the nursing attitudes, however having a strong and patient nursing team around the trainee to give the most optimum training experience is crucial. Regretfully, as we have seen, this is not always the case. For any endoscopy unit to be successful team working is paramount, this is even more important during a training situation. We can see as the themes have emerged how fragile the training environment can be and that success requires an all-round commitment from the whole team.

7.8 Feedback

Feedback was something which was mentioned by the trainees as a matter for discussion in both the positive and negative sense. The feedback process is broadly defined as the delivery of any report on clinical healthcare performance to the practitioner covering a specified length of time and has been applied successfully in several health domains (Bishay, Causada-Calo, Scaffidi et al 2020). In a recent survey by Radcliffe et al (2021) nearly all trainees felt they could raise concerns or ask for help during the procedure. However, for more formalised trainer feedback, many trainees felt they were unable to raise concerns about providing constructive criticism due to perceived hierarchy.

Hierarchy was discussed in the Organisational Barriers chapter and it can be seen that the trainees have an experience of this which relates to many aspects of their training. However, it is true to say that the trainees feel unable to provide feedback or constructive criticism about their training due to perceived hierarchy. It was noted from the interviews that this seems to feature in some of the large teaching hospitals in the south of England.

Radcliffe et al (2021) also found that that most of the trainees questioned felt that they were well supported, however they noted that there was a fine balance between close supervision while still respecting the progression of the trainee's development.

Consistency of feedback provided in medical feedback would help in addressing this as an issue for the trainees. In endoscopy, Pendleton's rules (1984) cited in Dent, Harden and Hunt (2017) are recommended as a supportive method in providing quality feedback. These rules consist of four main points in the framework:

1. Clarify – ask for clarification of information and feelings as necessary
2. Good points first – Ask the learner what they did well, tell the learner what you observed that was done well
3. Areas to improve – Ask the learner to identify what they had difficulty with and what could be improved. Provide specific suggestions for improvement
4. Constructive summary – mutually develop a constructive summary.

Providing effective feedback is a core skill for medical educators and from the data in this research it is essential to building confidence and ensuring successful learning/training experiences.

From this chapter there is a real sense of the stresses felt by the trainees and from the transcripts it is clear that endoscopy training can be a difficult undertaking which is complicated by many various competing factors during their journey.

7.9 Chapter summary

This chapter has focused on the ‘Trainee Emotions’ associated with the endoscopy journey. The trainees have given an honest and contemplative narrative. By sharing the physiological attributes of their training experience, we can begin to identify that endoscopy training is a multi-layered construct.

The following chapter explores the concept of the final Super-ordinate professional self-identity. This is a critical aspect of the trainee’s experience or journey and fundamental to the process of becoming an endoscopist.

Chapter 8: Superordinate Theme – Professional Self identity

Introduction

The following chapter discusses the theme of professional self-identity. This Superordinate theme is broken down into four Sub-ordinate themes which will be discussed individually and be supported by direct quotes from the participants' interviews. There is a discussion section at the end of this chapter which will include aspects of contemporary literature.

The Sub-ordinate themes are as follows:

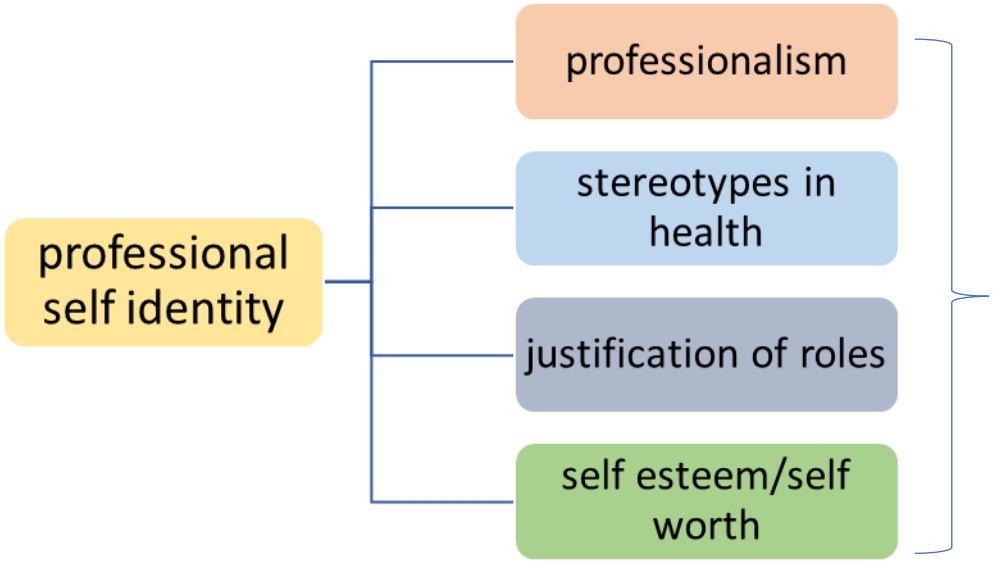
- Professionalism
- Stereotypes in health
- Justification of roles
- Self-esteem/self-worth.

The diagram below demonstrates the connections between the Super-ordinate theme of professional self-identity and the Sub-ordinate themes.

While each Sub-ordinate theme is explored separately in this chapter, it is clear that each theme is linked with each other, and each encompasses the whole of an individual's professional self-identity rather than being separate parts.

Super-ordinate theme

DIAGRAM 8.1 – THEMES – PROFESSIONAL SELF IDENTITY



Sub-ordinate theme

8.1 Professionalism

During the interview's professionalism was often discussed. This could be in the context of the trainee, the trainer or the staff around them. Some of the quotes in this section have been also used in various other themes. However, the subject of professionalism has a relationship with many other aspects and themes. Professionalism is defined later in the chapter in the discussion section.

When listening to and re-reading the transcripts I needed to identify what the trainees actually determined as professionalism which related to their training experience. Much of what they discussed related to the interaction with other professionals during the training episode.

The quotes below are taken from Interview C. They are explaining the attitude of some of the consultants with regard to ownership and management of patients which have had endoscopic procedures:

> *'I have worked with consultants who basically just type a couple of things in the comment bar.' (Interview C)*

In relation to this quote the trainee is explaining that the consultant is failing to adequately communicate findings to the patient referrer suggesting a general lack of interest in the procedure, patient or training. Thus, the trainee is left feeling unsupported during their training. Further on in the interview the trainee reports that:

> *'Consultants you know, are not really bothered.' (Interview C)*

On further prompting they clarified that they meant there is a general lack of interest in some consultants, whether this is due to apathy, pressures of work or stress remains unknown. However, this type of behaviour and attitude can be associated with a lack of professionalism.

Many of the trainees also described the fact that the nursing teams were unhappy with having a trainee present as, the nurses believed, it hampered the progression of the list resulting in late finishes. This unhappiness was communicated to the trainee, resulting in the trainees feeling uncomfortable or that no matter what other factors contributed to the late finishes it would always be the fault of the trainee. In the following quote the trainee is explaining how delays and other difficulties can affect the session:

> *'There are a lot of other factors, there is not only the patients but sometimes the nurses can't wait to leave or something.' (Interview E)*

Participant G discusses freely their personal experiences with the nursing teams and they suggest that it is vital that the trainee maintains a good relationship with the nursing teams or they should 'keep on the good side' of the nurses. This gives the

impression that the nurses maintain an element of ‘control’ or ownership over the procedure rooms which could consequently have an impact on the trainee’s overall experience:

> *‘If we do run late you very often felt as dissatisfaction from the nurse.’ (Interview G)*

The trainee highlights the fact that endoscopy is a team approach and there can be many reasons why procedures are delayed, however the attitude that it is always the fault of the trainee is irrelevant when other factors came in to play during the list:

> *‘If everything goes ok well great then everyone is happy then great, not if things go slightly differently everyone is very important rather than putting down to the trainee is just slow.’ (Interview G)*

They also mention later on in the interview the comment below:

> *‘If you are working in a hospital for a year the last thing you want to do is to upset nurses.’(Interview G)*

This again suggests that nurses could potentially cause difficulties for the trainee throughout their rotation. This type of attitude would be regarded as unprofessional in nature and can impact on the trainee’s confidence and progression. We have examined the attitudes of staff members in previous chapters, however, I feel it is worth consideration in the Sub-ordinate theme of professionalism.

We have seen that attitudes from other staff member can significantly impact on the atmosphere in the procedure room and this will no doubt affect the trainee, the nursing staff but also the patient. The trainees discussed this in different contexts from the trainer leaving the room to let the trainee manage on their own, which of course is not acceptable as no training can take place not to mention the risk to the patient:

> *‘There are trainers I have come across that they are not scoping they are not in the room.’ (Interview G)*

They also describe the occasion when consultant trainers can be hierarchical and *'upsetting the room'* which also results in a stressful working environment for all concerned:

> *'The old consultants get on really well and are easy to scope with, all the new consultants I don't think they realised that they upset the room quite a lot.' (Interview B)*

This may be due to a lack of confidence for the newer consultant or that they are trying to secure themselves a place within the perceived hierarchy, or it could be that they are asserting themselves as a new consultant. Conversely, this type of behaviour could also be a stress reaction from the new consultant as they are trying to position themselves within the team. This has also been discussed in a previous chapter, but it warrants further discussion here in the context of professionalism.

The following section examines the Sub-ordinate theme of stereotypes in health and how this has been highlighted in this doctoral study.

Stereotypes in Health

As we have seen in previous chapters, stereotypes between doctors and nurses still exist in practice today. With advanced roles the doctor-nurse relationship is more dynamic then ever and this is particularly apparent in endoscopy. Endoscopy is often a unique working environment, where inter-professional working and education often results in supportive working relationships, however the following quote suggested that the stereotypical perceptions of role and its boundaries are not altogether absent and there is still a distinct intergroup relationship rather than collaboration between peers. The stereotypes between doctors and nurses were discussed during the interviews but in various contexts. The quote below is describing their experience of working with a Nurse Endoscopist:

> *'Nurse Endoscopists are a lot more concerned about patients and the nurses in the room, probably because they have been on that side and they are much more interactive with patients and in my opinion doctors or consultants are much more focused on the procedure itself or getting things done.' (Interview C)*

The trainee makes a generalisation about the professional differences between doctors and nurses, using the stereotypical suggestion that nurses are more interested in the patients and their care and the doctors are more interested in the procedure and diagnosis. They also suggest that the doctor is less interested in the nurses who are assisting the procedure and the Nurse Endoscopists have an interest or insight in the role of the nurses in the procedure room because they have previous or a shared experience of working in the procedure room, which makes them more appreciative or understanding of the role of the nurses. This also could imply a 'kinship' between the NE and the endoscopy staff because of their shared experience of working in the endoscopy environment.

Several of the trainees described this phenomenon. They often described the Nurse Endoscopist having better 'control' or can manage the room more effectively. The quotes below are from a variety of trainees from different stages of their training and different geographical areas which describe this occurrence:

> *'I guess I notice the Nurse Endoscopists get on better with the room which makes it a slightly nicer learning environment.' (Interview B)*

Participant C describes how working with the Nurse Endoscopists has given them a different perspective of how to work in the room. Endoscopic Non-Technical Skills (ENTS) are becoming an increasingly more important aspect of endoscopy training and assessment and these are directly related to aspects of room management, communication and leadership skills, we will discuss further in the discussion section at the end of the chapter:

'Having worked with nurses probably gives you a bit more that you care about the patient rather than trying to get the procedure done (laugh) or care about the people in the room like the nurses and team.' (Interview C)

Participant E also discusses how the Nurse Endoscopists seem to build a rapport with the nursing team and how a different relationship has cultivated which results in a more effective working relationship:

'They [the Nurse Endoscopist] also have got a different way with the nursing staff in the room and their interaction with the nursing staff is interesting and I feel that they have them better under control they have better control of the room in terms of the nursing staff.' (Interview E)

Further on through the interview with participant E they continue to discuss again the management of the endoscopy procedure room and the difference in the interaction from the Nurse Endoscopist. The trainee suggests that the NEs have a unique perspective which is due to the fact they have been 'nurses' so they understand how to interact with the staff in the procedure room:

'I don't know but I feel that it's the way the Nurse Endoscopists control the room with the nurses is different maybe because they have had a unique perspective of being a nurse so they have a different way of doing it and probably a bit more of efficient way I would say.' (Interview E)

Participant F makes a similar observation as the previous participants, and again the suggestion that the Nurse Endoscopists have been nurses before so they have the ability to form a more positive working relationship which results in a more efficient training session:

'Interaction is quite good, it is good, they have been nurses they have been before and they are quite familiar with the endoscopy department and the rest of the endoscopy nurses.' (Interview F)

From the interviews it would appear that the influence of the Nurse Endoscopist provides a more relaxed training episode and that the NE is much more effective at managing the endoscopy room. The impression is that this is a direct result of their

previous role as a ‘nurse’ which gives them the ability to be more effective managers, however, NE are still practising nurses albeit in an advanced practice role. Perhaps the NEs have an insight due to their own past experience or they have evolved better ENTS which considers the management of the procedure room and the nursing staff.

The following section goes on to discuss the next Sub-ordinate theme examining the justification of role.

Justification of role

When looking at the data there is a sense that the trainees need to justify their role, whether this is related to aspects of the endoscopy technical and clinical skills, or clinical management and decision making.

This ‘justification’ seems at times to be part of a process of differentiating between their own skill set and the Nurse Endoscopists’ skills and knowledge, and could be viewed as linked to a need to reinforce and place boundaries around professional identity.

This can be seen in several of the direct quotes. For example, this trainee is explaining they found clinical decision making different with the Nurse Endoscopists saying that they felt more comfortable with the consultant gastroenterologist. This could be due to the perceived differences in knowledge between the two professional groups or the fact that the trainee would have the clinical decision made for them by the consultant and their clinical skills wouldn’t come under question:

> *‘There is a bit of a difference with the Nurse Endoscopist, I did find a bit of a difference especially in the planning management and I find I am more comfortable with the gastro consultant.’ (Interview A)*

Below is a set of quotes from a narrative from interview H who is a very experienced surgical trainee. From the interviews it would seem that the trainee has had a difficult journey during their endoscopy training. I have spent a significant amount of time

exploring and re-reading this transcript to establish what exactly the trainee is describing. They appear to have had multiple issues along the way but much of them are focused on the difference of roles between the medical endoscopist and Nurse Endoscopists:

> *'A lot of doctors want to get trained and if you have four or five Nurse Endoscopists in the department who don't want to train and they [NE] just put you off.' (Interview H)*

In the quote above the trainee is explaining that having multiple Nurse Endoscopists in a department restricts the learning opportunities of medical endoscopists because the Nurse Endoscopists can't train. However, this is a misconception as Nurse Endoscopists are encouraged to train and actually make very accomplished trainers. They also go on to explain that nurses have fixed session times and question whether a nurse would be available to perform an endoscopy after hours:

> *'The nurse endoscopist is not going to come in after 5 when you need scoped.' (Interview H)*

Further on during the interview the trainee discussed the cost effectiveness of Nurse Endoscopists and explains:

> *'NHS gets more out of the doctors because they are doctors.' (Interview H)*

They seem to have a misunderstanding of the Nurse Endoscopist role and are very traditional in their viewpoint, however, this seems to be a result of their own personal experience of the Nurse Endoscopist role:

> *'The problem is that when somebody becomes a doctor that's because they want to become to become a doctor not because someone asks them.' (Interview H)*

In the final quote for this selection, the trainee explains that doctors become doctors because that's what they want to do as a career, it is a vocation, a way of life. They

went on to suggest a nurse is asked if this is what they would like to, indicating that nurses have an easier pathway:

> *'Whereas a nurse it's not like that.' (Interview H)*

In the quote below from participant B, they are explaining the occasions where they have had a patient refuse to let the Nurse Endoscopist perform their procedure, instead asking the trainee to do it because they are a doctor even though they are not a fully trained endoscopist:

> *'I have seen patients where I am the trainee and they will see the patient and they will say 'actually I am not happy for a nurse to scope me' which obviously makes no sense because I am the trainee.' (Interview B)*

They go on to explain:

> *'Certainly, some patients seem to have an issue with it not loads but I have had a couple because it quite amusing as they would rather have me do it and I am the trainee and actually the person training me has done about 10,000 endoscopies.' (Interview B)*

This is an interesting impression and highlights that there is still a wider issue with patients' perception of role and advanced practice in the current healthcare system. There is also the impression that the nurses are better organisers. When one of the gastroenterology trainees was asked about their experience of Nurse Endoscopists, they explained in the context of the organisation of one of the training courses they had attended:

> *'So, they [Nurse Endoscopist] did they did all the co-ordination before the course so there were a lot of emails and things and when we got there it was good at that point so you meet someone you have been interacting with and again during the course it was very good.' (Interview D)*

It could be concluded from this statement that the trainee was discrediting the role of the NE and implying their skills lie as a course facilitator, thus making the differentiation between medical and non-medical endoscopists.

In this section we have examined the trainee's perception of role justification and how this relates to the training journey. The following section explores the role that self-esteem and self-worth playing in their trainee's journey.

Self-esteem/self-worth

The quotes below are taken from the Sub-ordinate theme exploring professional self-worth. Several quotes will be unpicked and broken down to analyse and give insight into the trainee's thoughts and feeling of their training experience and how the training impacts on their self-esteem:

> *'As I am a little bit more senior now scoping with the consultants it's not as nerve wracking for me as ST3 first year trainee.' (interview B)*

In this quote the trainee discusses how as they have progressed through their training they feel more comfortable scoping with a consultant trainer, suggesting that they have gained more experience and have become more comfortable with their endoscopy training. This suggests they have become more accomplished at their current stage as a trainee. Their identity as an 'endoscopist' is more established as they progress through their core training. They feel more of an 'equal' in the trainee/trainer relationship. By this stage they have achieved competence in the basic technical scope manipulation skills and are now polishing and perfecting their technical endoscopy skills.

In contrast they are reflecting and comparing on their own lived experience as a new or junior trainee and how they felt at that early stage of their core training especially as having a consultant as the trainer. They must feel intimidated, anxious and stressed as they are looking to make a good impression and demonstrate they have the right attributes to be successful at endoscopy. However, learning to perform endoscopy requires good technical skills, hand and eye co-ordination and pathology

recognition as well as developing the required non-technical skills which can only be acquired through time, experience and practice.

The quote below in contrast discusses the impact a 'new' consultant has on the training experience:

> *'All the new consultants I don't think they realised that they upset the room quite a lot they kind of come in as the consultant.' (Interview B)*

When they expanded further they said:

> *'I don't know what the right word is but kind of top down.' (Interview B)*

They also described how this can affect the atmosphere in the procedure room:

> *'There is a couple of consultants who are as you can imagine more top down so therefore the room become a bit more tense and less easy to train.' (Interview B)*

These quotes were made by a senior trainee with experience in different large teaching hospitals. They were reflecting upon the attitudes new consultants appear to have and their impact on the atmosphere of the procedure room and a negative impact on the training environment. By suggesting the new consultant *'upset the room'* this implies that the staff are under pressure as the new consultant feels they need to assert themselves and demonstrate their seniority and their position in the hospital hierarchy. However, this can lead to stress and anxiety among the nurses in the procedure room as they will be trying to maintain their standards of care. As a result, errors can be perpetuated which in turn lead to more upset, stress and anxiety. The statement can also demonstrate that the new consultant is trying to cement their position as new consultant. They have been a senior in their core training and have now moved to be new or inexperienced consultant and then they have to somehow prove themselves and their capabilities especially if they have moved to a new Trust or hospital, not known by the staff/teams or on the department, finding how processes

work can be difficult. They have to redevelop or reaffirm their identity. Staff and trainees also have an expectation of the consultant's identity, there will be elements of patient expectation especially if they have taken over a caseload from another consultant. The trainee also suggested that there is very much a hierarchy as they say the consultants are *'very top down'* which implies a dictatorial approach, this can also be a challenge to the whole team and create a barrier to team-working. This appears to be commonly mentioned among trainees from large teaching hospitals, which implies that the social heritage of the doctor as a profession allows them to hold privilege in the hospital hierarchy.

This is further explored by participant A, who just happens to be a trainee Nurse Endoscopist, who gained much of their experience in Italy. They were asked by the interviewer how they found the quality of their training:

> *'I think the consultants are more prepared, probably because of the experience because of the years [experience], I mean the two Nurse Endoscopists are very good.' (Interview A)*

Later on, through the interview they clarified:

> *'I am not saying the Nurse Endoscopists are not good in that I am just saying the consultants are better.' (Interview A)*

I spent some time reviewing this transcript to understand how the trainee felt, I analysed the data further and it would appear that the trainee feels that if he gains more exposure to more experienced trainees, the trainee will have a good quality of training. One could also speculate that the role of the Nurse Endoscopist is not used in many European countries and endoscopy is still regarded as very much the role of the doctor. This was supported by several other trainees from other European countries and they explained that not only does the role of the NE not exist but only gastroenterologists are legally allowed to perform endoscopy which is why many surgical trainees need to travel to the UK for endoscopy training:

'This field belongs absolute to the gastroenterologist.' (Interview I)

'In my country it will always be a doctor as an endoscopist there will be assistants who will be nurses but not endoscopists.' (Interview J)

Many of the trainees discussed how stress had a direct influence over their performance, this has been discussed previously in the 'Emotions' chapter in relation to confidence, however I believe that this also relates to the trainee's self-esteem. In interview C, the trainee gives the sense that they feel less self-assured in their training at certain points during their training episode. They explain that if there are tensions in the procedure room or the procedure doesn't go as anticipated it has a direct impact on the trainee's self-esteem:

'When you are a bit stressed and having a couple of [bad ones] (colonoscopies) or a bit of tension around you so definitely it does have an effect on the trainee.' (Interview C)

8.2 Discussion

This section investigates the literature associated with each of the Sub-ordinate themes. It starts by examining the Super-ordinate theme of professional self-identity which I feel is a key component to the research.

8.3 Professional self-identity

There are many definitions of professional self-identity in the literature. Vivekananda-Schmidt, Crossley & Murdoch-Eaton (2015) define it as the extent to which an individual feels like a member of the profession of which they intend to become a part. Whereas Cruess et al (2104) aim to provide a more physician specific definition: *'A physician's identity is a representation of self, achieved in stages over time during which the characteristics, values, and norms of the medical profession are internalized, resulting in an individual thinking, acting, and feeling like a physician.'* Professional self-identity in healthcare is regarded a 'state of mind' identifying oneself

as a member of a professional group. Crossley & Vivekananda-Schmidt (2009) state that acquisition of a professional self-identity is by nature subjective. Crossley et al (2009) go on to say that it is important because it is a pre-requisite for accepting the responsibilities and obligations of the professional role and it can be key to developing the confidence to work as a qualified professional and is a foundation for professionalism.

Doctors' professional identity is increasingly of interest in medical education research. It is recognised that a developing sense of 'being a doctor' has important implications for professional and personal development, influencing how professionals practice and learn. It has been suggested that the process of 'becoming a doctor' is the key to professional practice (Burford and Rosenthal-Stott 2017).

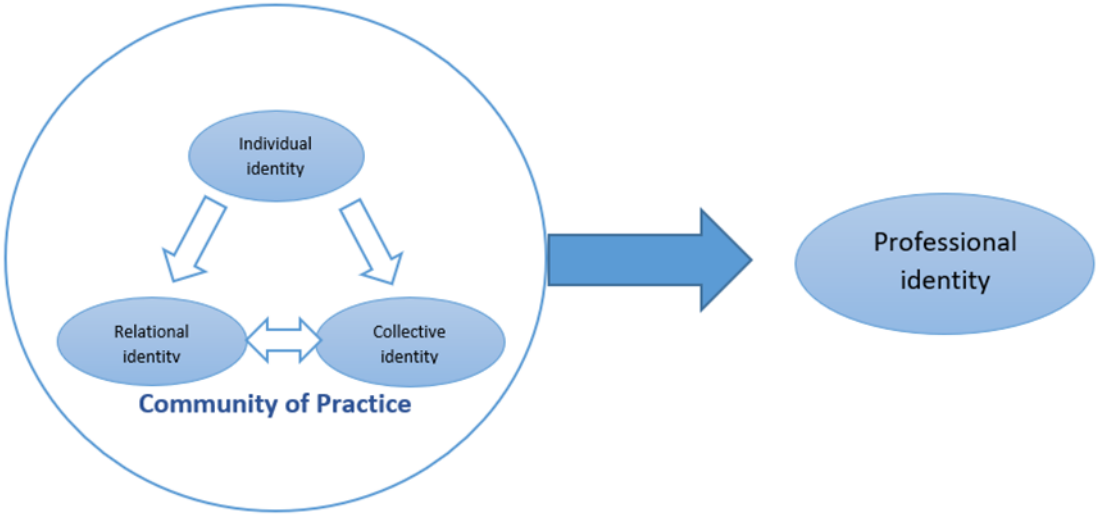
According to Mann (2011) the years as a student are central to the evolvement of an individual's professional identity. It is during this period that the progression into a profession takes place. Early placements are seen to be beneficial to students, such as early opportunities to observe the future profession, contextualise learning and opportunities to improve clinical skills (Kamalski et al 2007). Medical students rated to learn their profession and to develop professionally as vital during their early clinical practice (Dyrbye, et al 2007).

Research demonstrates that when people outside the medical professions acknowledge students as future health professionals, the students will gradually alter their identity over time to meet the expectations associated with their profession (Vivekananda-Schmidt et al 2015). Interestingly, Burford and Rosenthal-Stott (2017) found that medical students identify as doctors rather than students very early into their medical education. They also discovered that medical students feel the attributes associated with doctors apply to them rather than the identity of a student. In essence, medical students consider themselves to be doctors and describe themselves as typical doctors, rather than as typical members of the undergraduate student body.

This has implications for their medical education and the potential risk of overconfidence from a professional identity that is overdeveloped in relation to an individual's level of training. In my research this could support the fact that the trainee endoscopists subscribe to being established in their professional development and then return to the fact they are a novice in their endoscopy training. We need to acknowledge that in practice these trainees are accomplished autonomous doctors but as an endoscopist they are very much the novice, the process of endoscopy training can be a long drawn out process particularly as many of the trainees move to different hospital Trusts to continue their training.

The development of professional identity occurs through the dynamic interaction of individual, relational, and collective identities within a community of practice (Chandran et al 2019).

DIAGRAM 8.2 THREE TYPES OF IDENTITIES ADAPTED FROM CHANDRAN ET AL (2019)



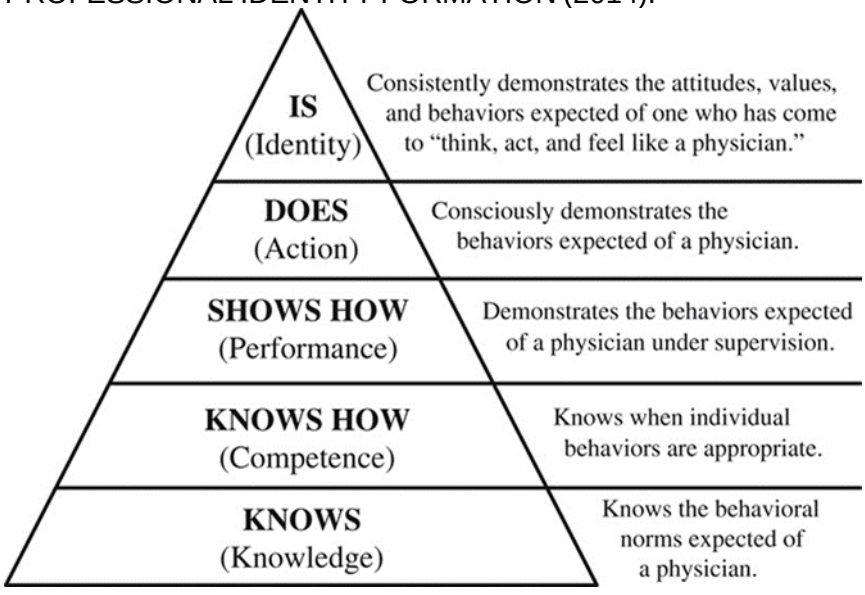
Chandran et al (2019) explains that the diagram demonstrates three types of identities:

- Individual - trainees enter medical school with an individual identity shaped by their inherited predisposition and past personal experiences
- Rational - influences their individual identity as they navigate relationships in social environments
- Collective - medical profession's collective identity, with its explicit and implicit norms, hierarchies, values, and behaviours, heavily influences the dynamic evolution and moulding of trainees' professional identity.

According to Chandran et al (2019), professional identity is based on social development theory and situated learning theory. These dynamically interact within a community of practice to form a trainee's professional identity. Each of these three identities can be demonstrated in each of the endoscopy trainees. By unpicking their narrative each of these 'identities' can be highlighted and exposed.

The diagram (diagram 8.3) below was taken from Cruess, Cruess, and Steinert's amendment of Miller's pyramid of learner assessment for professional identity formation (2014).

DIAGRAM 8.3 MILLER'S PYRAMID OF LEARNER ASSESSMENT FOR PROFESSIONAL IDENTITY FORMATION (2014).



This demonstrates a doctor's development and the behaviours they exhibit as they progress through medical education. With addition of the word 'is' this pyramid continues to serve as a guide to assessment, using adaptations of methods currently in use for assessing professionalism and this is relevant in the behaviours shown by the trainees and other healthcare professionals during their endoscopy training journey.

This links to the next section which will examine the literature related to professionalism.

8.4 Sub ordinate theme - Professionalism

O'Sullivan (2017) describes that medical professionalism is now widely accepted as a key part of medical education and it often features directly or indirectly in the educational standards of national medical bodies, interestingly they reflect the Hippocratic oath as a symbolism of medical standards the profession expects of its members (see Chapter 2).

At this point it is important to state that professionalism and professional identity are not the same thing (Chandran et al 2019). Professionalism is defined by the set of values and virtues espoused by the profession including universally accepted core values such as competence, compassion and integrity. Professionals are described as a group that are assumed to act in the public interest and for this reason their behaviour is regulated and their actions scrutinised by public and professional bodies (Martimianakis, Maniate & Hodges 2009).

The Royal College of Physicians (2018) describes the professional attributes of a doctor in terms of roles: healer, patient partner, team worker, manager and leader, advocate, learner and teacher and innovator. These 'aim to help doctors improve their professionalism in practical ways'.

Professional behaviours are seen to be the expression of professional attitudes (Ginsburg, Regehr, Hatala, McNaughton, Frohna, Hodges, Lingard, Stern 2000). Work in medical professionalism literature in recent years has stressed the importance of assessing observable behaviours rather than attitudes, with attention to the contextual framing of those behaviours (Ginsurg, Regehr and Ligard 2004).

In a piece of work examining professionalism in healthcare professionals conducted by Health and Care Professionals council (2014), dual perspectives on professionalism were identified – as a holistic concept, and as a multidimensional, multi-faceted construct consisting of professional identity, professional attitudes, and professional behaviour. Parallels can be drawn from this statement and the participant interviews. The literature surrounding professionalism with be further explored in the Discussions of Findings in Chapter 9.

8.5 Sub-ordinate theme - Stereotypes in Health

It has been suggested that working as a collaborative, inter-professional team is essential to providing effective, patient-centred care (Cook & Stoecker 2014).

This theme is related to the notion of stereotyping roles between doctors and nurses. There is a structural hierarchy between medicine and nursing and is defined by clinical governance. It has also been suggested that this doctor-nurse hierarchy is a 'negotiated order' which occurs in the workplace but there also is some fluidity to this relationship (Burford, Morrow, Morrison, Baldauf, Spencer, Johnson, Rothwell, Peille, Davies, Illing 2013). In endoscopy this 'negotiated order' is often displaced as there are blurred boundaries due to the prevalence of advanced practice roles, for example Nurse Endoscopist, clinical nurse specialists, stoma care nurses and nutrition nurse specialists. However, stereotypes can have negative effects on group interaction if based on inaccurate perceptions of others. One example of the effect of stereotyping

on collaboration among practising healthcare providers may be seen in the area of decision making. A repeated issue in the literature on the nurse-physician relationship involves physicians taking a more active role in patient care decisions (Cook & Stoecker 2014).

In a study conducted in 2016 which examined relationships, stereotypes and tribalism of healthcare professionals found that stereotyping is an artefact of healthcare workplaces and history to a considerable degree, which means that in the workplace there are perceptions of marked behavioural patterns distinguishing doctors, nurses and allied healthcare professions (Braithwaite, Clay-Williams, Vecellio et al 2016).

Some of the quotes from the transcriptions suggest that stereotypes in healthcare are an active aspect of inter-professional relationships within the endoscopy department. The trainees freely discuss their experiences and refer to the knowledge and skills of the nurses. The suggestion is while the Nurse Endoscopists have good technical skills, it is believed that the Nurse Endoscopists' knowledge base in clinical decision making and pathology is lacking compared to that of the doctor.

It could be argued that this is related to the next section which will discuss the trainee's belief around justification of role.

8.6 Sub-ordinate theme – Justification of Role

During the interviews there is a suggestion that there is a lack of understanding of roles of each professional group, for example between medical endoscopists and Nurse Endoscopist. It could be argued that if there is a better understanding of roles between professionals it could help towards better working relationships during endoscopy training.

Medical versus Non-Medical Endoscopy

The notion of doctor-nurse substitution has been a method for addressing doctor shortages and to reduce the doctor workload. It has been an influence in advanced practice for many years, however, some contention remains between the professional groups. While nurses see this as a positive pathway in developing advance practice within their roles, some doctors believe that nurses should only act within the boundaries of what doctors believe the be appropriate (Karimi-Shahanjarini, Shakibazadeh, Rashidian, Hajimiri, Glenton, Noyes, Lewin, Laurant, Colvin 2019). This belief can be identified during the interviews with some of the trainees expressing a dissatisfaction of the Nurse Endoscopist impact on endoscopy training. Interestingly a study carried out by Van Putten, Van Leerdam and Kuipers (2009) examining gastroenterologists' views of Nurse Endoscopists found 48% had positive attitudes towards the introduction of the NEs into their team, 18% were neutral and 34% were negative. However, there was a direct relationship with those who had had experience of NEs were generally positive, whereas those who had not had any experience working with NEs were negative. Van Putten et al (2009) also state that studies that have investigated the endoscopic skills of NEs concluded that NEs are effective and can safely perform procedures such as diagnostic gastroscopy and sigmoidoscopy, but state that most of these studies were criticised for methodological flaws. This would support why the negative views of NEs can be perpetuated and there is a misinterpretation of the role in practice.

Being a novice

By the time trainees enter endoscopy training they are already highly skilled and accomplished clinicians in their own right, however, endoscopy training brings new challenges. We have already discussed in a previous chapter the complexity of endoscopy training. However, I felt it was important to address the idea that in

endoscopy the trainee endoscopist is learning a new skill, which is completely different to what has gone before in their training. Endoscopy training is described as the acquisition of skills through four major stages. The first two stages, termed unconscious incompetence and conscious incompetence, are cognitively arduous phases characterized by intense concentration and limited success. In the third and fourth stages, termed conscious and unconscious competence, cognitive effort decreases and automatic movements increase, leading to eventual skill mastery (Mohamed, Raman, Mclaughlin, Anderson and Coderre 2010). These stages can be difficult to acquire and often takes a significant amount of time to progress through each stage. In later research by Forbes, Mohammed and Raman (2016) they have further developed the stages into three main stages of developing competence in endoscopy training:

- Novice phase – this involves intense concentration to completely understand the activity and minimize mistakes
- The second phase – an evolution to a more fluid and less cognitively arduous step in which trainees begin to perform at an acceptable level
- The final phase - involves a process of automation in which the skill is precisely and smoothly performed with little or no conscious cognitive involvement.

This skills acquisition can often be associated with the skill of the trainer (Wells 2010), (Huang, Hopkins, Huang, Demers, Wasan 2020). Therefore, endoscopy training brings with it many complex issues for the trainee and its success is clearly multifactorial, which was identified in the research.

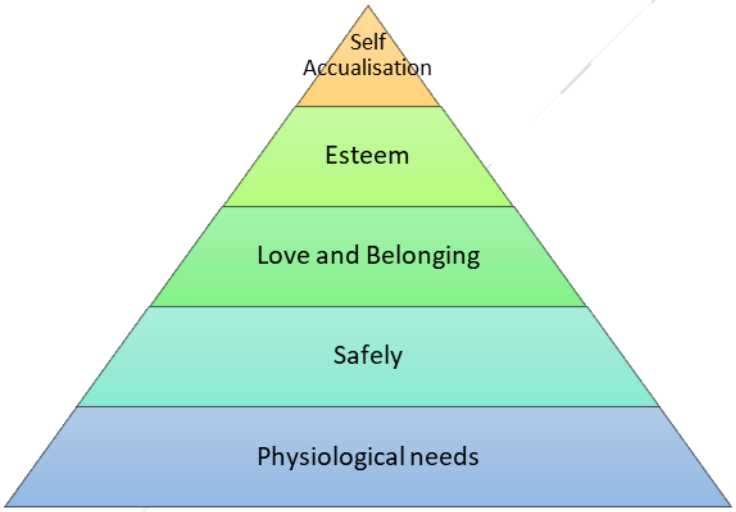
It has become apparent in the literature that achieving competence and excellence in endoscopy requires many hours of training in order to develop the numerous technical and non-technical skills to effectively perform the procedure.

These factors would appear to have a significant impact on self-esteem which brings the discussion to the next section.

8.7 Sub-ordinate theme – Self-worth/self-esteem

Self-esteem can be defined as in a positive or negative way, evaluation that a person makes for himself, and is defined as an emotion – an internal belief system that expresses an attitude of approval or disapproval to oneself.

DIAGRAM 8.4 MASLOW HIERARCHY OF NEED ADAPTED FROM MCLEOD (2007)



Self-esteem is one of the most widely studied constructs in the social sciences (Bleidorn, Arsan, Denissen et al 2016). Researchers have defined self-esteem variously as 'the extent to which an individual believes him or herself to be competent and worthy' (Abdullah, Aizan, Sharir, Kumar 2009) and 'an individual's subjective evaluation of his or her worth as a person.' (Bleidorn et al 2016), (Kammeyer-Mueller, Judge, Piccolo 2008). Self-esteem has been correlated with job success, school achievement, and general happiness.

Competence

At this point I feel it is important to discuss an overview about what competence means in endoscopy training.

Competence is defined by the American Society of Gastrointestinal Endoscopy (ASGE) as *'the minimal level of skill, knowledge and/or expertise derived through training and experience that is required to safely and proficiently perform a task or procedure.'*

Developing technical and non-technical competence in endoscopy training is vital as endoscopy is an invasive procedure with the potential for physical and emotional harm. Competence in the UK is measured by Key Performance indicators (KPIs) and there is a clear link between endoscopist performance and patient outcomes (Siau et al 2018).

However, in recent years more attention has been paid to the human factors in patient safety and quality endoscopy which has in turn driven the focus on the development of non-technical skills (Siau, Hawkes, Dunckley 2018). These non-technical skills comprise leadership, communication, judgement, decision making and teamwork. Competence in endoscopy includes all elements of performance, not just a focus on technical skills alone. Non-technical skills are defined as 'the cognitive, social and personal resource skills that complement technical skills, and contribute to safe and efficient task performance' (Flin, O'Connor, Crichton 2008). Teams in endoscopy are constantly changing, according to Haycock and Matharoo (2012) resulting in 'teams of experts' rather than 'expert teams'. As a result, this kind of working relies far more heavily on positive safety attitudes, shared understanding and an efficient exchange of information which is unimpeded by hierarchical or cultural factors (Hichins, Metzner, Edworthy & Ward 2017).

According to Gurgen (2009), there is as much to interpretation from what is not said in the narrative. This would imply that the trainee finds training with the consultant still stressful despite the extra years of training. Social constructionists would maintain that the trainees construct their own professional identities within the context of the medical profession, surgery, gastroenterology and endoscopy along with the supporting intuitions such as BSG and JAG.

Changing personal identities to meet expectations

This relates to social structure which refers to the way in which society is arranged around the department and regulates ways people inter-relate and organise a social life. The society here is the hierarchy of the training structure and the leadership of the procedure room. Goldie (2012) discusses the formation of professional identity in medical students, however this can be ascribed to the social structure within the treatment room and the endoscopy training environment.

Several researchers have documented the fact that people's work-related values tend to match the values of their work environments. It is also suggested that this value match yields superior job performance and greater employee satisfaction (Haley and Sidanius 2005). This again can be related to the consultant's self-esteem and the impact this has on behaviours and working relationships. Dimitriadou – Panteka et al (2014) state that self-esteem contributes to shaping the attitudes and behaviours and it has a huge impact on behaviour and psychological reactions involving relationships with others, the quality of communication, competition or rivalry, compliance or submission and generally in the treatment of self-versus environment.

As there are specific characteristics of nursing work, there is a degree of personal and group interaction, self-esteem can influence the interactions with patients, colleagues and doctors and other staff. Negative communication can affect self-esteem and in turn constitute a low self-esteem which can affect morale and

communication with colleagues. Some of the nursing research literature demonstrates that when nurses have high levels of self-esteem this is associated with encouraging clinical competence which implies when nurses have their self-esteem diminished their levels of competency are less. This could occur in the situation which the trainee outlines above, the literature also suggested that interaction with colleagues who are intimidating can undermine confidence and in turn affect clinical capability which is a potential consequence of the new consultant's behaviour. In contrast this is also a sign of their own loss of confidence and low self-esteem.

8.8 Chapter Summary

This chapter has focused on the theme and Sub-ordinate themes around professional self-identity. The chapter has brought together the related literature and the dialogue from the trainees. The chapter suggests that professional self-identity is what defines the professional values of each of the trainees and how they portray themselves as a professional group.

The following discussions chapter brings together the finding from the literature and the three super-ordinate themes as identified from the data.

Chapter 9 - Discussion of Findings

Introduction

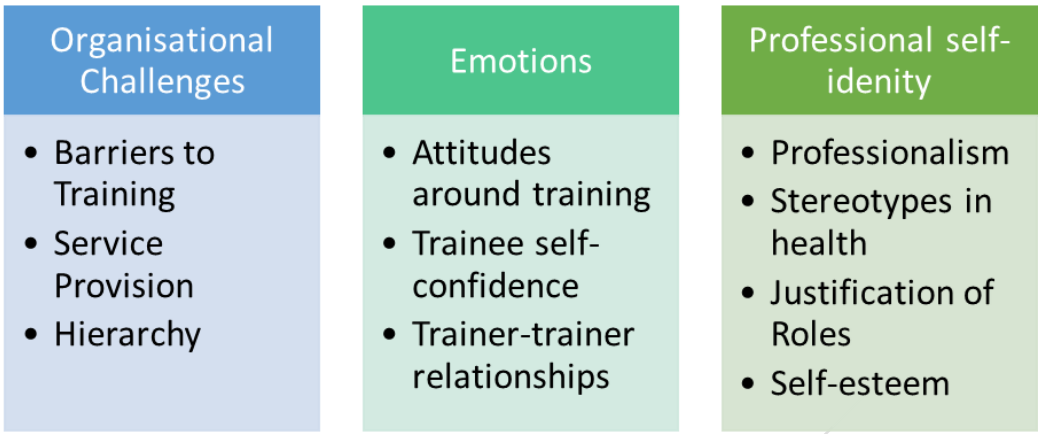
This discussion chapter will present and discuss the outcome of the research findings. This chapter requires that themes, sub-themes and understandings that emerged from the process of structural analysis are reflected upon and considered in relation to the literature and the research question, aim and objectives.

Within the previous Super-ordinate themes chapters there was a wide discussion of the findings which have been identified in this study. The quotes from the participant interviews are supported by aspects of the relevant literature. The focus of this chapter is to bring together the themes and illuminate the lived experience of endoscopy trainees and highlight their significance as to how this can impact on the training episode and subsequent learning.

The previous chapters identified that there are several factors that have a significant impact on the trainee's endoscopy experience. Many of these factors are outside the control of the trainee and were concentrated around the Super-ordinate themes of organisation barriers, trainee emotions and professional self-identity.

The aim of this research was to explore the lived experience of the endoscopy trainee. Through the methodology of Interpretative Phenomenological Analysis, three Super-ordinate themes were identified along with several Sub-ordinate themes. As a reminder the themes are outlined in the table below. When considered together, it is noted that these themes are not discrete, they are influenced by one another and are therefore interconnected.

DIAGRAM 9.1 SUPER-ORDINATE AND SUB-ORDINATE THEMES



By using other literature, theory and perspectives to develop understandings, the focus of this chapter is to explore those experiences that have influenced the endoscopy trainees' journey in more depth. This will enable drawing together the overall findings and discussion of the emergent theme's organisational challenges, trainee emotions and professional self-identity.

The key findings relate to factors beyond the trainee's own control such as time pressures, attitudes, service provision and factors which have a more psychological element such as confidence, self-esteem and professional identity.

It is clear that all the trainees irrelevant of their skills level, speciality or background profession seem to have had a very similar experience with the recollection of similar events. Aspects which are related to time pressures, culture and service provision appear to have a direct relationship to the trainee's psychological mindsets.

The chapter concludes with an overview of how the research has enhanced our understanding of the lived experience of the trainee endoscopist.

9.1 Re-engagement with the literature

Reflecting on the themes and sub themes that emerged as a result of analysis has allowed concepts to be identified that required further review in order to facilitate generation of a comprehensive understanding of the phenomenon. Re-engagement with the literature therefore included returning to the literature presented at contextualisation and the initial review stage (Chapter 2). It also included review of literature published subsequently which is pertinent to the findings. Additional theoretical areas were also explored that had not been revealed prior to the study but had emerged from the findings.

A nuanced approach to data analysis

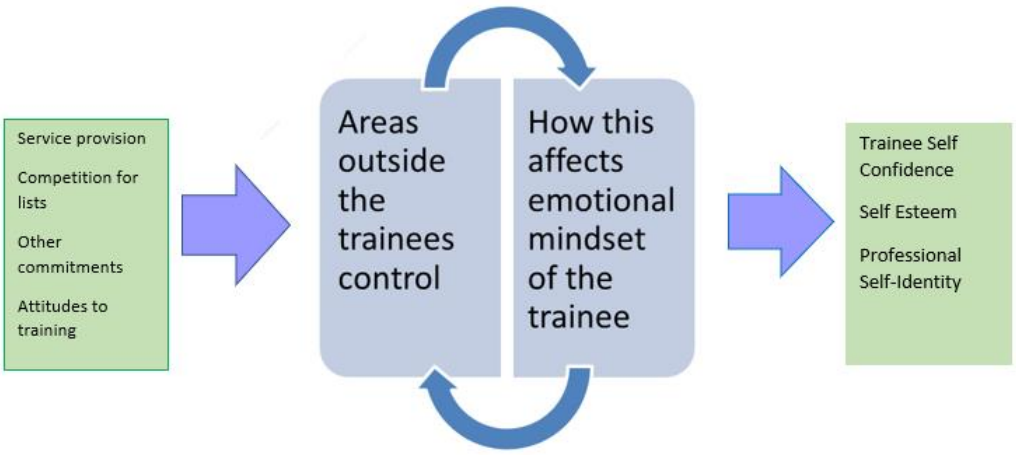
An important aspect of the research journey is to move back and forth through the data and the relevant literature. The subsequent writing of the thesis for me, has highlighted that the methodological standpoint of IPA has allow a deviation from a strict phenomenological view. While bracketing oneself from the data is an important concept in IPA as described earlier in the thesis, it is clear that my past experience as a nurse endoscopist, endoscopy trainer and now researcher has enabled me to develop insights which have contributed to the responses from the participant interviews. It is my belief that as I approach the end of this research project, my professional, academic and practical experience have led to responses I received at interview and the development of the key findings. Van Manen (2017) supports this view and suggests that as IPA has its origins in discursive psychology, a strict interpretative phenomenological approach is not necessarily adopted in IPA.

9.2 Summary of Key Findings

The main factors that become evident within this study can be divided into two groups, the first being areas outside the trainee's control and the second being the impact these events have on the trainee's emotions and mindsets, both of which seem to

have direct effect on the quality of training and the ability for learning to take place. These two groups will be discussed in turn in the following sections. Diagram 17 below illustrates how these factors are influenced by one another and therefore are interconnected.

DIAGRAM 9.2 INTERCONNECTION OF INFLUENCING FACTORS



Endoscopy training today appears to be somewhat haphazard with access to designated training lists dependent on several factors mainly revolving around organisational challenges such as service provision, availability and appropriateness of endoscopy lists. Radcliffe et al (2022) suggests that this can be one of the biggest barriers to a quality training episode and comments that endoscopy is facing significant challenges as departments balance the need for training and the demands for service delivery. The impact of Covid-19 is likely to also have an impact as services begin to return to pre-Covid levels and the need to effectively catch-up with surveillance produces which have been delayed during the pandemic. This was a feature that was evident both from the data and the trainee's experiences. The Super-ordinate theme of organisational challenges reflects many of these factors which

emerged and have significance to the trainees, this could include a positive culture of training which leads to a positive learning episode.

9.3 Areas outside the trainee's control

From the data, the trainees' learning experience seems directly linked to outside influences which contribute to difficulties with training. The trainees express in the interviews that many of the perceived issues which impact on training are directly related to occurrences which are beyond the control of trainee, for example service provision, organisation challenges, workforce issue or dedicated training lists. The data seems to suggest that these outside influences directly contribute to a positive or negative training experience. Therefore, the result is a somewhat haphazard approach to training with the experience varying from organisation to organisation depending on what measures and structures are in place to facilitate the training. Recent literature suggests that much work needs to be done around endoscopy training to ensure a more consistent approach. Clough, Fitzpatrick, Harvey, Morris (2019) conducted a survey to identify if the impact of the Shape of Training which aims to reduce quality gastroenterology training to be delivered in the shortened time frame from five to four years. They concluded that there would be significant barriers to delivering endoscopy training within the current five-year programme, therefore, the shortened training would need to have strategies in place to mitigate the time reduction. This would bring new challenges and barriers to training which are outside the trainee's control, for example, access to lists or competition for training. The reduction in time to train and the increased demand for service delivery, particularly following the impact of the global pandemic, is likely to create more challenges than ever before. While the impression would be that more procedures would be needed and potentially available for training, not all procedures are suitable for training lists due to case complexity or associated co-morbidities of the patient. It also needs to be considered that not all endoscopists are trainers and this would also impact of the

type of lists available. Careful planning will be required to ensure that the training needs of the individual are meet. At the time of writing, plans are in place to completely re-imagine training to introduce regional training academies and offer 'block training' or 'immersion training' at particular specialist units which would facilitate a more comprehensive training experience (Siau et al 2022). Such reimagining of training relates to the themes emerging from this study which that are concerned with organisational challenges.

Service provision

Service provision is one of the major issues identified by the participants in this doctoral research. The data collection took place in the months before the global pandemic, the impact of this on training has been previously discussed earlier in this chapter. However, endoscopy pre-Covid and in the post-Covid recovery phase is very much an over-stretched diagnostic service. Current literature suggests that 2.1 million endoscopic procedures are performed each year in the UK (Siau, Hayee, Gayam (2021). It is estimated that there are 5578 independent endoscopists with 1350 currently in training (Ravindran, Bassett, Shaw et al 2021). As we have already discussed in chapter 6, patients can be referred for procedures via different pathways and each require their procedures in a timely fashion. At the time of writing this chapter, the waiting times are changing to facilitate faster cancer diagnosis. Previously all patients who were referred for endoscopy with a suspected cancer needed to have the procedure performed within two weeks of the diagnosis. However, in spring 2022 a faster diagnosis standard, which is a new performance standard was introduced to ensure patients who are referred for a suspected cancer have a timely diagnosis. This means that patient will have a cancer confirmed or excluded within 28 days (DH 2019) This will replace the current standard which states that patients need to have a procedure performed within two week and a diagnosis made within 32 days (DH 2010).

Endoscopy training is performed on 'live' patients during scheduled lists. As per JAG guidelines (JAG 2020), dedicated training lists should have reduced amounts of patients to allow for optimum learning. In the UK this would be eight patients requiring gastroscopy or four patients requiring colonoscopy as opposed to a service list would have up to twelve gastroscopies or up to six colonoscopies. This reduction in patient numbers may have a significant impact and be detrimental to cancer targets. However, targets are not the only concern, and it is important to remember that there is a person – the patient - at the centre of endoscopy care pathway. This gives rise immediately to reasons opposing reduced number training lists (i.e. there may be a delayed diagnosis, creating suffering and anxiety for patients and potentially, therefore, shorten life expectancy for some) and highlights the need to ensure targets are met to provide training and the need to ensure targets are met. However, trainees still need to learn and new cohorts of endoscopists need to be trained and educated. The trainee endoscopists in this doctoral research highlight feelings of frustration over accessing dedicated training and they state that service provision is one of the major barriers. They appear to understand that service demand can outweigh service provision, which often means that training lists are the first list to be cancelled to ensure target breaches are prevented. The data illustrates the ongoing issue that endoscopy training continues to face significant challenges as departments balance the demands for service delivery with training. In a comprehensive review of endoscopy services in the UK, Shenbagaraj, Thomas-Gibson, Stebbing et al (2017) identified significant challenges in service provision and suggested that endoscopy services will need to continue to increase activity in order to meet the expected further rise in demand over the upcoming years. However, meeting increased workload should not be to the detriment of quality, safety or training. Balancing service provision and endoscopy training is a difficult issue and often, in my experience, training lists are the first thing to be cancelled if targets are not met. Rarely do endoscopy management teams seek to explore alternatives to cancellation of training lists as it

seems to be regarded as a ‘quick fix’. This obviously causes frustration and disappointment to the trainee. The trainees, of course, need to have their training but the patient has to come first in the pathway. In the data from this research there is a sense that this remains a conflict for the trainees as they are under pressure to meet their learning goals. Although not discussed as a topic in this research, it is worth considering simulation training as an alternative to hands on ‘live’ patient training. There are limitations to this method in endoscopy training, however it can be employed in conjunction with tradition training methods.

Appropriateness of lists

One of the issues highlighted by this doctoral research is that often the training lists are not always appropriate for training which reduces the quality of the learning episode. This means in simple terms having the appropriate procedures booked on each list.

According to Ratcliffe, Subramaniam, Ngu, McConnell, Beales, McCrudden, Smith & Wells (2020) the gold standard for endoscopy training is to have a least one adequately booked training list per week with the training occurring on a one-to-one, trainer-trainee basis. The reasons behind this can be multi-factorial, however, in general it revolves around service provision.

For successful learning, the endoscopy lists need to have the appropriate case mix on each list, otherwise this results in a reduction in the opportunities for training and this leads to frustration and disappointment as the lists are ineffectual for training. The data from this doctoral research suggests that lists are not always utilised appropriately for training and access to suitable lists remains an issue. This view is also supported in the literature. Ratcliff et al (2022) and Siau, Beales, Haycock et al (2022) also suggests that not only purpose-specific lists can improve skills acquisition

in endoscopy, but there is an improvement of pathology detection and a reduction in complications.

In many organisations endoscopy lists are booked by clerical staff with no understanding what the procedure involves. Their role is ensuring the lists are utilised fully to meet the service needs; however, this means training lists are at risk of having an inappropriate case mix, which reduces the learning opportunity as highlighted in this research. The trainee endoscopist relates in the interviews that often their training lists are populated by procedures which are either not suitable for training or a procedure which the trainee is already trained in, thus, effectively wasting the training episode. The trainees highlight the frustration they experience that this results in a reduction in the exposure of appropriate training procedures. This can be linked back to service provision and the notion that any available appointment is utilised whether it is appropriate for training or not. Having a designated clerical team who manage endoscopy booking will develop the added knowledge and skills to be able to understand the requirements or restrictions of each list. In my experience this can work very well to minimise patient cancellation and can utilise lists to the maximum capacity, thus giving the trainees lists with the appropriate case mix. Anecdotally this is known to improve access to training lists, however, there is no reference to this documented in the literature. A recent consensus review examining gastroscopy training conducted by JAG (Siau, Beales, Haycock et al 2022) highlighted that difficulty in providing training in some units is a problem. This can be due to the number of trainees and the sub-specialities. It is acknowledged that more equitable access to training and experiences is required. A potential model for establishing this would be to look to other specialties such as radiology and histopathology which have pioneered a more centralised academy-style training programme with organised training focused in one area, but with planned networked exposure in other units. At the time of writing this thesis, regional training academies will hopefully be established

as a fundamental aspect of endoscopy training which will provide equitable access to all trainees.

However, until this time, it is vital that endoscopy management have a fundamental understanding of each trainee's requirement and by having a designated endoscopy training lead this can facilitate more appropriate case booking of the training lists. This will not only improve access to training but will go some way to ensure the lists are utilised which will make sure training requirements are met and service provision is maximised.

Competition for training

Throughout my experience, endoscopy training has been regarded as a valuable and sought-after commodity, and with this in mind, competition for training lists is inevitable. The lists need to be shared with medical and non-medical endoscopists and each trainee is entitled to have the same access to lists, however this is not always the case. We can see from the data that there is a distinctive disconnect between the trainee's experience and their speciality. There is also a sense of entitlement between the trainees regarding who should have the priority access to lists.

The data describes that the gastroenterology trainees have the expectation that they should have more access to lists as endoscopy is a major aspect of their role, whereas the surgical trainees appear to be at a disadvantage as they have theatre commitments which competes with exposure to endoscopy training. It is well documented in the literature that the surgical trainees are at a disadvantage due to the added pressure of extra clinical commitments. A survey by Radcliffe et al (2022) demonstrated that there were ongoing concerns felt by surgical trainees as barriers to their training. Only 38.9% of surgical trainees who responded reported having access to one training list per week. This would be consistent with the data from this

research. In contrast, Radcliffe et al (2022) also found 70% of gastroenterology trainees who responded reported two or more scheduled endoscopy lists per week. Other barriers previously reported by surgical trainees include conflicting clinical obligations and prioritisation of gastroenterology or clinical endoscopist trainees for lists. This has implications for certification as significantly fewer surgical trainees achieve certification in OGD, colonoscopy and flexible sigmoidoscopy compared with gastroenterology trainees (Jones, Stylianides, Robertson et al 2015).

In an earlier study carried out by Patel, Ward and Cash et al (2019) which specifically examined the experience of surgical trainees' ability to access endoscopy training and draws similarities from my data, they found that 88.0% of higher surgical trainees reported that they faced barriers in gaining dedicated endoscopy training at their current hospital. Common reasons included lack of available training lists (77%), operative clinical commitments (59.3%), on call commitments (58.4%), clinic commitments (50%) and prioritisation of endoscopy lists for gastroenterology trainees (57.8%) or prioritisation of endoscopy nurses (35.6%). Interesting, 38.6% of respondents reported resistance from endoscopy departmental leads as a barrier to endoscopy training (Patel, Ward and Cash et al 2019). This issue of who takes precedence in lists may also be related to hierarchy or snobbery among specialties and professions - which is discussed later in the thesis.

It is envisaged that the introduction of regional training academies will hopefully address this issue and ensure endoscopy training is distributed more fairly by providing immersion-style training, which means the trainee will be released from their normal duties and have intensive training for a period of four or six weeks depending on chosen modalities, either gastroscopy or colonoscopy (Siau et al 2022).

In the data the medical (gastroenterologists and surgical) trainees are also jointly of the opinion that the Nurse Endoscopists have priority over both other groups of trainees. This disparity is also suggested in the literature, which proposes that Nurse

Endoscopists have more priority and consistent access to lists (Taylor, Ovens, Bhatt and Messenger 2016), (Patel et al 2019). This was mentioned several times during the interviews in this PhD, that the trainees believed that Nurse Endoscopists took priority in the training lists as it would be in the best interests of the organisation to train this group because they would remain in employment within the organisation, therefore once trained they would be able to deliver service lists to maintain service provision. The trainees rationalise this because the medical trainees leave the organisation following completion of their rotation and move on to another organisation, effectively the following organisation benefiting from the training. This would tend to be a common thread through many of the organisations. The pressure of the service provision and training in my personal experience seems to be a competing factor. However, training is a necessity to ensure upskilling of the future workforce. As things stand it is suggested that there are not enough endoscopists in training to replace those who will be retiring in the next ten years or so (Rutter 2022).

From the research data, the medical trainees are of the opinion that the Nurse Endoscopists in training have protected time in their timetables which allows unrestricted access to lists as they also do not have other additional commitments such as on call. To address the increasing demand for endoscopy services, many Nurse Endoscopists are training in a Health Education England (HEE) nationally accredited accelerated pathway, which means their training is delivered over a 30-week period for gastroscopy and 40 weeks for colonoscopy training. This means that Nurses Endoscopist completing this type of training must complete a minimum of two training lists per week, which is more than JAG and the medical deanery stipulations. Thus, medical trainees are left at a perceived disadvantage when it comes to fair access to lists.

Other commitments

The data in this doctoral study highlights that the trainees' other commitments and responsibilities have significant implications to the access to training. Part of the trainees' normal working responsibilities involves fulfilling commitments in other clinical areas. These areas differ for each clinical speciality, for example trainee gastroenterologists will have clinics in the outpatient department, on-call and ward responsibilities. They may also be required to attend other learning opportunities. Surgical trainees will have similar responsibilities, with the added pressure of surgical operating training and theatre sessions, not to mention sickness, annual leave or rest days following on-call or night duty. Providing adequate numbers of training lists can be a challenge for service providers. Organisations have an obligation to provide training opportunities to the speciality trainees ensuring learning requirements are met, therefore the balancing act between meeting service needs and training is an on-going issue.

Hierarchy

The data emphasises that hierarchy may also play a role in the success of training experiences and that this may be related to the endoscopy team and/or to professional or specialty relations. Hierarchical attitudes in healthcare organisations are well-explored in the literature. Ravindran, Matharoo, Coleman, Marshall, Healey, Penman, Thomas-Gibson (2020) discuss how it is important to minimise the idea of hierarchy in endoscopy. They suggest that team briefings familiarise team members with each other, allow task planning, and enhance communication. They also suggest that briefings can improve the quality of information sharing, promote accountability, empower team members, and provide a sense of team cohesion. They go on to describe that from a human factor's perspective, briefings can be invaluable in flattening hierarchy – reducing the 'authority gradient' between different staff groups

by encouraging contributions from all multidisciplinary team members, therefore, improving safety. Aveling, Stone, Sundt, Wright, Gino, Singer (2018) examine teamwork in relation to operating theatres which works as a close comparison to endoscopy. They suggest teamwork is also dependant on how conducive the context is to enacting different models of teamwork. In addition to the technical demands of a procedure, local culture may constrain or enable different behaviours. For instance, engrained hierarchical dynamics can suppress the ability of non-medical team members to speak out and lead (Matharoo et al 2020). Organisational policies and processes (eg handover practices) can also affect staff behaviours and their capacity to provide safe and effective care.

The data from this doctoral study suggests that the trainees' experiences of hierarchy can hamper the overall training experience. The quality of the training reported depends very much on the attitudes of the trainer and the staff within the procedure room. At this point it might be worth considering social hierarchy. It is an implicit or explicit rank order of individuals or groups with respect to valued social dimension. The words implicit and explicit are used to capture the range of awareness that people have and the hierarchies in which they are embedded. Western liberal societies are described by a mix of two contrasting ethical presuppositions, that which commences from a perspective that views persons as natural equals and that which commences from a perspective that classifies persons hieratically. Differences in this mix among separate policies may create difficulties as principles of justice are extended across national boundaries in response to continuing globalisation (Buchanan 2006).

Eich–Krohm et al (2016) explored the views of medical students and nurses of inter-professional education. The hierarchical order between nursing and medicine is well established, however these hierarchical differences were seen as a challenge by medical students and nurses in the study and were thought to hamper rather than enhance working relationships. It must be noted that this study took place in Germany

and not the UK and that working practices between both professions are slightly different. This research reflects a symbolic interactionist approach where the understanding of each of the groups placed on the issue of hierarchy between the two professional groups had different meaning and interpretation. This diversity of meaning may be due to the levels of establishment felt by the two 'professions' in that medicine is a long-term well-established profession within society whilst nursing is still fighting to be recognised as a profession. Thus, nurses may be more acutely aware of anything that implies that they are of lower status. This may go some way to explain the negative attitudes that occur around endoscopy training for nurses and which was highlighted by several of the participants.

Crowe, Clarke & Brugha (2017) conducted a qualitative study which explored the relationship between power and emotion and question how effective relations between senior and junior doctors are patterned on the hierarchical structure of medicine. Their study suggests that doctors are socialised to respect and reproduce hierarchy from the start of medical school, where they learn not to challenge authority. They found that while hierarchy was accepted as part of the medical structure, 21 participants highlighted how it could have a negative impact on more junior doctors. Crowe et al (2017) also found that considerable power was concentrated among consultants which could be limiting in its effects for more junior doctors. This study compares to the data in this research regarding the theme of hierarchy and the adverse effect hierarchy has on the training experience as it illuminates the ways in which the trainees in this study described. The Crowe et al (2017) study also highlights the issue of emotions – a theme arising from this PhD research which will be picked up on in detail later in this chapter.

Attitudes around training

In this section I will explore attitudes around training. This not only includes the attitudes of trainees and trainers but also the attitudes of nursing staff and management and administration staff who control allocation of lists both service and training. Firstly, the issues relating to management and administration attitudes regarding training will be addressed and then attitudes from other staff groups will be explored.

The experiences reported by participants in this doctoral study suggest that the challenges with training can occur even before the training commences. There are significant challenges for the trainees to have a list allocated, the reason for this is considered to be multi-factorial. The pressure of training means that the dedicated training lists have a reduced number of patients to allow for time for training and adequate feedback. However, this means that 1-2 patient appointment slots will be lost per list resulting in a reduction of available procedures for patients. With this in mind, it is understandable that endoscopy management need to maximise the number of appointments which are available to patients. In my organisation approximately 700 training lists are carried out each year resulting in a loss of either 2100 gastroscopies or 1050 colonoscopies per year compared to service lists. This can be cross-referenced to the Sub-ordinate theme of Appropriateness of Lists as there are similarities between some of the emergent themes.

From the data, one of the other issues that came to light relates to administration of the lists. Several of the trainees describe how the booking of patients on to training lists is sometimes inappropriate with patients being booked on who require a different procedure to that the trainees are learning. However, if one considers the number of appointments that are lost through training (because the numbers are fewer), the challenges in organising patient appointments are obvious. Therefore, it could be

argued that the trainees are effectively forgetting that their endoscopy training occurs on live patients who need to have procedures performed to exclude a potential cancer diagnosis. On the other hand, as training is so highly sought after, the frustration of the trainee can be appreciated if the lists are filled with inappropriate cases meaning the learning opportunity is lost. This frustration often leads to dissatisfaction regarding the whole learning experience and this frustration can be identified emerging from the data. Nevertheless, according to Radcliffe et al (2022) trainees feel they generally have a good training experience once they attend hands-on training. However, Radcliffe et al (2022) also found that the trainees highlight that aspects of negotiating the lists and appropriateness of case load can prove to be an added stress. This was mirrored in this doctoral research with the participants sharing a similar experience. Another factor with emerged from the data of this PhD research suggests that the attitudes of other staff groups such as nurses and healthcare assistants can have a negative impact on the training experience which in turn could affect their confidence. Many of the trainees in this research expressed experiencing negative attitudes from nursing staff but did not report any positive interactions directly with the nurses. The only positive interactions were those who had experience of training with Nurse Endoscopists.

The study by Eich-Krohm et al (2016) highlighted the views held by medical students relating to nursing, demonstrated that nursing is still perceived as a physician's assistance job and not as a profession in its own right and that the hierarchical order between nursing and medicine is well established. Eich-Krohm's study highlighted that the most important part of nursing is to 'help the physician in his daily quest' (Eich-Krohm 2016 p3) and that this perception hinders rather than helps inter-professional teamwork and informal learning interactions between the two groups. The data highlights that while the medical student perceives that the nurses are being obstructive, one could speculate that the trainees perceive that the nurses are in fact

in attendance for the trainee benefit rather than the nursing role to care for the patient. Ideally, as two principal members of the healthcare team, there should be a 'collaborative relationship' between doctors and nurses. This should include both groups working together in a true partnership, demonstrated by mutual understanding of roles and responsibilities, and shared mutually-derived clinical goals. However, the relationship between doctors and nurses has been shown to be often less than optimal, even at times confrontational (Fagin & Galelick 2004). A variety of factors have been offered to explain the doctor-nurse relationship, including misconceptions about the responsibilities and capabilities of nurses. Unfortunately, the literature on this subject is limited and somewhat dated, however, the data suggests that is an ongoing issue in current practice.

In a study performed by Weurlander, Lönn, Seeberger, Broberger, Hult, & Wernerson (2018) which examined undergraduate healthcare professionals' learning experiences it is suggested that learners have a dilemma about using patients for their own learning. The learners expressed feelings of guilt when using patients for their own learning, and they could relate to the patients' vulnerability in the situation. However, this was not apparent in the doctoral research reported in this thesis. This leads me to consider a certain amount of objectification occurs with both patient and team members and the 'training episode' becomes the absolute focus of the session. It could be argued that the episode is used as a vehicle to facilitate the learning journey purely to meet the needs of the trainee alone. It could be argued that this could be extended to the nursing staff in the treatment room. During the interviews several of the trainees discussed how they felt that the nursing teams didn't appreciate the role of the trainee and when the nurses suggested being 'late off duty' the trainee thought that this was to the detriment to their training, however, they fail to consider the needs to the nursing teams during the training episode.

9.4 How this affects the emotional mindset of the trainee

This section explores the areas which are to some extent within the trainee's control. These areas were highlighted in the data and expressed by the trainees as aspects which can be considered as physiological. IPA is particularly well placed to examine how people make sense of their life experiences. According to Smith et al (2009) the participant can begin to reflect on the significance of what is happening, and IPA research aims to engage with these reflections. So, an IPA researcher might be interested in looking in detail at how someone makes sense of these experiences.

Throughout the interviews the trainees illuded to emotional aspects such as confidence, self-esteem, professionalism, and inter-professional relationships and belonging. These areas were interpreted from the text and developed in to themes.

Objectification

While objectification is not a theme, however I felt it gives a context to the emotional mindset of the trainee and I felt worthy of discussion. Objectification is defined as viewing an individual or group solely as a depersonalised thing (or 'object') existing for the sole purpose of the viewer's wants and needs, without regard for the individual's or group's own agency. Objectification plays a major and necessary role in medicine, although, objectification can be problem in medicine as it can lead to poor medical practice or, in the worst case, dehumanisation of the patient (Svenaeus 2020).

Martha Nussbaum (1995, 257) has identified seven features that are involved in the idea of treating a person as an object:

- Instrumentality: the treatment of a person as a tool for the objectifier's purposes

- Denial of autonomy: the treatment of a person as lacking in autonomy and self-determination
- Inertness: the treatment of a person as lacking in agency, and perhaps also in activity
- Fungibility: the treatment of a person as interchangeable with other objects
- Violability: the treatment of a person as lacking in boundary-integrity
- Ownership: the treatment of a person as something that is owned by another (can be bought or sold)
- Denial of subjectivity: the treatment of a person as something whose experiences and feelings (if any) need not be considered.

Although Nussbaum's list relates to sexual objectification of women, parallels can be drawn in relation to objectification of the patient or the patient's body. The first item on the list refers to treating a person as a tool and this is the most problematic as far as morality is concerned. Treating people, or in this instance patients, as a mere means to an end, is the core of enlightenment ethics and famously conceptualized by Kant in 1755-1770 in his Practical Philosophy (Gregor 1996).

In the research there is an insinuation that the trainee 'needs' to have their training and primarily the session is to facilitate their training experience rather than deliver a service to the patient. This could be viewed as the patient becoming objectified and viewed mainly as a 'teaching tool' This objectification is further demonstrated in the data when the trainees discuss the inappropriateness of case or times nurses are due off duty. Therefore, the idea of objectification is not purely about the patient, but the nursing staff are also treated as an extension of the procedure which leads to unhappiness and disassociation amongst the teams.

Trainee self-confidence

One of the factors that emerged from this data relates to self-confidence. Trainee self-confidence is one of the subordinate themes which suggested the emergence of the Super-ordinate theme of “Emotion”. It seems to be apparent from the data that training to perform a complex skill such as endoscopy is indeed an emotional experience. This is an aspect which is affected by the training experience in general. Confidence is often regarded as a trait which is associated with successful individuals and doctors can be included in that group (Brooks 2005). As previously discussed, by the time a doctor commences endoscopy training they are already well established in their speciality and working as autonomous practitioners. Much of the literature suggests that confidence and competence in undertaking clinical tasks are important considerations in postgraduate medical training (Mason et al 2015). However, interestingly, Krautheim, Schmitz, Benze, et al (2017) in a study examining knowledge and confidence found that there is a distinct difference between the knowledge a doctor has to the self-confidence they feel. This could be described as self-efficacy which is an individual's belief in their capacity to act in the ways necessary to reach specific goals which was originally described by Bandura (1982). In the literature the nearest comparison for self-efficacy is in the field of education (Alt 2015). In relation to this doctoral research, the trainee endoscopists describe learning and motivation as a key element of developing self-efficacy. Dinther, Dochy and Segers (2011) suggest that the quality of the educational programme has the ability to enhance the learner’s self-efficacy. This is an interesting concept as we can see from the data that the trainees recognise that the quality of the training is crucial in the quality of their learning experience.

During medical training doctors are expected to develop many skills. They often find themselves pushing the limits of their individual comfort zones, attempting procedures

and tasks that they have not yet mastered. In order to deal with these potentially anxiety-provoking situations, the medical culture teaches them to develop self-confidence. In doing so, they can move beyond insecurities, with the hope that they will feel assured in their capabilities. However, from the data in this doctoral research, endoscopy training appears to cause trainees to feel less confident in their abilities. This may be due to the complexity of acquiring the skill of scope manipulation, pathology recognition and Endoscopy Non-Technical Skills (ENTS).

This could be directly relatable to competence, the process of skills acquisition related to endoscopy has been well-described and involves three major phases as described by Forbes et al (2016):

- The novice phase involves intense concentration to completely understand the activity and minimise mistakes
- The second phase is an evolution to a more fluid and less cognitively arduous step in which trainees begin to perform at an acceptable level
- The final phase involves a process of automation in which the skill is precisely and smoothly performed with little or no conscious cognitive involvement.

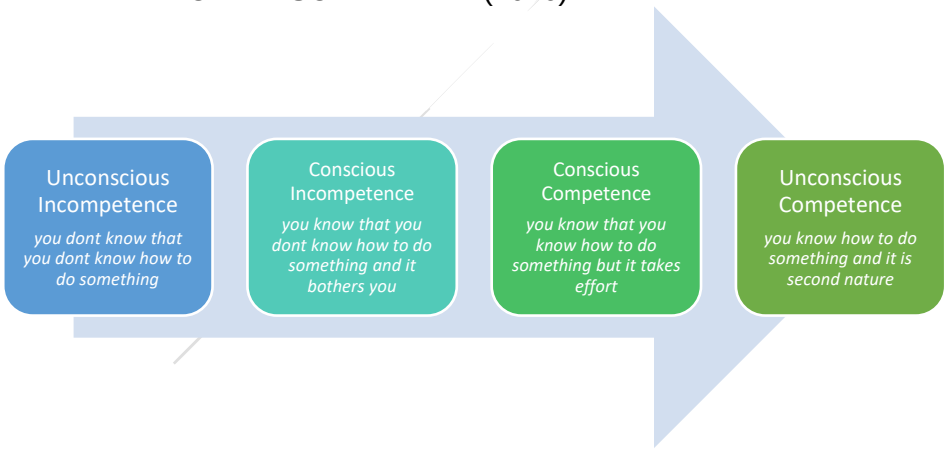
A novice endoscopist is required to perform several complex motor and sensory skills. These include scope manipulation, pathology recognition, verbal feedback from patient, nursing team and trainer, observation of the image on the monitor, understanding anatomy and all the while physically performing the procedure. Through time, experience and exposure the trainee will eventually acquire the competence to perform the procedure safely. However, the consequence of the learning curve and the exposure to all the stimuli can be added to cognitive load. Trainees in particular are vulnerable to cognitive (mental) load, which can be detrimental to endoscopy performance; these improve as skillsets develop. Cognitive load refers to the short-term ‘working memory’, which is the primary bottleneck for

learning (Siau, Hawkes and Dunkley 2018). This can be detrimental on trainee's self-confidence and limit quality learning and competence.

According to Siau et al (2018), competence in endoscopy is important as quality standards apply for all endoscopists, therefore, training programmes must set credentialing standards, which parallel key performance measures expected of independent practitioners, thus providing quality assurance which is necessary to safeguard patients.

Diagram 9.3 below demonstrates the process of endoscopy procedural skills acquisition and how the process of endoscopy can be taught.

DIAGRAM 9.3 PAYTON'S MODEL OF CONSCIOUS COMPETENCE ADAPTED FROM WASCHKE ET AL (2016)



In this doctoral research the trainees suggest how self-confidence can be improved by the support of nurses and skilled trainers. When the trainee received a boost of self-confidence their performance and learning opportunity appears to be significantly enhanced. From the data, the trainees explain that working with the Nurse Endoscopist can improve their confidence through the manner in which the NE

facilitates the training and feedback. They also describe how the NE allows them more time to problem-solve and is less likely to take over the procedure without a thorough explanation of the techniques they used to solve the problem. They describe the NE as being more patient and calmer while training and their use of simple language appears to be more conducive to the learning to perform the physical procedure. This would suggest that the training strategies used by the NE would help to reduce the cognitive load. This is in contrast to some medical trainers who take over the procedure and complete it without an explanation to the trainee. This means that the trainer would use skills and techniques to perform the procedure without imparting the required knowledge and skills required during this training episode to the trainee, thus leaving the trainees frustrated due to a failed learning episode. This was considered to be one of the areas which caused the trainee to lose confidence as they just feel demoralised and little learning has taken place at that time. However, this could be representative of trainer confidence or lack of training experience. As a result of unconscious competence, most endoscopists without formal training in teaching tend to teach others in the same way that they had been taught. Typically, they must take the endoscope out of the trainee's hands in order to demonstrate, either finding themselves unable to correctly explain in specific detail what is occurring or holding a strongly held misconception of what is actually occurring, as in this situation the trainer has an inability to verbalise to the trainee what is actually happening (Waschke et al 2016). This would suggest that the skills and competence of the trainer directly impacts of the trainee's own self confidence. Wells (2010) also makes the important point that in order to create the optimum learning environment trainers should demonstrate confidence in the trainee to give them self-belief. However, the trainer should have acquired the skills to be an effective trainer. With the standardisation of endoscopy training and Training the endoscopy Trainer courses this poor training should no longer be an issue. The literature reports over the last 12 years or so that it is essential to have specific skills in order to deliver

quality training (Wells 2010), Waschke et al 2016), (Siau et al 2018). The fact that this remains an issue today is of concern, and it would suggest that significant work still needs to be done with trainers to improve their skills and recognition that good quality training begins with a good quality trainer. This leads on to the following section which explores the trainer-trainee relationship. There is some overlap between this theme and the following section as each of the themes are interconnected and some point are inevitably related to each other. It has been identified that learner in medicine behaviours are influenced by the behaviours of their trainers (McNair et al 2016) Therefore, the trainee's self-confidence can be developed by the attitudes and behaviours of their trainers. Patient centeredness and a team approach to care have shown to be an important factor in the development of trainee confidence. Thus, as well considered training environment in endoscopy could go a long way to develop self-confidence and self-worth.

9.5 Inter-professional education - Nurse Endoscopists as trainers

The NHS is a complex organisation that employs many professional groups with the common goal of high-quality care provision and it makes sense to me that inter-professional learning is an effective method of developing education in healthcare today. Patient care is a complex activity which demands that health and social care professionals work together in an effective manner. The evidence suggests, however, that these professionals do not collaborate well together. Inter-professional education (IPE) offers a possible way to improve collaboration and patient care (Cooper, Spencer-Dawe, and Mclean 2005), (Hall 2005), (Reeves, Zwarenstein, Goldman, Barr, Freeth, Hammick, Koppel 2009).

The continued interest in IPE is unsurprising, given the increasing complexity of the organisation and delivery of healthcare. Various factors require a number of different health and social care professions to be involved in the delivery of care. As a result, the need for good inter-professional communication and collaboration to help

coordinate patient care in an effective manner is critical (World Health Organisation 2010). Despite this need, research indicates that such communication and collaboration can be problematic. Studies have shown that effective inter-professional collaboration can be undermined by boundary infringements, a lack of understanding of one another's roles, limited communication and poorly coordinated teamwork (George, Renjith and Renu 2015), (Pethybridge 2004), (Reeves 2004), Skjorshammer 2001), (Hall and Weaver 2001) However there is very little evidence to demonstrate the efficacy of nurses participating in medical education (Carpenter 1995), (Hall 2005).

The government's focus is on high quality care with choice, service improvement and personalised healthcare for all. The NHS plan (DH 2000), the Wanless report (2002) and the Darzi report (2008) all asserted the importance of how the NHS can accelerate the changes that frontline staff wish to make to meet those challenges, whilst continuing to raise standards to ultimately create a NHS that works in partnership and has quality of care at its heart. The recommendations are far reaching and suggest collaboration between the NHS, higher education providers and regulatory bodies to make education more flexible (Abu-Rish, Kim, Chole et al (2012).

These proposals have been vital in transforming the NHS workforce, with nurses playing a pivotal role. With this in mind nurses can be a valuable resource for medical education (Bluteau and Jackson 2009). Nurse education focuses largely on holistic patient care, however medical education has evolved to train doctors in clinical skills, theory, simulation, healthcare management and leadership in a 'spiral curriculum model' which develops attitudes, cognition and skills (Dent and Harden 2013). Work carried out by Cooper et al (2005) demonstrated that IPE enables the students to learn with and from each other; it significantly raised awareness about collaborative practice and it is linked to improving the effectiveness of care delivery. The qualitative data showed that it served to increase students' confidence in their own professional

identity and helped them to value difference, making them better prepared for clinical placement.

Nurses have been proven to be effective trainers in the context of inter-professional learning. It is accepted that Nurse Endoscopists can train to be endoscopy trainers and they regularly teach both medical and non-medical endoscopists. This data suggests that the NE is not only an effective trainer but they are often preferred to medical trainers. This is in the main due to the trainee and trainer relationships, their training style, patience and the ability to build trainee confidence. The literature about NE as the endoscopy trainer is limited, in fact I was unable to find any literature apart from a paper published by myself based on this doctoral research (Donnelly and Steven 2021). There appears to be a discrepancy as to what the Nurse Endoscopists can actually do and whether training other Nurse Endoscopists or medical trainees is allowed. From the interviews some of the participants suggested that Nurse Endoscopists could only train other Nurse Endoscopists and not medical trainees or they couldn't train any endoscopists at all. The data also suggests that there also appeared to be a north/south divide on the views regarding nurse endoscopists as trainers. From my personal knowledge and experience, Trusts in the Northern Region of the country (UK) tend to have a larger proportion of their endoscopists being Nurse Endoscopists. For example, in the Trust in which I work there are 16 Nurses Endoscopists performing a range of procedures. However, the data from this PhD research highlighted that in the larger teaching hospitals in the south of the country there are only maybe one or two fully accredited Nurse Endoscopists. However, without any literature to support this view it is difficult to understand if this has any significance to the context of this study. This is an area of research which could be explored as a post-doctoral study as there is a definite gap in current literature regarding this subject.

9.6 Trainer-trainee relationships

The trainee and trainer relationship are a crucial theme which emerged from the data and along with their impact, not only on the quality of the training but also on the levels of stress and anxiety a trainee can feel, this also has a direct relationship to the trainees feeling of self-worth.

Wells (2010) suggest that it is essential for a trainer to respect the individual needs of the trainee (Ref). He explains that most medical trainees who learn endoscopy are experienced professionals practising at a high level within their existing roles. Endoscopy is completely new to them and they suddenly become complete novices, therefore this can be intimidating. It is necessary for trainees to learn in a safe environment that acknowledges their potential anxieties and respects their professional standing. The trainer should have the ability to help create optimal learning atmosphere for the trainee.

It is well described in the literature how this relationship is pivotal to successful endoscopy training. Wells (2010) examined in some detail the implication of the trainee-trainer relationship. He described that the trainer is required to have specific attributes to be a successful trainer which are divided into six domains:

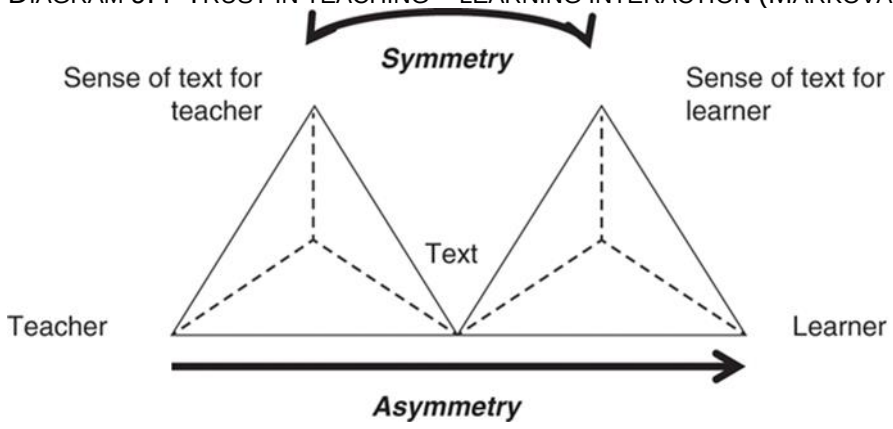
- Interpersonal attributes
- Endoscopy attributes
- Technical teaching attributes
- Developing as a teacher attribute
- Motivation to teach
- To be patient-centred.

These domains endure effective delivery of endoscopy teaching and ensuring excellence is maintained.

In contrast to this, the data highlighted that the attitudes of the trainer can have implications on the quality of training, the trainees expressed how some of the trainers were completely disinterested in the process of training resulting in a poor episode of learning and lack of safe working practices. Crowe et al (2017) found that within the trainee-trainer relationship, the junior doctors were relatively disempowered. It is suggested in the data that if a trainer fails to explain aspects of the procedure or interjects too early during the learning episode, the trainee is left with feeling of inadequacy and loss of confidence.

Trust between trainer and trainee is highlighted as key to successful learning outcomes. Epistemic trust is defined as the ability to appraise incoming information from the social world as accurate, reliable, and personally relevant, allowing for the information to be incorporated into existing knowledge domains.

DIAGRAM 9.4 TRUST IN TEACHING – LEARNING INTERACTION (MARKOVÁ 2016).



The above diagram (19) explores the relationship of the teacher and learner from a trust perspective, this highlights that the trust of the learner and that of the trainer is mutually dependant. Nevertheless, the data in this doctoral thesis demonstrates that this is not always the case. At some point in the training experience the trainees identified that some of the trainers failed to support the trainee. This left the trainees

feeling vulnerable and exposed. It must also be highlighted that this can be detrimental to safe and quality patient care.

Trust is fundamental to workplace-based learning in postgraduate medical education. For the trainee, trusting their trainer is essential for trainees to experience a safe learning environment. However, according to Bonnie et al (2020) factors involved in the process of trainees developing trust in their trainer still are poorly understood. As both trainer's trust in their trainee, as well as trainee's trust in their trainer play an important role in trainee learning and development, understanding the mutual trust relationship might help to optimise the learning outcomes for trainees.

Again, the literature is limited in examining trainee and trainer relationships in endoscopy. However, in a study conducted by Bonnie et al (2020) a focus group of GPs were studied to ascertain the development of trust between the trainee and the trainer. The results suggested that the process of gaining trust is a complex association. The foundation for the trust relationship between trainers and trainees begins by introducing trainers and trainees to each other before the start of a training period, therefore, a solid foundation for the trust relationship can be established. They also suggest that a long duration of a training relationship positively influences the trust relationship between trainers and trainees when compared with short-term training relationships. This is thought to improve trainee performance. This research resonates with the endoscopy trainees' experience in this doctoral research. By ensuring the trainees have consistent regular dedicated training lists with the same trainer, levels of trust can be developed and this could prove trainee experience and learning outcomes.

Given the hierarchical nature of the medical profession, relationships between trainees and trainers can be challenging. The reasons for this are multi-factorial, however one of the main reasons cited in the literature and by the trainees in this doctoral research, is related to the whole training placements. As they are on rotation

and move between posts, even different hospitals every 6-12 months, this means that both trainees and trainers need to build new relationships at fairly regular intervals (Mistry & Latoo 2008).

It is evident that there is a perceived power differential which can hamper the trainee-trainer relationship. This doctoral research suggests that the trainees feel a sense of apprehension when having endoscopy training from their lead consultant or educational supervisor. This scenario appears to give them an added anxiety, this may be due to the concern that their supervisor may be disappointed with the trainee's performance or as the trainer/supervisor has an evaluative function in relation to the trainee and therefore the potential for manipulation and trainee vulnerability in respect of the supervisor, is clear.

Although the trainer and trainee relationship is on the whole a positive one, there appears to be room for improvement. By ensuring all endoscopy trainers have attended a Training the Trainer course this will provide them with the tools required to teach endoscopy, thus, providing the trainees with a positive learning experience.

The following section seeks to explore the role of self-esteem in the trainees' lived experience and how it relates to this research.

9.7 Self-esteem

Self-esteem is one of the most widely studied constructs in the social sciences. Researchers have defined self-esteem variously as 'the extent to which an individual believes him or herself to be competent and worthy' (Naderi, Abdullah, Aizan, Sharir, Kumar 2009) and 'an individual's subjective evaluation of his or her worth as a person' (Bleidorn, Arsan, Denissen et al 2016). Self-esteem has been correlated with job success, school achievement, and general happiness. However, the literature regarding the study of self-esteem in relation to health professions is somewhat limited.

A recent study conducted by (Manne-Goehler et al 2020), examined gender differences in faculty advancement persist in academic medicine. They used the Rosenberg self-esteem scale, widely used in social-science research. It uses a scale of 0–30 where a score less than 15 may indicate a problematic low self-esteem. They demonstrated that overall the physicians had a high self-esteem score, however, they found that female physicians tended to have a lower self-esteem than their male counterparts. Research concerning self-esteem outside the field of medicine has demonstrated that outside of medicine men are significantly more likely than women to have higher self-esteem (Kling, Hyde, Showers, and Buswell, 1999). This research is important since higher self-esteem has been linked to greater academic achievement. While gender was not an aspect explored in this doctoral research it is worth considering related to self-esteem.

According to Marková (2018) a learner's inner dialogue arises from previous knowledge and experience, that is, from the 'personal culture', drawing on memory, past experiences and associations. This inner dialogue also arises from formal modes of learning to which the learner is exposed, that is, from what is socially and culturally acknowledged as knowledge.

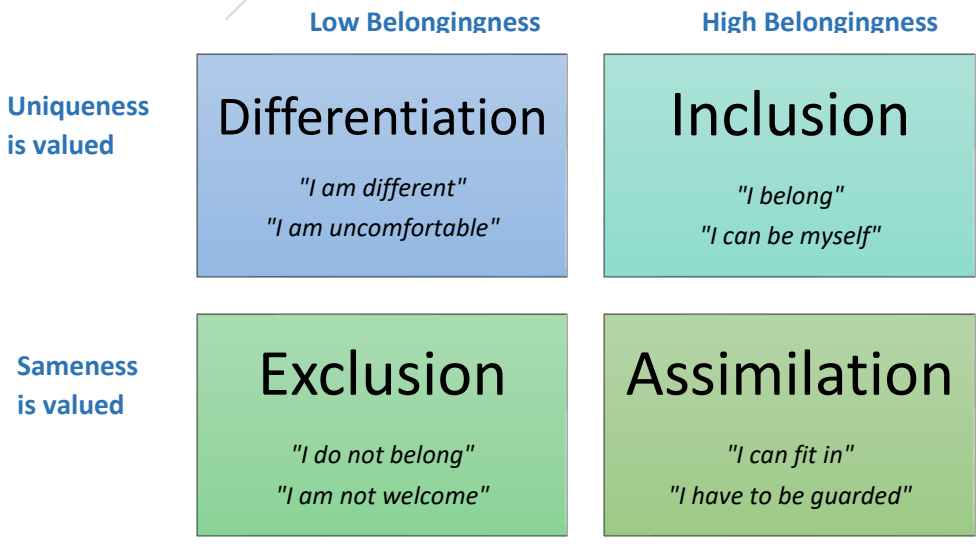
9.8 Belonging

According to Gadamer (1976), we belong to tradition, the historical and cultural traditions in which we participate orient us towards our world and form the basis for our assumptions and expectations about who that world works. Therefore, according to Gadamer belonging is very much part of our tradition and assumptions.

In the data from this there is a sense from the trainee endoscopists that they search for or there is a need for a sense of belonging. This could be to belong to the team or to have their role as a trainee valued. A lack of belongingness in the workplace has been associated with anxiety, job stress, and lack of esteem, particularly among

healthcare workers (Aljondi et al 2022). Therefore, social integration in the work environment should be acknowledged and experienced by healthcare members and colleagues in the clinical setting (Mohamed, Newton, & McKenna 2014). It is considered that the feeling of belongingness in healthcare professionals is essential to ensure an improved quality of care. A study carried out by Aljondi et at (2022) which was conducted in a radiology department offers a close comparison to an endoscopy unit as they are both diagnostic departments with close multi- professional working. The study highlighted the healthcare professionals' feeling of belonging to their work environment which is considered one of the most critical healthcare organisations' responsibilities to provide the highest quality of medical care. This work also mirrors what Mohamed et al (2014) found in their study examining belongingness in nurses. It is suggested that the concept of job belongingness among healthcare was associated with professional, social, and administrative strategies that surrounded the notion of acceptance from colleagues and other healthcare members in the organization. While neither of the studies describes the experience of trainees specifically I feel that it is relatable to the finding in this doctoral research. Diagram 9.5 below gives a visual representation of belonging and the expectation is that each person needs to aim for the top right-hand box of 'inclusion'.

DIAGRAM 9.5 A FRAMEWORK FOR BELONGING SHAW (2019)



Although belongingness is not reported as a Super-ordinate theme or Sub-ordinate theme, I feel it offers an insight into the emotional aspects of the trainee's experience and how it contributes to self-esteem, confidence, wellbeing and ultimately patient care.

The following section explores professionalism, how it develops during training and its relationship to the trainee endoscopists experience.

9.9 Professionalism

Professionalism in healthcare is a key issue and is described as the set of values and virtues espoused by the profession including universally accepted core values such as competence, compassion and integrity (Martimianakis, Maniate & Hodges 2009).

Wagner et al (2007) conducted a qualitative study to understand the meaning of professionalism from the perspective of medical students, academic faculty, and patients. In this study recurring themes of knowledge and technical skills, patient relationships, and character virtues were found. The definition that resulted focused on the value of skilled professionals, supported within effective relationships (Wagner et al. 2007).

According to Owens, Singh and Cribb (2019) the very existence of professionalism depends upon complex sets of social conditions being put in place and maintained. Professionalism is both an expression of individual capability and in social organisation both are required.

Professional roles are always constructed by and executed within particular social conditions and relationships. In the case of this doctoral research this would be in the context of the professional role between the trainee, trainer, nursing staff and the patient. To some extent the data demonstrates that some of these professional roles are not regarded with integrity, for example when the nursing staff make comments to the trainee endoscopist on list delays and finishing work on time. It could be argued

that part of the demand of a profession is that a healthcare professional can take individual responsibility and be worthy of trust and capable of exercising leadership, but also they still gain their bearings and legitimacy from their professional role.

Following an extensive literature review there seems to be a lack of consensus as the best method to teach the importance of professionalism in healthcare education (Birden et al 2013).

9.10 Stereotypes in Health

Stereotypes in healthcare and in particular between doctors and nurses are still prevalent. A study by Lee-Flicek (2012) identifies nurses and physicians as key members of the healthcare team. Many studies show a breakdown in nurse-physician communication which remains a concern. Physicians and nurses during pre-registration training contrast greatly and that this has been an important element in communication breakdown between the two professions (Dixon et al 2006). This study identified that during the pre-registration education stages for both professions, emphasis is placed on their individual roles in patient care. The lack of inter-professional education experiences involving the two professions can possibly lead to a lack of understanding of what each profession contributes to the interdisciplinary healthcare team, and this in turn complicates communication between nurses and doctors. This can be frequently seen throughout the data as the trainees describe the 'nurses' as almost a separate entity as opposed to a key member of the endoscopy team. This would also tie in with the stereotyping of the nurses' role and the medical/doctors' role and the lack of understanding regarding the roles and responsibilities of each person's profession.

Robinson et al (2010 p 214) noted nurses believe doctors do not view them as professionals but simply 'purveyors of tasks'. Nurses attribute this belief to their awareness that doctors are not always knowledgeable about nurses' scope of

practice and the autonomy nurses have gained. This could be pertinent to advance practice nurses like Nurse Endoscopists. According to Dixon et al (2006 p377), doctors' express frustration with nurses' communication style, describing it as '*disorganisation of information, illogical flow of content, lack of preparation to answer questions, inclusion of extraneous or irrelevant information, and delay in getting to the point'*. Clearly, each professional group perceives the other to be the main culprit in communication breakdown. Research suggests that doctors must be more aware of the scope of the practice and knowledge nurses can contribute to patient care. Likewise, nurses must provide information in a timely and accurate manner and understand the unique problem-solving process used by doctors. Tan et al (2017) identify that due to discipline-specific or workplace-embedded cultures and practices still common today, effective nurse–doctor communication remains a challenge. It could therefore be suggested that current interventions only address information needs of nurses and doctors in limited situations and specific settings but cannot sufficiently address the wider inter-professional communication skills that are lacking in practice. The data in this doctoral research could suggest that doctors and nurses would benefit from a better understanding of each other's role and how each professional group needs to support each other during endoscopy training. This view is supported in the literature, West et al. (2004) concluded that clear professional roles are essential, and that team members may benefit from a comprehensive understanding of not only their own role but also the professional roles of their colleagues. By understanding the nursing and endoscopists' role, it could lead to better cohesion with the development of an improved inter-professional relationship. It could be suggested that if the endoscopy nurses are more actively involved in the training process on a more formal level, for example, assisting on training courses, this may lead to a better practical understanding of the challenges the trainees face. Similarly, it could also help the trainees gain an insight into the requirements of the nursing role and the functional management of an endoscopy department. This

section links into how the trainees feel they sometimes need to almost justify their role and justify their position as an endoscopy trainee.

9.11 Justification of Roles

The idea of the trainees having to justify their role and position to be eligible for endoscopy training can be unravelled from the data in this research.

It has already been discussed previously and to some extent in this chapter, that the trainee will be skilled practitioners in their own right. However, the complexity of endoscopy training means that they will start as a complete novice. The trainees can be very accomplished in their current role as doctors or senior nurses, they could be considered as experts. Expertise is described in the literature as the formation of an individual accomplishment along a stage-based and linear trajectory of development. This is often described as 'mastery' (Guile and Unwin 2020). This expertise in one area is often not transferrable to endoscopy training. Endoscopy training is highly sought after and becoming an endoscopy trainee is a major stage in developing a role as specialist trainee. For many trainees, success at endoscopy training is essential for progression to their chosen speciality so it is vital for the trainee to achieve the required level of training, otherwise promotion and completion of speciality training may be delayed.

It has already been discussed that endoscopy training is complex, with various skills which need to be learnt and refined in order to become a competent endoscopist. From the data, the trainees suggest that their position as a trainee endoscopist is an entitlement and to some extent different specialities such as gastroenterology, surgical and Nurse Endoscopist trainees take precedence over each other and who should receive the training as a priority. There was even the insinuation of the perceived rivalry of surgeons and physicians.

9.12 Research question

According to Creswell (2014) the purpose of the research question is to define the research aim and objectives and will outline the specific areas that the research will address. During the course of the study the focus of the research changed. In the early stages the original research question concerned itself with examining the lived experiences of endoscopy trainees and the perceptions of Nurse Endoscopists as trainers. However, upon data analysis the focus shifted to examining the lived experience of the endoscopy trainee. The focus of the question changed due to the emergence of themes from the data and to be true to the research and the data the question needed to be revised.

The research question in its original form was:

'What are the lived experiences of endoscopy trainees and how do they perceive nurse endoscopists as trainers?'

However, as the study moved into the data collection phase I was limited by the participants who attended the basic skills course as many of the trainees had no exposure to Nurse Endoscopists. In my naivety I had assumed that most hospitals in the UK had a number of Nurse Endoscopists on their workforce, however this was not always the case. Another issue was that at least three of the participants had been working in Europe where Nurse Endoscopists are not featured at all in countries like Greece, Poland and Italy with limited exposure in Finland, Denmark and Germany with endoscopy firmly a medical-only role and in Greece the role for a gastroenterologist only.

Staying true to the data the research question has evolved into:

'What is the lived experience of the endoscopy trainee and what are the perceived challenges in training?'

I feel this new research question is much more authentic and in keeping with the data.

Review of the research aim

The aim of the research is to examine the experience of trainee endoscopists and to explore specific themes that the trainees consider important. The intention of the research is to investigate the lived experience of the trainee undergoing skills-based endoscopy training as a window onto the experience of being a trainee endoscopist. My intention was to understand the perception of roles and the experience of the trainee endoscopist. It is my belief that the aim of this doctoral research has been achieved. Interpretative Phenomenological Analysis as my chosen methodology provided me with the tools to allow the trainee endoscopist to tell their story and share their personal, lived experience of endoscopy training within the NHS. Through the application of hermeneutics, the interpretation of the findings from the interviews was contextualised in the body of this research thesis.

Review of the research objectives

Following the review of the research question and aims, during the data analysis phase of the research, further objectives were developed to be more in keeping with the research data. These objectives are outlined below:

1. To gain insight into endoscopy training
2. To develop an understanding of how trainers, influence endoscopy training experience
3. To develop an understanding of the trainee's view of their own endoscopy training experience

4. To gain insight into the perception of Nurse Endoscopists as endoscopy trainers.

Overall, therefore, the objectives of this research have been achieved. The objectives were achieved through the critical evaluation of the literature and analysis of the participant interviews which highlighted the lived experience of the trainee. Through a detailed background in the methodology chapter and the analysis of findings from the IPA studies, it has been demonstrated that the methodology can be applied to this research examining the training experience. An evaluation of the themes developed from the IPA study demonstrated that the influences of endoscopy training and the pressures and expectations of the trainee endoscopists can shape the trainee's perception of endoscopy training.

Interpretation of results

While each of the trainee's experience is completely unique through the very essence of being an individual, the resulting findings highlight a number of interrelated issues that influence their personal perspective of the training journey.

9.13 Limitations of the study

Limitations of the research need to be considered within the context they have been presented. The first limitation relates to the non-generalisability of findings of qualitative research. The interpretive paradigm was chosen to inform this research because of its suitability with the research aims. Like many methodologies, IPA has faced some criticism. One of the reasons I choose IPA as a methodology is for its ambiguous nature but flexibility is considered one of the major drawbacks for IPA. It is my view that IPA offers a flexible and versatile approach to understanding individuals' lived experience and in the instance of this research provided the trainee endoscopists with a voice to share their narrative. However, Tuffour (2017) suggests that it has been shown that even in the presence of solid philosophical foundation;

many IPA studies are still conducted badly. Tuffour (2017) also argues that that IPA is fundamentally a subjective research approach, therefore, two analysts working with the same data may come up with different interpretations. However, this could be said for many different methodologies in qualitative paradigm. Dibley, Dickerson, Duffy and Vandermause (2020), suggest that IPA is a point of confusion for novice phenomenological researchers as IPA can be confused with a method for analysing phenomenological data rather than a methodology in its own right. However, I found the structured approach to exploring the lived experience as a useful aspect for the practice implementation of the methodology.

It was hoped that the participants in the research would be a good mix of medical and Nurse Endoscopists, however, due to the participants for the research being selected on various courses on two different occasions, I had no control over the professional background of each of the participants. Therefore, the majority of the participants interviewed were medical endoscopists. However, I do not feel this has distracted from the quality of this doctoral research as I feel the research has illuminated some powerful themes relating to the trainee endoscopists lived experience. I am also of the opinion that using IPA to explore the lived experience of the trainee nurse endoscopist could form the basis of a further study sometime in the future.

Limitations, Strengths and Weakness of the Research

From a methodological point of view, I have already discussed the limitations of IPA and the chosen sample group, however in this section I would like to expand on this further from a more personal perspective. I will explore what limitations have surfaced throughout the study and I aim to 'un-pick' my decision-making process. This will also serve to provide the study with a reflexive approach.

As phenomenological researcher my intention is to seek to investigate the lived experiences of people while suspending my preconceived assumptions and biases.

Therefore, a key strength of this research is the reflexive and iterative approach employed throughout each stage of the research process. According to Smith and Nizza (2022) researcher reflexivity implies being aware of our own opinions and feelings in relation to the research in an attempt to examine the researcher influence on the research outcomes. This is considered to be an integral part of the IPA research journey and the keeping of a research journal is recommended. For me, my research journal was a key aspect of my phenomenological standpoint which assisted not only in the reflexivity of the research but it allowed a constant process of reflection to be employed at every stage of the study.

As with any doctoral research project the initial proposal continued to evolve throughout the whole study. Significant and reflexive consideration was also given to the process of data analysis. During the data analysis phase of the study the emerging data suggested a need to evolve the research question further in a response to the authentic nature of the data. This demonstrated the true reflexive nature of the chosen methodology, furthermore, the inductive and iterative nature of the research also gives confidence that an understanding of the phenomenon emerged from the trainee endoscopists lived experience as opposed to being imposed by myself.

In IPA in-depth interviews are the extemporary method for data collection as it is considered to elicit the most detailed, first person narrative. However, Smith et al (2009) suggest that under certain circumstances other approaches could be employed. With this in mind I chose to include a participant observation to enrich the semi-structured interviews. The participant observation was employed as a method to gain more information to help inform the questions in the interviews to encourage the participants to share stories, experiences, thoughts and feelings. While the observation provided a context to the study and interviews it yielded very little in terms of a method for data collection. While IPA offers a structured approach Smith et al

(2009) propose that there is room within the methodology for flexibility in choosing data collection methods. On reflection, I feel that the time set aside for the participant observation could have been better served elsewhere in the research project.

When exploring the literature around trainee endoscopist experience, it was clear that in recent years research had been conducted to explore the trainees' experience. The research was mainly questionnaire or survey based with the results presented statistically in a very much medical-centred model. While this information is vital to stakeholder and policy makers in planning training and services, in my mind it failed to address the real-world experience which truly impacted on the trainee endoscopists own personal narrative. Therefore, one of the key strengths to this doctoral research is the truly qualitative nature of the research and the presentation of Super-ordinate and Sub-ordinate themes which emerged from the data analysis. These themes demonstrate that the goal of hermeneutic phenomenology is interpretation and through extensive reading and re-reading the data the meaning emerges. From a Heideggerian perspective, we are being-in-the-world; this means we understand our situation around us and we cannot separate ourselves from that world in which we inhabit. Therefore, for this doctoral research and its underpinning philosophy, I am seeking meaning and understanding of a phenomenon (endoscopy training) as it presents itself to the person that experiences the phenomenon (the trainee endoscopist). Thus, I believe offering a unique piece of research to the academic arena and the field of endoscopy education and training.

One of the noted weaknesses of phenomenological research is reproducibility. Replication of a study based on constructionist principles in this context will always be difficult, as dialogues cannot be taken to mean an accurate description of any experience. The interpretations detailed in this study represent a unique participant perspective, and one that cannot be recaptured (Crotty 1998). As IPA has a strong ideographic focus and as the interest is to understand particular people in particular

experience in particular circumstances the belief that this is best achieved through focusing on individual cases and make comparisons between each case would suggest that IPA studies are nor easily reproducible (Smith and Nizza 2020).

IPA is considered to be very time-consuming and as a result can be a barrier to this as a choice of methodology, for example, producing a verbatim transcript for each interview. This was a very time-consuming aspect of the research; however, I fully did not appreciate the extent of time required for this activity. Nevertheless, the activity was beneficial in that it gave me the opportunity to be immersed in the data which I found was a very valuable aspect of the journey. By reading the transcriptions and listening to the voice of each participant I felt a connection with the data which I may not otherwise have had. While there is an option to use a transcribing service or tool, Smith et al (2009) and Smith and Nizza (2020) advocate the value of the researcher transcribing their own data and this can be particularly useful for a novice researcher. Transcribing allows the researcher to become familiar with the data and also to review the interviewing technique.

This research has highlighted gaps in the literature regarding the experience of the trainee endoscopist. It also suggests that further work is required to expand on this area further. I believe that using IPA as a methodology has allow the trainee endoscopist voice to be heard in a way which illuminates the true, real world, lived experience. I believe this uniqueness is the major strength of this doctoral research as it can provide an insight for other trainees, trainers, educators and stakeholders as to which areas for improvement need to prioritised.

9.14 Contribution to knowledge

Modes of delivery of endoscopy training are changing. Over the period of this doctoral study regional endoscopy training academies will be established in autumn 2022. Only time will tell of the efficacy of these developments of endoscopy training.

With this in mind the completion of this work is very timely and will be of interest to the stakeholders involved in the academy's development. From an extensive literature review, most research examining the trainees' experience to date has been questionnaire-based and not truly qualitative in nature and it has not strictly examined and unpicked the trainees' lived experience of their endoscopy training. This doctoral research would appear the only work of this kind conducted by a nurse in this field as other research tends to be medically focused. To date the only piece of work found in a literature search is in fact my own work which describes the initial findings of my research (Donnelly and Steven 2021).

This doctoral research will provide an insight to the lived experience of endoscopy training, as a phenomenological researcher. Bracketing my own biases has allowed me to examine the trainees' experience from a unique perspective. This work has demonstrated various aspects of the trainee endoscopists' experience which has had a significant impact on their learning journey. Some of the findings identified may not have been previously considered as a barrier to endoscopy training. Most of the literature examines the trainees' experience related to organisational barriers, service provision, access to lists and competing commitments. However, this work also focuses on areas which are beyond the trainee's control and highlight areas such as professional identity, self-esteem, stereotypes, attitudes and confidence.

The chosen methodology of IPA has been applied to this field of study thus giving a voice to the trainee endoscopists to share their lived experience and providing the rich narrative dialogue which is so important in IPA. The development of the Super-ordinate and Sub-ordinate themes highlighted some interesting perspectives which were both expected and unexpected. It is my intention that this doctoral research will be used to help understand the complexities of the endoscopy training experience and the findings of this doctoral research could be used to influence future delivery of endoscopist training.

During the period of this study I have raised my national profile and I am part of various committees with a responsibility for producing consensus and guidelines which influence aspects of endoscopy practice. My expectation would be that this doctoral research will contribute to the production of these guidelines and will give me the opportunity to use my acquired knowledge and expertise to provide insight and opinion.

As a nurse by background, it is my intention that this research will contribute to the nursing academic arena of advanced nursing practice, the role and practice of the nurse endoscopist and also nursing research. IPA is a methodology which is emerging in nursing research and I hope this work will be added to the increasing body of literature which has successfully applied this methodology in examining the lived experience of a particular group of individuals. While IPA in nursing is usually a methodology used to examine the lived experience of individuals with long term conditions or health issues, my research has used IPA to examine the lived experience of healthcare professionals, which is an innovative interpretation of the methodology, thus demonstrating to other allied healthcare professionals that IPA as a methodology can pertain to the experiences of professionals in various contexts including in the healthcare environment.

This research will also add to the group of work relating to inter-professional leaning and education as well as inter-professional working. Endoscopy is a speciality in which team working is essential for successful patient care, with this in mind the work contained in this doctoral thesis is very transferable to other speciality teams such as theatres, critical care and other allied healthcare professionals.

Overall, I feel this doctoral research will have an impact on the delivery of future endoscopy training not only locally within my organisation but also throughout the region through the Northern Region Training Academy but also on a national and

international agenda through my membership on various National and European committees.

Strategic framing of what the thesis has contributed to the field

As can be identified from the data and the emergence of the super and sub ordinate themes, there are key areas which can cause barriers for the trainee endoscopist. It could be argued that these challenges are not only related to endoscopy but are also common to learning related to many other fields of medicine. Therefore, the recommendations drawn from this doctoral research could be transferable and translatable to other fields of post graduate medical education.

One of the key elements which emerged is that learning endoscopy is an emotional experience. In the interviews the trainees shared their personal experiences which have impacted on their own learning experience. This research has demonstrated that emotional impact of learning to perform endoscopy should not be underestimated as illustrated in the following quotes.

like I felt as a trainee you are always slowing the list down (Interview E)

comments make the room makes it not a very nice environment to work in if you do run late for unforeseen circumstances. (Interview G)

Balance between doing the endoscopies we need to do and being trained I would wish I had more time so I can get more time without having that much time pressure (interview J)

From some of the quotes above which have been extracted from the transcripts, several of the participants highlight how this emotional experience can impact on the quality of the training delivered, and cause an impact on self-esteem. According to Maslow's hierarchy of needs regarding the most basic needs of safety learners need to feel secure in the learning environment to be able to learn and to flourish

without significant barriers such as other commitments, time and attitudes of others. They must feel at ease and safe to questions or raise concerns, without the fear of being reprimanded by their trainer or judged by their peers or team members (Steven et al 2022,2014, Allan et al 2020). It would appear that this is well described in the nursing literature, however, less so relating to medication education. Steven et al (2022) suggests that nursing students deserve to be educated in the clinical setting with a high-quality learning environment. The learner needs to have exposure to positive role models and a safe blame free educational environment that enables the learner to feel 'emotionally safe'. However, I would propose that this is very much a similar requirement to medical education and as this doctoral research has indicated that the emotional aspect of learning endoscopy is a significant factor in poor learning experiences.

A sense of order and routine is essential to empower a learner to feel assured and confident in the quality of the learning episode about to be delivered. Therefore, the expectation is that each training list should be delivered in as similar a way as possible within the constraints of clinical practice, ensuring consistency for the learner.

Maslow's hierarchy also describes self-esteem as a need which encompass confidence, strength, self-belief, personal and social acceptance, and respect from others. These needs are represented as one of the key stages in achieving contentedness or self-actualization. The participants describe feelings of anxiety, stress and loss of confidence as a direct result of the learning experience. The quote below explores how the learner's emotional feelings impact on the training experience.

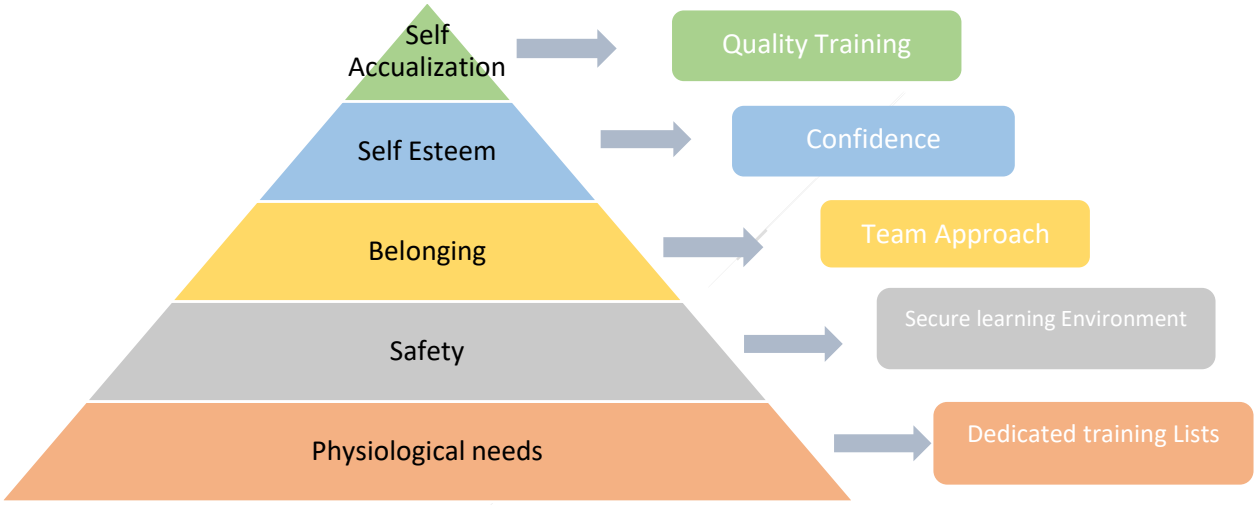
"I think when I am more relaxed my technique is a bit better and things do go a bit smoother than when you are a bit stressed and having a bit of tension around you so definitely it does have an effect on the trainee". (Interview C)

This doctoral research demonstrates that learning endoscopy is a process which takes the learner through stages which can be aligned to aspects of Maslow's Hierarchy of needs. It appears that in current practice, endoscopy training is lacking this type of consideration in the current curriculum, not only in endoscopy education, but perhaps in medical education in general.

It has been established the learning endoscopy is a complex and emotional experience. In the current literature it is accepted that feedback is an essential tool in endoscopy training (Radcliffe et al 2021). Feedback can be helpful or detrimental depending on the quality, timing, quantity, content, valence, and manner in which it is given. Furthermore, endoscopy requires multiple technical and nontechnical skills that require different types of feedback. Trainers may feel most comfortable providing feedback on technical skills, yet the teaching of nontechnical skills is equally important (Dilly and Sewell 2017).

While feedback is an essential aspect of learning, I would argue that feedback on performance alone is not enough and that reflection should be incorporated as necessary element of the trainee/trainer relationship. Reflection is considered a critical component of learning in graduate medical education (GME). By reflecting on experiences, doctors develop self-regulated learning skills that can lead to enhanced competence, humanism, and professionalism. Following a review of the literature, theory supports reflection as a means to advance knowledge, guide future learning, deepen understanding of complex concepts, and explore emotionally challenging situations. The process of reflection is well described in the nursing literature (Steven et al 2020). However, the impact of reflection on medical trainees and its most effective use in GME remain unclear. Winkel, Yingling, Jones and Nicholson (2017) conducted a systematic review which revealed a small body of relevant literature that supports reflection as a practice that can be developed, a tool that can clarify professional values and build community, and a way to help learners

process complex subject matter. With this in mind I would suggest that reflection should be considered as a process to support and enhance the endoscopy training curriculum.



(Diagram 9.6 The diagram above illustrates the possible relationship between Maslow's Hierarchy of Needs and the emotional experience of learning endoscopy

9.15 Recommendations for implementation and future research

I believe the completion of this research to be very timely. Healthcare is under a huge amount of pressure and service demand in departments like endoscopy is outweighing service provision. Workforce provision is of paramount importance not only in endoscopy but is many specialities in the NHS. In summary suggestions for research, practice, education and policy are outlined as follows:

Research

On reflection there are several areas in which I feel that further research could be developed. The writing of this doctoral thesis has highlighted some further questions which would benefit from further exploration. This research has focused on the trainees' lived experience of endoscopy training, however, as I have already discussed I feel further research examining the lived experience of the trainee Nurse Endoscopist would be insightful and an interesting comparison to this study.

I also feel an interesting follow-up piece of work would be to examine the trainers' experience as this has not been explored in detail in this research or any other studies accessed in the literature review. This doctoral research has highlighted that there could be a further piece of work which examines trainers' lived experience and it would be interesting to contrast the two studies. The findings from that research could prove to be enlightening and also offer a significant contribution to the academic arena. Future research could also be investigated to examine the role of the Nurse Endoscopists as trainer and their personal experience in relation to attitudes and assumptions around being a nurse trainer. This would be something I would be interested to explore as a post-doctoral study in the future. I feel a piece of research such as this would have a significant impact on developing the role of the Nurse Endoscopist as a trainer on a national level as there are various perceptions of this role within the endoscopy speciality.

Education

Training healthcare professionals to perform advanced diagnostic procedure is certainly not new, however the rate at which training needs to be completed is of primary importance to service providers. This thesis can help assist educational leads and programme developers to consider the themes which have emerged when

planning training courses with the emphasis on quality training. The findings as described in this doctoral thesis, I believe, can help support improvement of access to endoscopy training in the clinical setting and to some extent provide evidence as to the barriers which trainee endoscopist face.

Policy

Endoscopy services nationally are considered to be highly policy-, procedure- and guideline-driven with Joint Advisory Group (JAG) leading the way in standards and quality improvement. All endoscopy services must strive to be high performing and comply with the standards set out in the guidance stipulated by JAG (2020). Endoscopy training will always be affected by policy in order to protect patient care delivery. As a member of national and European committees, it is my expectation that this research will have value when it comes to planning and producing policy documentation regarding training. The findings, as outlined in this doctoral thesis, can be used to identify areas of weakness in current training and seek to develop new methods which take these findings in to account. Stakeholders and policy makers can utilise the research findings and consider the improvement of training strategies in order to meet the demands of a safe, effective care at the same time providing high quality but effective training.

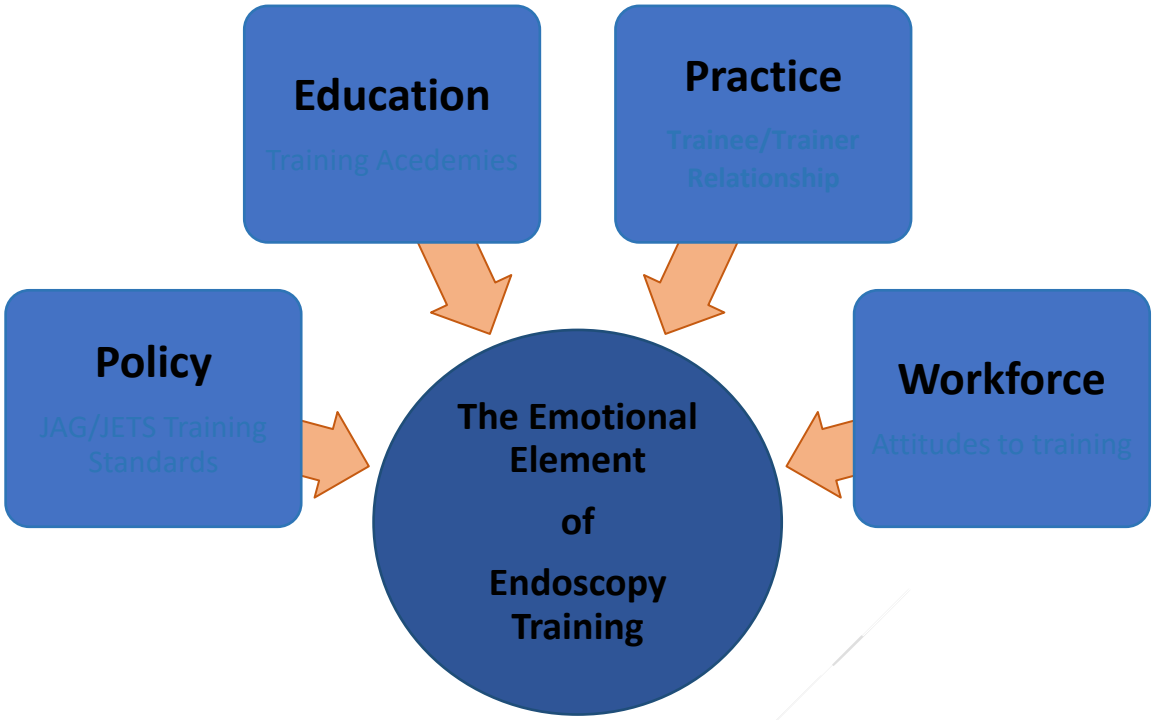
Practice

Implications for practice are evident in this research and are addressed in the previous sections. Many of the highlighted areas can be difficult to change as they are ingrained within the hierarchy of the organisation. However, there are various elements in this doctoral research which emphasise that some aspects within the practice setting can impact on training, this could be the attitudes of other staff or the trainers themselves. On a practice level some simple reminders to all members of the

team could go a long way to address some of the issues. In relation to human factors, one of the key requirements for JAG to improve safety is that all staff should attend at ‘huddle’ at the beginning of each list (Scott, Thomson, Donnelly, Lee 2018). This should in effect be attended by all staff due to be present at each list, however this is not always the case. It should be mandated that the trainee endoscopist should be present for this meeting so that ground rules can be set which include all team members. By ensuring these measures on induction and training documentation are embedded in the culture of endoscopy units, I believe this can be reinforced to all staff members and go some way to improve communication during the training experience.

Strategic Framework of recommendations for medical agencies

The following diagram illustrates potential relationships between the emotional element of endoscopy training and policy, education, practice and workforce considerations. It is followed by a framework of recommendations for medical agencies and stakeholders, drawn from this doctoral research and structured around these areas.



Strategic Framework of recommendations for medical agencies

Policy – JETS/JAG training standards

Policies are important in strategically guiding practice and education, therefore it is recommended that,

- There be more emphasis on, and acknowledgement of, the complexity of training
- Strategies to assess emotional impact of training be developed

Education – Training Academies

The formation and operation of educational programmes and initiatives such as the training academies is crucial to endoscopy education and training provision, therefore it is suggested that those planning, leading and delivering training,

- Consider diverse learning needs of trainees

- Develop and implement robust support systems for example a Buddy system
- Promote peer support and encourage trainee connections across the region
- Develop and implement a training curriculum which supports Health and Wellbeing regarding the emotional impact of endoscopy training

Practice – Trainee/ trainer relationships

At the forefront of any educational experience is the relationship between teachers, trainers, educators and their students, it is therefore recommended that,

- The skills of the trainee and trainer should be well matched
- An authentic and inclusive approach to teaching be promoted.
- Opportunities for reflection, not just feedback, should be integral
- Trainer feedback/reflection should be promoted

Workforce - Attitudes to training

The health care workforce is multi-disciplinary and this has implications for in-service education such as endoscopy training, it is therefore recommended that,

- Multidisciplinary approaches to practice-based learning are developed
- There is attention given to the embedding of a safe and supportive environments for learners
- A cohesive approach to endoscopy training is developed which incorporates the whole team, where each team member has a voice.
- A strong training ethos is created within each unit
- Skills-based scenario teaching is incorporated into training areas, and that these scenarios emphasise training relationships and the importance and impact of all workforce groups in training experiences

9.16 Conclusion

Workforce expansion is critical to future-proofing a resilient and sustainable gastroenterology service. This can be a significant issue as acquiring endoscopy skills can delay a trainee's progression, thereby reducing the number of trainees who will be able to take on consultant roles which has an impact on the specialist endoscopy workforce.

Quality endoscopy training is critical in developing competent, highly skilled endoscopists. This doctoral research has provided an insight into endoscopy training and the experience of the endoscopy trainee. This thesis has described in detail how an IPA methodology can be chosen and justified as an appropriate research methodology when attempting to understand the lived experience of endoscopy trainees. The emergent Super-ordinate and Sub-ordinate themes have identified areas which have been categorised as outside the control of the trainee, such as service provision, hierarchy, access to lists, other clinical commitments, competition for training and appropriateness of lists. These aspects were common but inter-woven threads described by the participants. The second area which emerged was how identified themes affected the emotional mindset of the trainee. This area included self-esteem, confidence, professional self-identity, trainee and trainer relationships and staff attitudes. It is evident that these are the themes which have the most impact on the confidence of the trainee and these themes and experiences are likely to have the most impact on the trainees' learning. Nevertheless, there are some themes which highlight the trainees' desire for training access which can sometimes be to the detriment of the staff assisting with the procedure and even the notion of objectification of the patient to become a tool for training has been explored. By developing these themes, it is hoped that this research will provide a basis to improve the quality of endoscopy training. This doctoral research has identified that endoscopy

training is without doubt and “Emotional” experience and this concept, in my view needs significant consideration in planning of training curriculum.

This research is only the tip of the iceberg. It has highlighted some interesting themes that would benefit from further exploration. I am looking forward to conducting further work in this area in the future. For now, I need time to reflect on this experience and consider what has been achieved not only through my personal journey but in the course of this research apprenticeship.

Chapter 10 - Critical reflection of the research project

Introduction

The following section of the thesis will explore the reflective component and illustrate some of the factors that have impacted and influenced my research journey.

10.1 Reflection in Nursing

As nurses we have a professional and moral obligation to keep up-to-date within our area of practice to ensure that our patients receive the highest standards of care at all times. The NMC (2015) indicated that nurses should be competent in creating 'an environment for learning, where practice is valued and developed that provides appropriate professional and inter-professional learning opportunities and support for learning to maximise achievement for individuals'

The aim of reflection is to facilitate and enhance professional practice and in this instance, researcher reflexivity. It is seen as reviewing experience so that it may be described, analysed, evaluated and consequently used to inform and change future practice through the lens of my research examining the lived experience of endoscopy trainers and their perceptions of the nurse endoscopist as their trainer (Bulman & Schutz 2008). Schon (1983) describes reflection in action, on action and for action as a process of thinking back on what we have done in order to discuss how our knowing in action may have contributed to an unexpected outcome. This is achieved by reflecting during, after or by pausing during the event. In my research re-reading and re-writing has been critical to developing the project and the keeping of a research journal key to effectively 'look back' to see how ideas have developed. Refection is reported as an important concept in nursing and in recent years reflection has been successful in stimulating healthy debate and investigation influencing nursing and nurse education (Bulman and Schutz 2008).

Bulman & Schutz (2008) further maintain reflection provides the challenge to open up the dialogue to provide the language to express our practice to others. Nurses are interested in reflection because it can provide pathways of communication to justify the importance of practice and practice knowledge. This begins to legitimise knowledge gained from the realities of practice rather than from traditional forms of knowing. This is a vital aspect in professional practice and I regard learning as a continuous aspect of my professional life; it encompasses all areas within my speciality including as an endoscopy trainer and now as a researcher.

Indeed, over the last few years my own process of learning has taken many different paths and I feel that this has influenced me greatly, not only on a professional level but I feel I have personally benefited from my doctorial journey, I have gained confidence in many aspects of academic work including the reflection process which has become essential to my research. However, reflection is a process that I have struggled with at times and generally avoided, a position echoed throughout nursing. Welsh and Swann (2006) also regard reflection as a poorly- understood concept but it is regarded as an essential aspect of experiential learning. Kolb (1984) refers to a description of experiential learning as the cyclical process in which a concrete experience is followed by reflective observation. Therefore, this process of reflection of my experience of the planning of the research project over the last few years has been challenging at times. I often find reflection a difficult concept and to facilitate reflection during the course of my PhD a research journal was kept, allowing me to document my thinking at each stage and to go back and see how my thought processes have evolved during the research process. I have been able to capture my thoughts and ideas and consider how the research has evolved during that time.

10.2 Chosen model of reflection

A model of educational reflection is Brookfield's four lenses (2005) which could be adapted to research to help frame the reflection. In Brookfield's model, it considers

reflection from four perspectives: from the standpoint of self, from that of learners, from that of our colleagues, and from its relationship to wider theory and literature. Only from the consideration of multiple points of view can we deepen our reflection. (Brookfield 2005). By examining multiple viewpoints this can help limit biases which can occur at any phase of the research (Pannucci and Wilkins 2010). Even though I have 'bracketed' myself off I need to be aware that some degree of bias might be present in the completed research.

DIAGRAM 10.1 BROOKFIELD MODEL OF REFLECTION (2005)

10.3 Self

By encouraging reflection through the lens of 'self' I can explore my journey through my own eyes and how my research journal has acted as a tool in the PhD process which in turn has enabled me to track the methodology, epistemological and philosophical processes.

Personal motivation

In order to gain a bit of context to my position and how my personal experience has impacted on my journey I think it is important to understand my own lived experience of education and my career. One of the motivating factors for my academic journey was that I had left school without any qualifications, I thought I was never going to be an academic person and would be more suited to practical work. School for me was an environment in which I did not really flourish and I was never expected to achieve any level of education. This lack of education would be a barrier to me in applying for my chosen vocation in nursing or another healthcare- related discipline. I therefore, decided to go to a college of further education to study a pre-nursing course which would allow me to complete further basic education including O-Levels and GCSEs, and gain some practical experience through hospital placements.

Two years later once the course ended I was in a position to apply for my nurse training at various local hospitals. In 1990 I was offered a place at the Bede College of Nursing based at the Queen Elizabeth Hospital in Gateshead. Following my three years of nurse training I successfully completed my course qualifying as a Registered General Nurse (RGN) in 1993. Being a registered nurse at that time had no academic value other than my registration to practice.

I settled into my first role as a staff nurse in General Theatres at Newcastle General Hospital. A short time later I went on to do a Diploma in Nursing Practice, and a degree in Nursing Science soon followed, as did a Masters in Nursing Practice and a Postgraduate Diploma in Professional Education. Over the years I had developed a passion for education and my professional life felt empty if I was not studying. By this time, I was working as senior nurse endoscopist specialising in Upper Gastrointestinal surgery and I had never considered a PhD as a route my educational journey would take. This felt like a step too far into the higher levels of academia. However, it was

during the last period of study the seed was planted and I felt I would like to pursue this avenue and see what happened. I gained the confidence to approach the research department at the organisation to see how I could move forward with this and by working with lecturers from both Northumbria and Newcastle universities and clinicians from my organisation a research proposal was eventually developed. The proposal was submitted as part of my application to a part-time PhD programme and following interview I was successful in being offered a place. For me just gaining a place on the programme was a huge achievement as I did not think it would be possible to me to study at such an academic level. I knew this would be a huge challenge but I was committed to take the opportunity and approached my organisation for support either in funding or in study time. However, it was felt that as it would not benefit their service I would have to do this in my own time and be self-funding. This would be a big financial undertaking for me and my family, but with the support from my husband we felt that this opportunity would not come along again so I decided to go ahead and take on the challenge.

The start of my PhD journey

During previous aspects of my academic studies I had always found any research components a challenge. I, like many of my peers at the time, feared the research module. For me nursing research always appeared to be complicated and difficult to understand, it was an aspect which was only for nurses who intended to follow a career in academia. On reflection I think this was because it was never taught well and the use of research jargon and academic language put me off. When I came to complete my Master's dissertation I was looking forward to getting my teeth into something and I really wanted to produce a quality piece of work which I hoped would make a difference to my practice and maybe we could make a small change to improve our patient care. However, halfway through the process the university changed the focus of the dissertation from a piece of action research to a quality

improvement project which was very disappointing and I found I quickly lacked motivation. The final dissertation although passed was in my mind unsatisfactory. A few years later I commenced a Postgraduate Diploma in Professional Education and my interest in research was reignited. The lecturers were full of enthusiasm and taught the subject well and I felt nursing research was not just for the academically minded but for all nurses. It was at this point I considered whether or not I could 'do' a doctorate, was I the right type of person? Could I commit to the work? Am I clever enough? With the support of the lecturers I felt that I could consider developing a research proposal.

I found that during my research module I was interested in phenomenology and the lived experience of people. For me the 'event' which made me want to examine things further was when I was teaching medical students on a basic clinical skills course. My session was to teach basic suturing and knot-tying to third year medical students. The session was a practical basis session using skin models. Usually the session is well received with positive feedback. I have taught this session many times in the past. On one occasion one of the medical students refused to participate in my session saying 'What can you teach me, you are a nurse and I am going to be a GP?' At the time I was quite shocked and I suddenly became embarrassed, feeling that I was out of my depth and I had no place thinking I could teach medical students. As time went by I continued to reflect on the incident and I began to think why did he feel like this? Is it an idea which is perpetuated by the medical school? Is it his social status? What is the opinion of medical students or doctors about nurses? What are the assumptions, attitudes and beliefs?

I began to develop an early proposal over the following two years working with several lectures associated with the Trust I work in. Over that time the proposal was refined and developed until it was of a standard in which I could apply for a part time PhD at

Northumbria University. Following submission of the proposal and subsequent interview I was fortunate enough to be offered a place on a part-time PhD programme.

I started my PhD in October 2016. Over the years the focus of the study has evolved with the help of my supervision team and my annual reviews. This process has helped me to refine and develop the project in such a way that it will add to the academic arena and be pertinent to several areas of practice including Nurse Endoscopy, advance practice and skills-based training.

As a novice researcher I was very anxious and felt I was taking on something I was not able to do or produce work with any quality. From a personal perspective one of the important things was to prove to myself I could take on and successfully complete a serious research project at doctoral level.

Keeping a research journal

The use of a research journal is an established tool for learning both in higher education generally (Morrison 2006) and in specific professions like nursing (Chirema 2007). The value of using such a journal promotes active learning and reflection on the learning that has taken place (Thorpe 2010). It is also a recognised means in research for the recording of learning and prompts the process of interpretation and bracketing as a reflective mechanism (Vicary, Young and Hicks 2017). Throughout the PhD I kept a number of notebooks exploring my thinking process and a research journal documenting my more personal thoughts about the process of my learning. This has given me the ability to audit my initial thoughts and plan through my research. Bracketing is an important factor in my research and I needed to be able to set aside my own thoughts and assumptions in order to approach the research in the most open and honest manner. The keeping of the research has helped me maintain perspective and allowed me to set aside some of my thoughts and ideas, but at the same time to be able to return and review these at a later date.

As the PhD has been evolved over that last five years, much has changed and developed during that time, not only from a personal level but also due to the global pandemic, the world has changed significantly which has taken its toll on the NHS and many aspects of daily life. As a result, I have grown and developed in my thinking during the period, iterative development clear when I look back at my journal and explore my thoughts at the time. I also find that I have a connection with the pen and paper and I find it easier to document my thoughts and key aspects of my learning journey using this method. The notebooks are informal and I find it a creative process to explore ideas, make connections and plan my work. The journals and notebooks have also served as an aide memoire of how the research process has developed over the period of time. The research has evolved and has taken on a different form from the beginning of the journey and this has been vital in the development of the project.

The research has evolved from the initial idea. The idea had developed and expanded out and now it has emerged as a more detailed and specific subject in order to have a piece of work that is very specialised with rich data and specific outcome rather than something more generic. The notes and journal have given me the opportunity to be able to chart my personal development and how my reading has begun to influence my thought process and I can see my understanding begin to develop. Initially I felt a little self-conscious about it as I had thought these things were just an artificial process which was slightly contrived. I was also concerned about how it would look, I wanted to make sure it was neat and perfect, however I soon realised that perfection was not necessary and it did not matter if what I wrote made sense, or the spelling was correct. The most important aspect was that it allowed time for thinking so I could create ideas and connections and to see my thinking process developing. At various aspects of the journey I felt it was important to go back to the journal and review my thoughts at each time, this has helped me in the construction of my thesis and had

given me the opportunity to see how the main focus of the project has changed and how the influences of the time and place have impacted on the research.

I personally found the process of keeping a journal an intuitive process, however I prefer to write by hand, I feel there is a connection between myself, the pen and the paper, I feel that the process of reflection flows more easily this way. According to Vicary et al (2017) the writing of the journal enacts some of the criteria in producing an audit trail whilst also recording and reflectively prompting the process of learning, interpretation and bracketing, thus evidencing transparency.

The process of keeping my journal has helped me to see how far I have travelled in my thinking about my project and how I have grown as an academic and personally, it has challenged me to look deeper into the project and challenge assumption. I have developed skills expected of a doctoral student and navigated the challenges of the PhD experience.

10.4 Peers

Through the lens of my peers I can reflect upon feedback from supervision sessions, seminars and when engaging in knowledge transfer strategies in relation to my work.

Becoming a postgraduate student

My first day as a postgraduate student was exciting and I remember sitting in the lecture theatre at the induction seminar with a combination of students from various disciplines including engineering, physics, biology and social sciences. Looking around the room I felt very old, I was 45, but I felt that I deserved to be there, I had earned my place. But I felt a shadow of doubt seep in as the lecturer began to discuss thesis word counts and said that 'real' scientists or empirical researchers only need 45,000 words for their thesis, however, social scientists like to 'talk a lot' so they need to write 85,000 words to justify what they have done! Laughter resonated around the

lecture theatre. I realised that academic snobbery that I had heard about actually existed especially in postgraduate education.

Supervision sessions

Completing a research project to this level requires a great deal of self-motivation and commitment and there have been times when it is hard to focus on one area of the work, however it is important to be able to continue with an alternative piece of writing or structuring of the thesis. It is often a lonely road and I really found I missed the peer support of others sharing my journey. In response, my supervisor meetings became one of the most beneficial aspects of my journey. The guidance from the supervisors would be invaluable in the process to direct and crystallise my thinking. With each supervision meeting the research project evolved, it was much more of a process than I had thought, I expected the project to be much more static. Then I realised that the original proposal was just an outline of what the research would eventually become. In reality my original proposal bears little resemblance than the completed research. My supervisors reassured me that this was perfectly normal in a PhD project and it was all part of the evolution of my learning.

My supervisors have told me to think of it as a research apprenticeship and at the beginning I did not really understand, however, as I approach the end, it makes complete sense to me now. I now realise that I began my journey as complete novice with no research experience whatsoever and the whole process has been about learning 'how to' conduct a piece of research, manage deadlines and be responsible for my own work, findings and interpretation. At times it has been a very lonely road to travel, however, I understand now why this is the case. It is really because only I know the research so there is no one else who could possibly share my journey, it is a unique experience to me.

I often feel that I am spinning plates to try and keep things going and it definitely feels like I have something always requiring my time and attention, a bit like a demanding child! I can see now that I have become a much more patient learner and I have written and structured things in a manner that I have never had to do so before now. I can see how I am moving from apprentice to researcher.

10.5 Scholarship

Through the lens of 'scholarship' this part of the reflection takes place through the literature and in my case reading around the research literature, research methodologies and methods.

Developing an interest

Through my clinical role I am very interested in endoscopy training, education and the impact nurse endoscopists have on endoscopy trainees. Soon after I started my research, I became training lead for endoscopy trainees which would prove to give me a further insight into the challenges faced by all trainees and trainers no matter their background profession. According to Brookfield (2005) the process of enhancing knowledge, skills and dialogue occurs during the exposure to the literature. Conducting the literature review gave me the opportunity to explore the literature in the context of my research and identify areas for exploration. During this process I could see where I needed to develop my knowledge and skills further and I became aware of the enormity of the task I had taken on. This did not deter me at all, it only made me feel more determined to continue with the PhD.

Exploring the literature also made me realise that there was very little research conducted about the lived experience of endoscopy trainees' experience. Much of the literature was more quantitative in nature, as a result, I felt that I would be providing a unique insight into the trainee experience and I was confident that this research would be a reasonable contribution to the body of literature.

Acquiring knowledge

Acquiring the knowledge not only around the subject but also around phenomenology and research methodologies has given me more confidence. One of my anxieties was that I would not be able to understand the 'academic language'. This felt very difficult to begin with and I was concerned I would never be able to articulate or write in the appropriate language. I was concerned I would become exposed as a fraud and not worthy of my opportunity to study at doctoral level.

My fear has been alleviated over time and by my supervisors, who have been reassuring throughout and as I have become more familiar with the literature I have become accustomed to the language and I feel more confident with my own abilities. I know now that I did deserve my place and I can see that I have become more articulate as a speaker and writer.

10.6 Learners

In this section of the 'learners' lens, my reflection will be explored through the lens of the participants' reflection upon feedback following observations, interviews and during discussion informally about my research. I did have an initial apprehension discussing my research with the participants and other trainees. As a novice researcher, I know now that I completely lacked confidence and I was concerned that endoscopy trainees and participants in the research would find the subject a waste of time or because it wasn't 'proper' (empirical) research wouldn't be a contribution to the literature. I think my initial experience as a postgraduate student may have contributed to this feeling as I was convinced that only research with numbers actually meant something to doctors and clinicians, however, this was not the case. All the trainees who took part in the research were really interested and it was clear that qualitative research does have a place in medical education. Since commencing my work there are many endoscopy trainees who I have worked with who are conducting

qualitative research projects of their own as they have validity in developing workforces in healthcare and are valuable in-patient care and quality of lived experiences. In fact, following the observation and interview sessions during the data collection phase of the research many of the participants reported that they had found the interviews cathartic and that it was very natural to discuss. To me this indicated that the topic had been of importance to each of them, which meant that the research would have value and importance to other endoscopy trainees.

10.7 Chapter Summary

Constantly reflecting on how I am positioned in relation to my research is a vital part of this process. In phenomenological research it is important to remember that the researcher is 'in' the research at every single stage of the PhD. How I interact with research participants, how I collected, interpret and analyse data and how my own biases, opinions and life experience may show through my work.

The reflection chapter has demonstrated my personal process of reflection using Brookfield's model of reflection (2005). The process has taken me through my whole journey as a PhD student, conducting the literature review, data collection and the construction of the thesis. My research journal has been invaluable in helping me recount my process but it has also been an essential aspect of demonstrating my learning and how my thinking has developed.

This journey for me has been a once in a life-time opportunity. At the beginning I thought five years was such a long time, however, as I approach the end, five years somehow does not seem long enough. I am very proud of my achievement and as my thesis begins to come together and I can see my findings emerge from the collected data I feel I have earned my place and I was worthy of studying for a PhD.

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PRESENTATIONS

WAGE – October 2021 – Green Endoscopy – Practical solutions

BSG Campus - November 2021 – Greener Endoscopy

GIN – London – Jan 2022 – Greener Endoscopy

ESGE – Prague April 2022 – Nurse Endoscopist Role Development

Greener Endoscopy

BGS Live Birmingham June 2022 - Practical Implementation of a Greener Endoscopy

IBD stars – Bristol July 2022 - Advancing the Nurse Endoscopy Role

GENCA –Sydney, Australia 2022 – Barrett's oesophagus a Nurse Led service

Sustainability in Endoscopy

EUG - Vienna October 2022 – Sexual Harassment in Advanced Nursing Practice

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APPENDIX

1. HRA Approval letter
2. UNN Ethics approval
3. Research Standards Certificate
4. Consent Form
5. Information Sheet
6. Prompt Questions for Interview
7. Research Role Assessment Form

Ymchwil Iechyd a Gofal Cymru
Health and Care Research Wales

NHS
Health Research Authority

Email: hra.approval@nhs.net
Research-permissions@wales.nhs.uk

Mrs Leigh Donnelly
Wansbeck General Hospital
Woodhorn Lane
Ashington
NE63 9JJ

22 January 2019

Dear Mrs Donnelly

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

Study title:	**What influences the interaction between Doctors and Clinical Nurse Specialists during Endoscopy Training.**
IRAS project ID:	**218517**
Protocol number:	**N/A**
REC reference:	**19/HRA/0445**
Sponsor	**Northumbria University**

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

How should I continue to work with participating NHS organisations in England and Wales?
You should now provide a copy of this letter to all participating NHS organisations in England and Wales, as well as any documentation that has been updated as a result of the assessment.

Participating NHS organisations in England and Wales **will not** be required to formally confirm capacity and capability before you may commence research activity at site. As such, you may commence the research at each organisation 35 days following sponsor provision to the site of the local information pack, so long as:

- You have contacted participating NHS organisations (see below for details)
- The NHS organisation has not provided a reason as to why they cannot participate
- The NHS organisation has not requested additional time to confirm.

You may start the research prior to the above deadline if the site positively confirms that the research may proceed.

If not already done so, you should now provide the local information pack for your study to your participating NHS organisations. A current list of R&D contacts is accessible at the NHS RD Forum

My Documents

Submission

Submission Ref	9265
Status	Approved
Submission Coordinator	Pauline Pearson (pauline.pearson@northumbria.ac.uk)
Name	leigh.donnelly
Email	leigh2.donnelly@northumbria.ac.uk
Faculty	Health and Life Sciences
Department	Nursing, Midwifery & Health
Submitting As	PGR - Postgraduate Research student
Module Approval	Tick this box if staff and this submission refers to an entire module.
Module Code	PGR Help
Module Tutor (or Submission Coordinator)	Find Help Clear Titl... Dep... Em...
Research Supervisor	Alison Steven Find Help Clear Titl... Associate Professor Dep... Health and Life Sciences Em... alison.steven@northumbria.ac.uk
Named Submission Coordinator (PGT/UGT only)	Find Help Clear If you are an undergraduate or postgraduate taught student please select a Named Submission Coordinator. If you are not sure who this is please contact your Module tutor or Supervisor as appropriate.
Ethical Risk Level	Medium

Risk Level Conditions:

Your ethical risk is **medium**. Your research should only consist of one or more of the following:

NHS
National Institute for Health Research
Clinical Research Network

CERTIFICATE of ACHIEVEMENT

This is to certify that

Leigh Donnelly

has completed the course

Introduction to Good Clinical Practice eLearning (Secondary Care)

December 1, 2016

Modules completed:

Introduction to Research in the NHS
Good Clinical Practice and Standards in Research
Study Set Up and Responsibilities
The Process of Informed Consent
Data Collection and Documentation
Safety Reporting

This course is worth 4 CPD credits

CPD
The CPD Certification Service

National Institute for Health Research
Clinical Research Network

Version 3
Date: 21.01. 2018
IRAS ID 218517

Consent Form

Project Title: Examining the interaction between Doctors and Clinical Nurse Specialist (CNS) during Endoscopy Training

Principal Investigator: Leigh Donnelly

Please read the information below and complete the consent form.

Northumbria University is the sponsor for this study based in UK. 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. Northumbria University will keep identifiable information about you until after the study has finished approx. 2021.

Your rights to access change or move your information are limited, as we need to manage your information in specific ways in order for the research to be reliable and accurate. If you withdraw from the study, we will keep the information about you that we have already obtained. To safeguard your rights, we will use the minimum personally-identifiable information possible. You can find out more about how we use your information by contacting dp.officer@northumbria.ac.uk
North Umbria Healthcare will collect information from you for this research study in accordance with our instructions.
Northumbria University will use your name and contact details to contact you about the research study, and make sure that relevant information about the study is recorded to oversee the quality of the study. Individuals from Northumbria University and regulatory organizations may look at your research records to check the accuracy of the research study. The only people in Northumbria University who will have access to information that identifies you will be the researcher. The people who analyse the information will not be able to identify you and will not be able to find out your name, or contact details.

Northumbria University will collect information about you for this research study. We will not provide any identifying information about you to any other organisation. We will use this information to collect data regarding your experiences with endoscopy training.

	please tick or initial where applicable
I have carefully read and understood the Participant Information Sheet.	☐
I have had an opportunity to ask questions and discuss this study and I have received satisfactory answers.	☐
I understand I am free to withdraw from the study at any time, without having to give a reason for withdrawing, and without prejudice.	☐
I agree that once data has been analysed it cannot be withdrawn from the project	☐
I understand that all data will be anonymized and that my contribution will remain confidential.	☐
I agree to take part in this study.	☐

Signature of participant..... Date.....……..   (NAME IN BLOCK LETTERS).....…….
Signature of researcher..... Date.....……..   (NAME IN BLOCK LETTERS).....…….

Faculty of Health & Life Sciences

Version 3

21.01.2019

IRAS ID 218517

YOU ARE BEING INVITED TO TAKE PART IN A RESEARCH STUDY. BEFORE YOU DECIDE, IT IS IMPORTANT FOR YOU TO READ THIS INFORMATION SHEET SO YOU UNDERSTAND WHY THE STUDY IS BEING CARRIED OUT AND WHAT IT WILL INVOLVE.

Participant Information Sheet

Study Title: What informs interaction between Doctors and Clinical Nurse Specialist (CNS) during endoscopy training

Researcher: Leigh Donnelly

Supervisor: Alison Steven

WHAT IS THE PURPOSE OF THE STUDY?

The aim of this research is to examine lived experience of interaction which occurs during Endoscopy training and to explore the ways in which an individual's professional journey may influence such interaction.

The intention of the research is to investigate these relationships through the window of clinical nurse specialist role. These roles are continually evolving with the emphasis on expanding clinical responsibility and accountability, thus traversing the boundaries of both medical and nursing roles. By understanding the perception of role, influences in the professional journey and by gaining insight into the interaction, this research could provide new insights to inform the development of a model or framework to enhance inter-professional collaboration at practice level.

Endoscopy training can be carried by both Doctors and CNS who have the relevant qualifications. Endoscopy plays a vital role in the diagnosis of and ongoing surveillance for gastrointestinal conditions including cancer. Endoscopy services are in demand and with the new NICE guidelines for referral of suspected cancer are likely to exacerbate this demand therefore more endoscopists need to be trained.

Why have I been selected to take part?

Through observing training and interviewing both trainers and trainee's this study develop insight into the interaction that takes place between the 2 groups. Knowledge obtained from

this study could go some way to improving collaboration, communication and new ways of working in a supportive culture within the delivery of Endoscopy services.

You have been selected to take part in this study because you are an endoscopy trainee or trainer at one of the hospitals in the Northern Region. This study is exploring interaction between doctors and CNS during endoscopy training

WHAT WILL I HAVE TO DO IF I TAKE PART?

If you choose to take part, you will be asked to complete the consent form and a date and time will be arranged during a planned Endoscopy training list for the researcher to observe the interaction between trainee and trainer, Things which occur during the observation may be referred to during the subsequent interview.

The researcher will also ask to interview you in order to gain more information regarding your thoughts on the interaction which occurs during endoscopy training.

Interviews will last approximately 45 minutes and will be audio-recorded. Your participation in the interview will remain confidential and any data you provide will be anonymised. All interviews will be conducted on site at Queen Elizabeth Hospital during the Endoscopy Basic Skills course that you are attending at an agreed time convenient during the course.

WHAT HAPPENS IF I DON'T WANT TO TAKE PART?

Participation in this research is voluntary. If you do not want to take part, simply inform the researcher (researcher contact details provided below) via email and you will not be contacted further regarding the research. The researcher will be conducting observations of the training, however, these observations focus only on the interaction of those taking part in the study others will remain anonymous if you wish to explicitly opt out of the Endoscopy training, again please inform the researcher.

WHAT IF I AGREE TO TAKE PART AND THEN CHANGE MY MIND?

You are free to withdraw from this study at any time during the data collection process.

If you wish to withdraw from observation, let the researcher know either by email (if prior to the interview) or verbally before or during the observation.

If you wish to withdraw from an interview, you can let the researcher know either via email (if prior to the interview) or verbally during the interview. Following the interview, if you wish to withdraw your data from the study contact the researcher.

It is important to note that it may not be possible to remove your data after analysis of the data is in process. This may apply to participant data withdrawal requests that occur more than one month following the original collection of data.

HOW WILL MY DATA BE STORED?

Any hard copies of your data will be stored in a locked filing cabinet within a secure room at a university campus. Any electronic data gathered will be stored on a password-protected computer with data being anonymised prior to electronic storage so that no identifiable information is stored electronically. None of the information will be saved using cloud storage.

WILL MY PARTICIPATION IN THIS STUDY BE CONFIDENTIAL AND ANONYMOUS?

Your participation in this study will remain confidential to the researcher and supervisor, all data will be anonymised.

Any identifying information or data collected (whether electronic or physical) will be destroyed where appropriate and any that may not be destroyed immediately (such as signed participant consent forms) will be stored securely as described above.

All identifying information will be removed from the data prior to data analysis and all participants will be allocated a participant number or code knowledge of which will only be available to the researcher. Pseudonyms will be used in place of participant names on data recorded from observations and interview.

WHO CAN I CONTACT IF I WANT TO ASK MORE QUESTIONS ABOUT THE RESEARCH?

If you want further information or have any concerns about the study, please contact the researcher, Leigh Donnelly, via email (leigh.donnelly2@northumbria.ac.uk). You may also contact the researchers' supervisor, Dr Alison Steven (alison.steven@northumbria.ac.uk).

controller for this study. This means that we are responsible for looking after your information and using it properly. Northumbria University will keep identifiable information about you until after the study has finished approx. 2021.

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

You can find out more about how we use your information by contacting dp.officer@northumbria.ac.uk

North Umbria Healthcare will collect information from you for this research study in accordance with our instructions.

Northumbria University will use your name and contact details to contact you about the research study, and make sure that relevant information about the study is recorded to oversee the quality of the study. Individuals from Northumbria University and regulatory organizations may look at your research records to check the accuracy of the research study. The only people in Northumbria University who will have access to information that identifies you will be the researcher. The people who analyse the information will not be able to identify you and will not be able to find out your name, or contact details.

Northumbria University will collect information about you for this research study. We will not provide any identifying information about you to any other organisation. We will use this information to collect data regarding your experiences with endoscopy training.

Semi structured interview question schedule June 2019

Research question: What influences interaction between doctors and clinical nurse specialists during endoscopy training

Thank you for agreeing to take part in this research, the interview should last around 1 hour.

There are no right or wrong answers.

1. Can you tell me about your endoscopy training to date?

   Prompts – when did you start? / What experience have you had?

2. Can you tell me about the trainers you have had?

   Prompts – how many trainers do you have? /do you have access to designated lists?/what kind of professionals were (Role/Rank/Type)

3. What is your experience of Nurse Endoscopists?

   Prompts – have they been involved in your training? /how did you feel?

4. What are your thoughts around the trainers you have had experience of?

   Prompts – comparisons between? from nurse endoscopists compared to other trainer?

5. How has training with nurse endoscopists influenced your training?

   Prompts – how do you feel about it? /what impact has it had?

The next part of the interview will be based upon the observation which was carried out.

Research Role Assessment Form

Section 1 - To be completed by researcher

Name:	Leigh Donnelly	**Date of birth:**	14/08/1971
Post title:	Upper GI Clinical Nurse Specialist		
School/Institute/ Directorate:	Northumbria healthcare NHS Trust and Northumbria University (Student No 01912881)		
Contact address:	Wansbeck General hospital, Woodhorn Lane, Ashington, Northumberland, NE639JJ		
Email address:	Leigh.donnelly@northumbria-heatlhcare.nhs.uk	**Tel no.:**	01670 564190
Professional reg. no.:*	NMC 90D0918E	**ISA reg. no.:**	

Research Categories Please tick all that apply to your work, or will do during course of current project(s)

✓	**Description of research**
	Direct contact with patients/service users and direct bearing on the quality of their care (not children or vulnerable adults)
	Direct contact with children and direct bearing on the quality of their care
	Direct contact with children but **no** direct bearing on the quality of their care
	Direct contact with vulnerable adults and direct bearing on the quality of their care
	Direct contact with vulnerable adults but **no** direct bearing on the quality of their care
	Direct contact with patients/service users, but no direct bearing on the quality of their care (e.g. observer)
	Indirect contact with patients/service users and direct bearing on the quality of their care (e.g. some types of telephone interviews)
	Indirect contact with patients/service users, but no direct bearing on the quality of their care (e.g. telephone interviews, postal questionnaires)
	Access with consent to identifiable patient data, tissues or organs with likely direct bearing on the quality of their care
	Access with consent to identifiable patient data, tissues or organs, but no direct bearing on the quality of their care
	Access without consent to identifiable patient data, tissues or organs, but no direct bearing on the quality of their care
	Access to anonymised patient data, tissues or organs only (including by research staff analysing data)
	Working on NHS premises (e.g. laboratory work) only

✓	Direct contact with staff (e.g. interviews)
	Access to identifiable staff data
	Access to anonymised staff data only

Give brief description of role/duties:

The aim of this research is to examine the experience of interaction in Endoscopy training and to explore the ways in which an individual's professional journey may influence such interaction.

The data will be collected via one semi structured interview and an observation of the interactions between trainee and trainers on the JAG basic endoscopy course

Where relevant I consent to details relating my current CRB and Occupational Health checks being provided by my employer to the appropriate NHS organisation to confirm details as necessary to assist with an assessment of my suitability to undertake the research category given above.

Signed: **Date:**

Project Title	**Start Date**	**End Date**	**NHS Manager at Gateshead**
"What informs interactions between Doctors and CNS during endoscopy training?"	**Oct 2016**	**Oct 2021**	

HEI staff with no contract with the NHS should now complete the Research Passport Application Form and meet with the HEI research services department

NHS staff should now complete section 2 below.

Section 2 – To be completed by NHS employer for NHS staff only

For completion by Line Manager:

I confirm that the above information is correct

Signed: Date:

Print name: Job Title:

Date employed:	**Date contract ends:**
CRB check level: **Checked for working with children?** **Checked for working with vulnerable adults?**	❑ Standard ❑ Enhanced ❑ Yes ❑ No ❑ Yes ❑ No
Date of disclosure:	**Ref no.:**
Comments:	
ISA status checked? : ❑ Yes ❑ No ❑ NA	**Date:**
Comments:	

Signed: **Date:**

Print name:	
Post title/designation:	
Employers stamp:	