Pedagogic strategies to support practice learning in specialised clinical learning environments: A Grounded Theory Approach.

By

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Abstract

The aims of my study were to explore and identify, from the experiences of mentors and mentees, the ways specialised clinical learning environments are constructed and the potential impact this has on practice learning; learn about the effects that pedagogic strategies have on the mentor/mentee relationship, to engage with clinical practice and the use of learning strategies to maximise practice learning that support and enable students to translate practice and vice versa.

The literature review demonstrated that mentoring in nursing is wide ranging and provided a strong rationale for this thesis to explore pedagogy in specialised clinical learning environments.

Grounded theory methodology was used for this research study. The ethical considerations associated with this methodology, the participant selection, the sampling process, data collection and analysis and issues of data credibility and the concept of trustworthiness in grounded theory were also explored. Two main codes emerged from the data analysis of 11 in-depth interviews: Transaction' and 'Motivation'. There were also three sub codes: 'Value', 'Culture' and 'Engaging'. The findings suggest that the relationship between mentors and mentees in the clinical learning environment was a mutual collaboration and exchange, which was developmental on both a personal and professional level. A substantive theory emerged: 'Transactional Motivation' which will contribute to the body of existing knowledge and provide an opportunity to generate further research into other relevant areas of clinical practice. The theory will also contribute a significantly innovative dimension to the theories of humanistic learning and introduce a new debate to the construct of mentoring in specialised clinical learning environments.

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Damian for being a friend.

God for His grace.

Authors Declaration

I declare that this thesis and the work presented in it are my own and have been generated by me as the result of my own original research.

I confirm that:

- 1. This work was done wholly or mainly while in candidature for a research degree at this University.
- 2. Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated.
- 3. Where I have consulted the published work of others, this is always clearly attributed.
- 4. Where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work.
- 5. Where elements of this work have been published or submitted for publication prior to submission, this is identified and references given at the end of the thesis.
- 6. This thesis has been prepared in accordance with the Coventry University and Buckinghamshire New University.
- 7. I confirm that if the submission is based upon work that has been sponsored or supported by an agency or organisation that I have fulfilled any right of review or other obligations required by such contract or agreement.

Allan Seraj

1.0 Introduction

1.1 Context

The researcher is an educator working in a specialised Intensive Care Unit and is interested in exploring and understanding the actual or potential impact that learning strategies used in practice will have on the relationship between mentees and mentors, particularly within specialised clinical learning environments such as Intensive Care Units and Midwifery. In order to understand the choice of clinical areas that would be included in this study, it was necessary to explore how clinical specialisation has evolved in the United Kingdom.

The demands on healthcare provision in the United Kingdom have increased in the last decade (Bosanquet and Fraser, 2007). This has contributed to greater nurse specialisation roles in an attempt to improve the quality of care delivery to the general public. This has been further augmented by the rapid expansion of medical technology and an increasingly aging population, whereby, people aged 70 and over usually have two or three chronic conditions (Patridge et al, 2014).

The development of nursing specialties has evolved not only due to professional development imperatives, but also through the need to ensure that patients will be able to access the facilities and skills they need. In 1998, the United Kingdom Central Council (UKCC) set out the criteria for specialist and advanced nursing practice, which echoed the medical model, and set the stage for nurses to develop specialized practice. The development of expertise in specialised practice requires the integration of science into clinical practice (Kristensen, 2016). This integration has been centred around the process of decision making and the notion of intuitive practice which has been linked to enhanced clinical judgment, effective decision making (Grol et al., 2003) and crisis aversion (Damschroder et al., 2009).

It could be argued that in this era of evidence-based practice, nurses need to adapt the growing body of empirical research which requires them to recognize intuition and utilize it effectively in nursing practice. Intuition occurs in response to knowledge and is a trigger for nursing action and reflection (Polanyi, 1966). Subsequently, this has a direct bearing on the analytical processes involved in patient care. Notably, nursing expertise had become a popular topic of investigation, stimulated by Benner's (1984) phenomenological study of clinical expertise.

As an educator within a specialised practice setting, I believe that I should have a clear understanding of the student's abilities and the use of different learning

strategies, that must be developed, related to the different learning circumstances. This enables the development of expertise in practice and promotes depth, reflection and meaning to knowledge or skill development (Gibbs and Simpson, 2005). This is further encouraged by Jessee, O'Neill and Dosch (2006) who indicate that clinical educators must engage in activities that encourage the learner to become 'transformational' in their thinking: enabling learners to display personal accountability, authenticity and vision to create generative change, build sustainable success, and perform at their optimum, in any circumstances.

The relationship of the mentor and mentee in clinical practice have been explored by Andrew and Roberts (2003), but the literature, that explores the impact of pedagogic strategies on this relationship, is limited. This is further augmented by the fact that conventional pedagogic approaches (competency based or outcome learning) are still the mainstay and the widespread use of pedagogic strategies in clinical practice has not taken on momentum (Kawashima, 2005).

Conventional pedagogy assumes that the learner gains knowledge & skills through the application of content knowledge (Ironside, 2015) but this is insufficient to prepare learners to become transformational (Kawashima, 2005). Coupled with this, the current climate within the NHS in the UK requires a rethinking of the culture of healthcare delivery from the current conventional approaches to training and development of healthcare providers, the delivery of quality, accountability within the NHS as an organisation and the need for change of the existing systems (Francis, 2013).

In 2004, "Making a Difference" was introduced with a specific focus on "fitness to practice" This saw the introduction of equal time devoted to theory and practice and an extension of the supernumerary status of student nurses. Despite this change, supernumerary status was beset with confusion following its implementation. The intention had been that as students were not part of the workforce, they would be able to learn and engage in a variety of learning opportunities without the focus on the student being a member of the workforce. In reality this changed their role and students were observing rather than participating in care and as a consequence not obtaining the necessary knowledge and skills. The NMC subsequently clarified that the supernumerary status meant that the student shall not as part of their programme of preparation be employed by any person or any body under a contract of service to provide nursing care (NMC, 2006). In addition, the NMC explained that students

should spend, at least 40% of a their clinical time being supervised directly or indirectly by their mentor/practice teacher (NMC, 2008).

Nursing students undertake a series of practice placements over the course of their programme and this is designed to provide the necessary clinical skills and proficiencies to become a registered nurse. The mentor role in nursing remains the main focus for support and supervision of pre-registration nursing students in clinical practice (NMC, 2008). Despite the importance of this role, there has been growing concern over the years as to how well existing mentorship programmes prepare mentors for their role (Duffy, 2003). The professional body, the NMC, provided new guidelines and standards in 2006, updated in 2008, for the support, learning and assessment of practice (NMC, 2006, 2008). As well as changes to the nature and content of the programmes the NMC also requires ongoing updating of mentors and more recently the development of "sign off mentors, for those nursing students on their final placement, who will make judgements about fitness to practice (NMC, 2008). Arguably the professional body is providing increasing regulation to mentorship, with the rationale to ensure "fitness to practice" at the point of registration. This regulation on mentoring was further enhanced by the NMC in 2018 and it now seeks to add assurances to the public and produce proficient nurses of the future. The term 'mentor' has been replaced with new terms: 'clinical supervisors' and 'clinical assessors'.

This increased emphasis on mentorship and increased recognition of the importance of supporting clinical learning was a prompt for me to explore this area as my research topic. A further prompt to this study occurred when I reviewed the preregistration students' feedback from their experiences of learning whilst on clinical placement. The feedback demonstrated great insights into the complexities inherent in the mentor-mentee relationship, and I wanted to explore these in more depth. I also saw this project as a means of developing professionally, enhancing my knowledge of the research process so that I could support the learning experience between mentors and mentees with more confidence. On a personal level, I welcomed the challenge of study at doctoral level, which would greatly enhance my self-esteem.

1.2 Thesis Overview

In this my introductory chapter, I have provided a rationale for this study, derived from both professional and more personal motivations. I began my research journey with the research title: 'Pedagogic strategies to support practice learning in specialised clinical learning environments'. A grounded theory approach. I also wrote broad research aims which provided a framework in searching and reviewing the literature.

In chapter 2, I review the evidence which will gives me a critical overview and analysis of the academic literature to establish what is known about the subject matter so that I can situate my study. The exploration of the literature assisted me in meeting the study's objectives of exploring and identifying the ways specialised clinical learning environments are constructed and the potential impact and barriers this has on practice learning. Further, searching the literature helped me to explore the existing evidence and support the aims of the study in more detail but also to identify areas for potential future research. I was also able to refine my research aims.

My research methodology is discussed in Chapter 3. In this chapter I explore grounded theory methodology (GTM) and its contribution to my data collection, analysis and development of a substantive theory. As part of this discussion, I describe the ethical considerations associated with this methodological choice and its limitations. I also discuss how participants for the study were selected, the process of sampling, data collection and data analysis. I follow this with a discussion of the issues related to data validity, credibility, the concept of trustworthiness and theoretical sensitivity in grounded theory as it relates to the actual or potential impact that learning strategies used in practice have on the relationship between mentees and mentors, particularly within specialised clinical learning environments I chose for my study: the Intensive Care Unit and Midwifery.

The results of my research are presented in Chapter 4. In this chapter, I present the findings that emerged from the interviews I conducted. My aims were to explore and identify, from their experiences: the ways specialised clinical learning environments are constructed and the potential impact this has on practice learning; learn about the effects that pedagogic strategies have on the mentor/mentee relationship, to engage with clinical practice and the use of learning strategies to maximise practice learning

that support and enable students to translate practice and vice versa. One to one interviews provided access to a rich seam of material regarding mentors' experiences of their day-to-day interactions with students and to personal reflections on their wider mentoring role. The data collection method was congruent with the grounded theory approach providing access to the experiences of mentors and mentees in specialist learning environments. I extracted forty two (42) open codes and five (5) level 2 categories: "Transaction", "Motivation", "Value", "Culture" and "Engaging". Saturation was achieved from a sample of eleven (N = 11) qualified mentors and mentees from an Intensive Care Unit and a Midwifery Unit. I used NVivo software and a cyclic process to analyse the interview scripts, after the interviews with mentees and mentors were completed. The software provided the platform to verify the saturation of each code and enhanced the opportunity to determine which node presented with more saturation based on the queries and coding and the analysis of the code spread demonstrated that there were five codes: two major codes and five sub codes. After each interview, the script was imported into the software and the document was explored under predefined 'nodes' and cross references were made by queries using text search. These queries validated the node and I was able to further strenghten the gueries by developing word trees and memoing. A wordcloud was generated to show the saturation of the codes that were emerging from the line by line coding. The interview scripts were reviewed by my supervisors and an external verifier to my research study for independent validation of the coding and codes that were emerging.

In Chapter 5, I discuss my findings and present recommendations for future practice. I draw on the data and relevant literature to develop a substantive theory. I also seek to explore the contextualization and theorization of my research study, fundamentally examining how the substantive theory, that is generated from this research project, will be applicable to my work environment, and further, the wider society. I will also reflect on the study's limitations identified and that of the research's methodological framework. I also aim to answer the question: What 'innovation' am I adding to my sphere of practice by doing this research?

The concluding chapter, Chapter 6 offers an evaluation of my study in terms of the research design, the key findings, its strengths and limitations. I will also reflect on aspects of my journey that could have been done differently in hindsight and what I will do differently in my professional practice as a result of my research. I follow this

with a more personal reflection on the learning that I have derived from undertaking this study.

In this thesis I will be adopting the definition of a mentor as defined by the NMC (2008a), as one who facilitates learning and supervises and assesses students in a practice setting and has undertaken an NMC approved mentorship programme (Stage 2 mentor). The term 'practice or clinical placement' is used to define a place where learning opportunities are available for nursing students and where practice can take place under supervision. The term 'student' will be based on the NMC (2008a) definition which applies to a person who is pursuing an NMC approved preregistration programme in nursing or midwifery. In this thesis, the terms 'mentee', 'learner' and 'pre-registration student' will also be used to describe the student.

2.0 Literature Review

2.1 Chapter overview

In this chapter, I aim to review the evidence which will give me a critical overview and analysis of the academic literature to establish what is known about the subject matter so that I can situate my study. The exploration of the literature will assist me in meeting the study's objectives of exploring and identifying the ways specialised clinical learning environments are constructed and the potential impact and barriers this has on practice learning. Further, a search of the literature will help me to explore the existing evidence and support the aims of the study in more detail but also to identify areas for potential future research.

In grounded theory research, I have to acknowledge that the existing literature is not used as a theoretical background, but rather as data to be used by the analytic strategies of the research. In most research studies, a literature review precedes data collection and analysis as it helps the researcher to contextualize the research within existing knowledge (Creswell, 2012; Gibbs, 20010). However, in a grounded theory research study, conducting a literature review prior to data collection and analysis is commonly presented as a constraining exercise rather than as a guiding one (Glaser, 1992; Glaser & Strauss, 1967; Strauss & Corbin, 1998). It is usually a requirement by academic institutions and ethics committees that the researcher demonstrate knowledge in the field of inquiry through a literature review, and often a brief review of the topic of interest is required. This tension between the expectations of a literature review, which has been the same experience for me, is discouraged by the chosen research methodology and it has been particularly challenging whilst using grounded theory methodology. This tension, however, is supported by Bowen (2006) and Dunne (2011).

Constructivist grounded theory methodology, following a long tradition within qualitative research methodology, suggests that it is an unattainable task to avoid the researcher's influential role in the research process. The researcher cannot be 'purged' from data collection and analysis as both are created from shared experiences and relationships with participants and other sources of data (Charmaz, 2014).

The resulting theory, in a constructivist grounded theory methodology, depends on the researcher's view; it does not and cannot stand outside of it. Therefore, its 'groundedness' is not the result of a somehow removed researcher, but instead, as argued by Charmaz (2014), results from these researchers' commitment to analyze what they actually observe in the field or in their data.

The core idea is that a theory cannot be grounded in the data by an active passivity that allows its emergence, but rather by a proactive focus on the data, acknowledging that it is not the research methodology that aims to discover a theory despite the researcher, but it is the researcher who aims to construct a theory through the methodology (Mruck & Mey,2007).

In constructivist grounded theory research, Mruck and Breure (2003) indicate that the researcher's presence in the research product is neither neutral nor undesirable. From the topic selection, to the research preparation, data collection, analysis, and the final rendering of the research result, the author is a key element of the process.

The researcher's voice in the resulting theory should not be excluded, avoided, or hidden. On the contrary, it should be explicitly acknowledged as it is this voice that shows and talks about the researched area (Charmaz & Mitchell, 1996; Clarke, 2003). It was Tedlock (1991) who mentioned that it is only by not disregarding the observer that one would have access to the essence of the observational situation.

In a constructivist grounded theory, reflexivity does not aim to eliminate the researcher's subjectivity from the resulting theory, but to allow the data to be prioritized over the researcher's assumptions and previously acquired knowledge, including any reviewed literature (Charmaz, 2014). The idea is not to disregard existing knowledge, but to engage with it critically (Thornberg and Elvstrand, 2012).

I cannot disregard the existing knowledge and have therefore stayed close to Thornberg and Elvstrand's (2012) idea of engaging with it critically-the literature review, whilst staying within the boundaries of constructivist grounded theory methodology. I developed a search strategy (Appendix 5) and gleaned literature from which core codes emerged.

There is a wealth of literature on the needs of mentees in relation to mentorship and support in practice. In addition the increasing complexity of the learning environment identified the need for ongoing research on the impact this has on practice learning. Learning within the workplace is difficult due to the increasing demands of patient care, however exploring pedagogy as participatory practices can aid understanding and support for learning in the practice environment.

2.2 Search strategy

A search of the databases (Appendix 5) was undertaken looking at all and any literature that was published on the on the subject matter up to the present. This allowed me to cover a wide base of information sources. These included CINAHL, PubMed, EBSCO host, Medline, Science Direct, PsycINFO and ERIC and British Education Index, as well as the Nursing and Midwifery Council and Department of Health websites. The search strategy included all studies on both educational programmes and mentorship in the UK, but also has considered the wider international perspectives on mentoring. A hand search was also undertaken of nursing journals to supplement the electronic search.

Search words/terms employed when searching electronic databases included, mentee- mentor relationships; mentorship and nursing: mentorship and learning; mentorship and nursing students; mentorship and mentors; learning environment and mentorship; specialised learning environment; clinical practice learning and nursing students; pedagogy and nursing, pedagogy and learning, nursing and mentorship.

These words were used in the search strategy to cover a wide range of familiar terms associated with the research study's topic. In addition, due to the different terminology utilised internationally for mentorship a search also included preceptorship and nursing students in order to include relevant articles. The search identified 1652 articles of which 35 were identified as relevant which included empirical studies and reviews of mentorship and learning.

The search strategy identified concepts and synonyms linked to each search word/term. Concepts were further refined by both key word and subject searching using Boolean logic which resulted in the development of themes but I recognised there was some overlap between themes. The articles were appraised and core themes emerged from the detailed search which were: student-mentor relationships;

learning strategies and workplace learning; learning environment; mentors' perceptions of mentorship; students' perceptions of mentorship and professional body requirements of mentorship.

The inclusion criteria were studies on mentoring in specialised clinical practice between 2005-2018, predominately focused upon nursing in the hospital setting. In addition, articles and studies related to learning and the workplace were included as I believed that this approach would allow me to understand the wider context of learning in the workplace. Relevant articles from Australia, America, Canada and Europe were considered. Exclusion criteria were if studies were not related predominately to healthcare and not focused on mentoring. It is clear that the literature on mentorship and learning is vast and to aid the process of critically reviewing the literature two critical appraisal tools were utilised. The first was drawn from Polit and Hungler (1993), which include a critique of theoretical, methodological, ethical, interpretative and presentational dimensions, particularly appropriate for quantitative studies. The second incorporated a critical appraisal skills programme (CASP), (2006) to review the qualitative studies, which focuses upon rigor, methods, credibility and relevance.

The search identified predominately primary sources and these were then identified as high priority or low priority. For example, if mentorship relationships were briefly mentioned then low priority given to this as opposed to if it was the main focus of the paper then a high priority given. The search strategy provided a large source of data concerning mentorship and learning but by more in depth searching this demonstrated a more robust picture of the quality of research studies on mentorship in nursing.

The review will now consider interrelated aspects of mentorship and learning within clinical practice, which I believe are the basis for this study. Firstly, I will explore the educational theories and nursing education, the learning environment, followed by the nature of placements, then mentorship and learning resources.

2.3 Educational theory and nurse education

Prior to me embarking upon this research, I thought it was necessary to review the education theories which I believe will help provide the background to this study and how learning might occur in clinical settings. Burnard (1990) indicated that the search

for such an 'educational golden fleece' is on-going and no single, all- encompassing theory of adult learning exists.

There is however, a range of theories contributing to the understanding of how learning takes place. Mentors need to facilitate student learning in a range of ways to help mentees to achieve NMC (2006, 2008, 2018) competence/proficiency: students must gain knowledge and understanding of their subject, for example anatomy and physiology, so they know how the human body functions. They need to develop clinical skills such as wound dressing. They must demonstrate problem solving skills, for example, recognising and responding appropriately to abnormal behaviour and they must learn how to conduct themselves in an appropriate, professional manner when faced with difficult issues in clinical practice, for instance, supporting bereaved families. Underpinning these competencies/proficiencies, is the need for mentors to adopt a range of flexible approaches to meet these needs.

2.4 Situated learning

Felstead et al (2007) argued that our thinking about learning and education is mainly based on the principal that learning is something that individuals do, and that it is the result of a discrete teaching episode, often based in a classroom. A different perspective of learning and education is presented by David (2014), which is important to help unravel the complexity of how learning occurs in clinical practice. He argued that it is the social situation, social practices and social relationships that create the possibilities for learning, and that these are presented continuously as we engage in daily human activity. In this view, effective socialisation within a 'community of practice' is essential to attaining what they term 'legitimate participant status', and it is this that provides access to learning.

David (2014) explained that the 'community' does not necessarily mean a well-defined, identifiable group: the 'community of practice' is a rather diffuse concept, far wider ranging than the physical environment to which student nurses might be allocated for their clinical placement. He further went on to describe the 'community' as 'a set of relations among persons, activity and world, over time and in relation with other tangential and overlapping communities of practice'.

The community of practice is therefore not confined by place or time, nor is it just concerned with the acquisition of technical knowledge or skill, important though these aspects are. They view it as, 'an activity system about which participants share understandings concerning what they are doing and what that means for their lives

and for their communities' (David, 2014) Newcomers need to 'absorb' and be 'absorbed into' the culture of practice (David, 2014). For a student nurse this would involve gaining an in- depth understanding of what it is to be a registered nurse, valuing the profession and the accepted standards of behaviour. Students need to understand how registered nurses 'talk, walk, work and generally conduct their lives' (David, 2014).

2.5 Socio-cultural theories

Vygotsky's (1978) work (1896-1934), offers much when considering 'neophyte nurses' and how they learn in clinical settings. His theories provide the foundation for Spouse (1998a) socio-cultural theories of human learning which explain her findings when investigating nursing students and uses concepts such as the Zone of Proximal Development (ZPD), 'scaffolding' and 'fading' to explain how her participants seemed to integrate theory and practice. The notion of the Zone of Proximal Development (ZPD) was introduced by Vygotsky in1934.

In the field of child development, they are functions that have not yet matured but are in the process of maturing. When a child becomes more familiar with a task, and the child demonstrates competence, those who provide the support or 'scaffold' will allow the child to do more whilst 'fading' the support that they provide, until the child can perform the task competently and proficient.

In clinical practice, mentors must first assess the boundaries of a student's competence and proficiencies. They must gauge the extent to which the student needs to be 'scaffolded' to help them progress through their ZPD and to meet the learning outcomes agreed by both parties at the start of the clinical placement. The mentor may 'scaffold' a student in performing a complex wound dressing, 'talking them through' the procedure in detail until the student gains confidence and the support from the mentor is gradually withdrawn or 'fades'. Thus, the mentor must make a complex formative assessment of the student's competence and set learning objectives that will 'scaffold' their learning in order to help them advance. Scaffolding becomes an important pedagogy for mentors to adopt when guiding novices in attaining new skills and knowledge (Spouse, 1998).

Cope et al. (2000) agrees with Spouse when he stated that one of the defining characteristics of 'cognitive apprenticeship' is the way in which experts make their situational knowledge explicit as they coach the learner and strategies such as scaffolding and fading are an important way of doing this. In other words both parties

must be concerned with the process of learning in order to achieve the required outcome.

Vygotsky and social theorists argue that for students to learn effectively, in the workplace, they need to be guided towards learning experiences appropriate for their stage of training. They need to be conversed with the professional terminology and jargon so that they do not feel excluded. Vygotsky further emphasized the roles of cultural and social factors in cognition, arguing that social interaction and speech were instrumental to human development and learning and that language was the most important symbolic tool provided by society. Spouse (1998) argued that the professional development of nursing students is also dependent upon social interaction and the use of language as a method of socialisation. Vygotsky (1986) further explored the relationship between language, development and thought. He made an explicit connection between speech, both silent, inner speech and oral speech, and the development of mental concepts and cognitive awareness. He believed that intrapersonal speech was qualitatively different from interpersonal speech, the former having developed from external speech by a gradual process of internalisation. Vygotsky argued that intrapersonal speech promotes higher mental functions such as problem solving and the development of conceptual frameworks and can be used as an internal organizer of activity. This can be seen in clinical practice when a nursing student is undertaking an unfamiliar task, for example: dispensing medication and can be heard 'thinking out loud'. In this case, the student is using an internal voice to act as their own personal guide or coach to help them gain proficiency in conducting a new procedure or in utilising the vocabulary of new knowledge. As mature learners we can self-instruct and 'scaffold' ourselves through difficult tasks. We may have also relied on others in the profession to 'scaffold' us during earlier attempts of unfamiliar tasks. Vygotsky was concerned with the social origins of human development, unlike Piaget who held that social development was dependent upon the stage of physical development (Spouse, 1998).

A number of parallels can be drawn between Piaget's theories (1950, cited in Atkinson et al., 2000) regarding the development of intelligence in children and how mentors support students in practice. Piaget argued that cognitive development in children progresses through a series of hierarchical, qualitatively different stages. Teachers must provide children with appropriate learning opportunities so that they can progress to the next developmental step; they must consider the child's state of 'readiness to learn'.

In clinical practice, mentors must adopt a 'student centred' approach, utilise appropriate teaching strategies and provide learning opportunities for students in the clinical setting, mapped to their stage in their education programme. To do otherwise might expose students to situations for which they are unprepared. This might leave them feeling thrown in 'at the deep end', and making them feel that they may be unable to cope and undermine their confidence. An example from clinical practice may be to have a first year student inform relatives of a terminal diagnosis of a patient. This would be inappropriate in most instances, and may result in the student feeling traumatised and unable to learn in such circumstances.

Mentors also have an important part to play in helping students to relate the theory they have learned at the university to the practice they see on clinical placement and vice versa. Mentors need to encourage students to make links and understand relationships within and between subjects if learning is to occur (Spouse, 1998).

Bruner (1966) further argued that educators need to apply appropriate pedagogy which will provide learners with the means of grasping the underlying principles and concepts of a subject, rather than just mastering factual information. This allows students to develop their own ideas and go beyond what has been taught. For example, a student may be taught by the mentor how to wash their hands and become very skilled at hand hygiene. However, in order for the student to apply her newly gained skills appropriately in all situations, she must have an underpinning knowledge of infection control principles. Bruner (1966), in extending Vygotsky's ideas and applying them specifically in an educational context, stressed the role of language and interpersonal communication, especially in the 'scaffolding' process. Unlike Piaget, Bruner did not identify 'stages of development', as such. He describes three modes of representing the world; they are enactive (action based), iconic (image based) and symbolic (language based). These are not neatly delineated stages; they are integrated and translate one onto the other. This forms the basis of the 'spiral curriculum' where a subject comes to be learned at increasingly complex levels of difficulty. A typical example from clinical practice: when nursing students are introduced to basic hand hygiene early in their programme but progress to the complexities of microbiology in the latter stages, the mentors' role is to help relate theory to the practice they engage with on clinical placement. Ultimately, this is about helping students to achieve a deep level of learning, to understand the meaning, rather than just having a superficial knowledge of the subject (Marton and Saljo, 1976).

2.6 The Humanist perspective

Humanist learning theories have a contribution to make in understanding how nursing students learn in clinical practice (Aliakbari et al, 2015).

A key principle of the humanist approach is the emphasis on respecting the individual as someone who is motivated by an urge to learn from within themselves (intrinsic). In this paradigm the learner seeks personal growth and development for their own sake, their focus is on the experience of learning.

In order to augment this aim, the student needs a facilitator to guide them towards achieving their goals and objectives, rather than a 'teacher' who attempts to directly transmit knowledge, for instance by means of a lecture.

There is an emphasis, in the humanistic approach, on the active learner who is required to take control of their own learning amidst a world of complexity and change.

Nursing students have chosen to undertake a programme of study and should therefore be self-motivated to meet the goal of attaining registration with the NMC. The facilitator is the mentor who provides guidance in helping the student to achieve this objective amidst the uncertainty and change experienced in modern health care delivery.

The humanist perspective and the educational theories generated by it have had a huge impact upon the way that pre-registration nursing programmes are designed and delivered. The socialisation process, inherent in nurse education, makes 'care' difficult to teach or facilitate unless the philosophy and methods are consistent with such ends (Milligan, 2011). Humanist educational principles assert that education is about personal growth and it underpins much of the remit of the mentor.

Mentors are expected to 'facilitate personal and professional development of others' (NMC, 2008a). In 1915, Dewey described education as 'a fostering, a nurturing and a cultivating process' (cited in Purdy, 1998). Nurse mentors take on this fostering and cultivating role for their students, providing learning experiences, teaching, assessing, providing feedback and acting as role models. Mentors hold a pivitol position in helping students to develop professionally and personally. Jones (2013) indicate that the relationship between mentor and mentee is an important factor in the initiation of learning. This is evidenced in the nursing literature, which reveals the importance of the personal relationship between mentor and student to the success of the mentoring process (Spouse, 1998, 2001a, 2001b).

Rogers (2002) advocates that it is necessary to create a community of learning learners are 'prized', accepted, trusted and valued as individuals. These humanist theories with their emphasis on the individual, personality and the circumstances of learning go some way to enhancing understanding of the ways in which nursing students can be helped to learn in the workplace. However, there has to be an acknowledgement that whilst the ideal is for the learner to be 'prized', in the busy health care environment this is not always the case and the literature bears witness to often poor student experiences on clinical placement (Duffy, 2013).

Learning can be seen as a complex amalgam partially explained by a range of educational theories. All make a contribution in helping to explain what occurs in clinical practice. Given that nursing students' placements are within clinical teams, the work of David (2014) seems particularly pertinent, offering a perspective in which it is the social situation and social practices that create the possibilities for learning. Humanist theories help in an appreciation of the facilitative role that mentors play in guiding students to achieve their learning objectives.

2.7 Theories of Adult Learning

I then considered adult learning theories for what they might add to my understanding of learning in clinical practice. Knowles (1989) stresses the significance of the prior experience that learners bring to education, making them a rich resource for peers and teachers alike. At the heart of this model is the way in which learners are regarded.

There is the possibility of envisaging a new nurse making a contribution as a result of their own experience, perhaps as a patient, or bringing a new perspective from their experiences as a health care support worker (HCSW). However, new recruits to the profession find it difficult to understand that their prior knowledge is a 'rich resource' for colleagues in each clinical speciality they have their placements.

In Knowles' model, adults are self-directed in their learning. They become ready to learn when they need to know something and they need to be able to apply what they learn. Nursing students ideally should have a strong appetite to learn: they have chosen to enter the profession and their goal is to gain the status of a registered nurse by achieving the proficiencies required by the NMC (2018). In clinical practice they are presented with the opportunity to directly apply this learning. Spouse (1998) indicated that self-concept is often affected by what is learned in adult learners. This self-concept moves from dependency to independency as individuals grow in

confidence. She further went on to say that the role of mentor is important in helping students progress from a state of almost total reliance upon them to independent working, when they can 'fly solo'.

2.8 The Learning environment

There is a lot of evidence of the importance of a positive clinical learning environment, and the majority of this focuses on hospital based environments (Andrews and Chilton, 2000; Gray and Smith, 2000; Papp, Markkanen and Von Bonsdorff 2003; Watson 2000, Wilkes, 2006). Students are also gaining their clinical experience on community placements and there is a growing evidence base of the role of these placements upon student learning (Simoni and McKinney 1998, Canham and Bennett 2002, Gopee et al. 2004; Kenyton and Peckover, 2008; Stayt and Merriman 2012, Albutt, Ali and Watson 2013, Al Saya et al 2014). However, regardless of the clinical placement, there are a number of characteristics, which have been identified as creating a positive learning environment (Chan, 2002). Chan (2002) highlighted the importance of interactions with staff on the ward coupled with rapport and support. Students seek respect, support and acknowledgement from their mentors and other members of the team. If the focus is on task orientation to gain clinical skills then Midgley (2006) argues that many learning opportunities may be missed. The clinical learning environment has increasingly been utilised in an international context to review the quality of placements, and viewed as a robust instrument for quality assuring placement learning (NMC 2010).

2.9 Nature of placements

The hospital setting provides differing clinical experiences across acute and chronic areas of healthcare. The culture within chronic care had a greater focus upon caring with patients taking on a more active role in their care. In contrast, within acute care areas with its emphasis on curing and technological interventions students found this more difficult to manage (Salmond and Echevarria, 2017). Higgins and Melincavage (2011) and Watson et al (2009) identified the anxiety students face on their first placement and this has also been reported in other studies (Chernomas and Shapiro 2013), Wedgeworth 2016). Henderson et al. (2012) and Willians and Palmer (2014) did highlight within specialised units such as critical care mentors were supportive of student learning and in contrast to general wards they were well staffed and were more able to facilitate student learning. Shepherd and Uren (2014) believe that one-

to-one mentorship results in a positive student-mentor relationship but impacts negatively on the mentors' workload.

2.9.1 Practice Learning

Students learn most effectively in learning environments that facilitate learning by encouraging and supporting and making them feel they are part of the team (Henderson and Eaton, 2013). If the learning environment is unpredictable, unstructured and overwhelming, students can be left with feelings of vulnerability and anxiety. Henderson and Eaton (2013), identified that issues such as staff shortages, a lack of mentors, increased workload, staff feeling threatened by student nurses, and poor teaching skills can contribute to students not feeling supported.

Both the NHS and HEIs have a responsibility to provide a high standard of nursing education and support, which includes high-quality teaching and leadership in clinical education.

MacDonald, Paterson and Waller (2016) found student nurses were very perceptive to poor practice. Not only do they frequently report negative experiences and dissatisfaction in the practice setting, but also they anticipate hostility and difficulties communicating with staff (Chan (2002). Responding to their needs and demonstrating a positive attitude to teaching can enhance students' learning McGowan (2006)

McIntosh, Gilman and Smith (2014) highlighted that although most mentors are aware of their role in working with student nurses, there are barriers that prevent them from giving the required support: increased workload, perceived negative experiences and organizational constraints. Generally, these constraints lead to mentors having to prioritise patient care over student learning.

Pryce-Miller (2013) identified that inadequate training to become a mentor and difficulties in taking responsibility for students without any reduction in their workload as some of the main challenges faced by mentors. Mentors felt that students should take more responsibility for their own learning and recognise opportunities for learning There was also a feeling from mentors that student nurses have a lot to offer and they both can benefit from the exchange of knowledge and skills in order to develop professionally and have mutual respect for each other.

2.9.2 Learning communities

learning communities take four generic forms (Lenning and Ebbers, 1999):

- 1. Curricular learning communities: this is made up of students co-enrolled in two or more courses (often from different disciplines) that are linked by a common theme.
- 2. Classroom learning communities: the classroom is treated as the centre of community building by featuring cooperative learning techniques and group process learning activities as integrating pedagogical approaches;
- 3. Residential learning communities organize on-campus living arrangements so that students taking two or more common courses live in close physical proximity, which increases the opportunities for out-of-class interactions and supplementary learning opportunities; and
- 4. Student-type learning communities are specially designed for targeted groups.

Most learning communities provide the opportunity for students to participate in extracurricular activities, which are linked to increased academic effort and outcomes such as promoting openness to diversity, social tolerance, and personal and interpersonal development (Cabrera, et al., (1998) and Whitt, et al., (2001). In addition, students who actively participate in extracurricular activities were more likely to connect with a group of peers, which is important for student retention, success and personal development (Pascarella & Terenzini, 1991; Rendon, 1994).

Authentic learning occurs when these diverse academic and social activities are integrated into a meaningful whole (Newell, 1999). In this way, learning communities develop a constructivist approach to knowledge development (Cross, 1998), whereby knowledge is not "discovered" but socially constructed.

There are three strands of theoretical literature that support the use of learning communities: (i) developmental research (King & Kitchener, 1994; Piaget, 1964) which encourages educators to design learning environments that both challenge and support students to move to higher levels of intellectual and psychological development (ii) cognitive science: Bransford et al (2000), stresses the importance of the learning context and developing schema that permit new learning through making connections with what was previously determined to be valid under specific conditions and contexts. The increased opportunities afforded by learning communities for peer learning and interaction allow for the development of richer, complex ways of thinking and knowing so that students learn at a deeper level (iii)

learning outcomes: Shapiro and Levine (1999) reported that students participating in learning communities were more engaged overall, had higher persistence rates, and evidenced greater gains in intellectual and social development compared with peers who did not participate in learning communities.

The theoretical and empirical work supporting learning communities suggests that there is much to be gained for both mentees and mentors.

2.9.3 Knowledge

Propositional knowledge refers to knowledge underpinning nursing which is gained from textbooks, often referred to as "knowing that" (Eraut, 2000). This knowledge underpins theories of nursing together with scientific knowledge from subjects such as biology, psychology and sociology. The term "standard paradigm of learning" is used by Spector et al (2004) to refer to learning which takes place in formal settings.

The above view of learning is firmly focused in the cognitive approach to learning arguing that learning is purely a process of the teacher providing the student with knowledge to be retained Spector et al (2004).

Practical knowledge on the other hand relates to that involved in action, referred to as "knowing how". Process knowledge cannot exist in isolation of propositional knowledge. Tacit knowledge is procedural and usually not directly taught but gained on the job in everyday situations (Eraut 2000). The apprenticeship approach of observing an expert and talking to them provide opportunities for acquiring tacit knowledge. Eraut (2000) further argues that 'uncodified' cultural knowledge is acquired informally through participation in social activities but that it is often difficult to identify. So nursing involves acquiring both propositional as well as practical knowledge and this occurs in both the educational institutions and the practice placements.

2.9.4 Learning as participation

There has been a growing interest in exploring how students learn in practice given they are now supernumerary and not considered part of the workforce. Socio-cultural approaches to learning have become more evident in exploring how students learn in practice settings particularly within the international literature (Spouse, 1998; Newton, Billett and Ockerby, 2009).

Lave and Wenger (1998) argue that learning in practice is about "acculturation", and is referred to as socialisation into practice with the opportunity to contribute to the practice, thus becoming part of a community of practice. Despite the benefits of being part of a community of practice, it is often hard for nursing students, who are constantly moving from one placement to the next, to become members of the team and achieve full participation, consequently they may remain peripheral which may impact on the amount of learning they achieve. Eraut (2004) identified four types of work activity that give rise to learning: working alongside others, tackling challenging tasks, participation in group activities and working with clients as.

In a longitudinal study in two Australian and one UK University, Levett- Jones et al (2009a), explored the relationships between staff and students and the impact on "belongingness" and learning. Students rated the placements as "ranging from a collective feeling of belongingness to one of alienation" (p322).

The data analysis in Levett- Jones et al (2009) study involved constant comparison with codes emerging. One important area identified was relationships, which included codes such as; "receptiveness, inclusion/exclusion, legitimization of the student's role, recognition and appreciation, challenge and support" (p316).

Newton, Billett and Ockerby (2009) drawing on the work of Billett (2002a), explored the experiences of six students in a qualitative longitudinal study in Australia and found that students needed to engage with the team otherwise they did not feel they "belong". The above study adds an important dimension to the review as it draws on workplace learning literature to support the rationale for learning through clinical placements and indeed provides a stronger argument for this thesis to draw on workplace learning literature. Levett-Jones (2009a) and Newton, Billett and Ockerby (2009) are both studies which considered learning in practice, although mainly Australian but they add support to developing a stronger theoretical evidence base of the impact of mentorship on student learning in practice.

An essential aspect to workplace pedagogy, is the guidance, participation and engagement afforded to individuals (Billett, 2004). As identified later in chapter, learning takes place in a variety of practice placements for nursing students. It is therefore essential that students maximize the learning experience and immerse themselves in the clinical environment as these are the foundation for developing into a registered nurse. This review will consider guidance in more detail as this is the

role the mentor undertakes in mentorship within the nursing context. I will draw predominately upon the work of Billett (2004) to demonstrate the underpinning pedagogy concerning learning in the workplace.

2.10 Mentorship

Nursing and Midwifery have adopted the term: 'Mentor', although it is beset by a lack of consensus around the role (Wilkes, 2006). Various terms are used to describe the term mentor: supervisor, preceptor, mentor, facilitator and assessor. In the UK the term 'mentor' is used to denote the qualified nurse/midwife who supports preregistration nursing/midwifery students (NMC 2008). However in Ireland and internationally this person is termed a "preceptor". Preceptor, within the UK, s a named experienced practitioner who offers guidance and support and must have been registered for at least 12 months and have experience in their clinical area (HEE 2017). It comes as no surprise that the lack of clarification of the term and the role has resulted in an inconsistent approach to the implementation of the role within clinical nursing practice.

2.10.1 Support and guidance

Billett (2004) indicated that the key aspects in supporting how and what students learn in their work/practice are based on giving them opportunities to engage and participate in work with guidance. The way in which students are welcomed, supported and given access to learning situations reflects the degree to which opportunities are afforded them.

Direct supervision or guidance, may involve intentional strategies such as modeling, coaching and questioning activities when students are new to a placement area or in their early placements. Engagement in activities is crucial and some of this may be sequenced to move from simple to more complex activities by direct or indirect supervision from a mentor (Billett & Somerville, 2004)

An important issue to the learner is 'guidance' (Mamchur & Myrick, 2003). They further went on to say that a lack of guidance might cause the students to spend more time on routine and simple tasks. This may have a negative impact on the way the students' see their learning experience As clinical placements become increasingly complex environments, students need the support of the experienced practitioners to support them in their learning (Billett. 2002b). Nevertheless, the way

this occurs will vary in each placement because it depends on the norms and practices of each, and thus the student's experiences and learning will be different.

The role that others play in the team seems to be less researched than mentor's role until recently when Christiansen and Bell (2010) have explored the role of peers as becoming an increasingly important part of the support mechanism in practice placements.

Students learn by observing and listening to others at work and participate. however they need to be aware of this new knowledge and make sense of this. Billett (2001b) and Eraut (2004) argue that the role of others in the workplace can be direct or indirect and can be positive or negative and that this is often not acknowledged. The norms of the workplace are essential to providing invitations to participate in work activities, as well as the workplace readiness to encourage participation. If these are not present then students can be left on the edge or periphery of practice (Billett, 2001).

The individual's prior history and personal experiences may influence their level of engagement and participation. There are instances where students have rejected guidance from a mentor and sought out others in the team for additional support where a mentor is less visible. Whatever the reason, this is most likely to be influenced by the students' personal history and their prior knowledge from either previous placements or life experiences.

In summary, workplace pedagogy provides an approach to understanding how nursing students learn in the different workplaces. Clinical placements that are inviting and provide guidance is needed to help the students make sense of the work activities. The workplace is indeed a complex arena for learning and this study will explore a variety of contexts through the eyes of pre-registration students and their mentors, a perspective missing from much of the literature on mentorship.

2.10.2 Mentor Preparation

Nurse mentor preparation has undergone many changes over the years, but recently this has become structured with the NMC identifying criteria and requirements of the mentor to ensure protection of the public (NMC, 2006; NMC, 2008). In order to qualify as a mentor in the UK, nurses need to pass a recognised mentor programme which involves both academic and practice learning (NMC, 2008). Mentorship

programmes were introduced and designed to reflect the changing nature of the preregistration nursing programmes so students were adequately supported and supervised whilst in the practice setting (DH, 1999). The preparation of mentors continues to evolve but there concerns around the quality of mentoring in clinical practice.

The governance around students' mentoring is well documented in the literature (Pulsford, Bolt and Owen, 2002; Watson, 2003; Duffy, 2013). The NMC's guidelines and standards which were introduced in 2006, updated in 2008 has since undergone a complete revision. In 2018, the NMC published their expectations regarding the delivery of all pre and post registration NMC education programmes. This standard: 'Standards for education and training' (NMC, 2018) is set out in three parts with Part 2 specifically detailing the standards for student supervision and assessment. Part 2 introduces and defines three new concepts: practice supervisors (all registered nurses and anyone who hold a registration with a governing body: physiotherapist, social workers, doctors), practice assessors (a nurse who is currently a sign-off mentor) and academic supervisors. The concept of mentoring will be phased out by September 2019 when it is expected that all nurse training will be based on the new standards. The implications of this move has not been quantified but the expectations would be that the governance around student supervision and assessment will become more robust. It is evident that the role of the mentor is complex and multifaceted and before exploring aspects of the role in more detail it is useful to consider existing literature on mentorship.

2.10.3 Mentorship relationships and qualities

Teatheredge, (2010), Straus et al.(2013) and Eller et al (2014) indicated that there is nothing mysterious about being an effective mentor. Eller et al (2014) further went to say that a combination of open communication and accessibility, goals and challenges, passion and inspiration, caring personal relationship, mutual respect and trust, exchange of knowledge, independence and collaboration and role modelling are the components of effective mentoring.

Spouse (2001) qualitative study of six students demonstrated that the mentoring role was crucial and identified the importance of the mentor "befriending" students to enable access to learning opportunities. When students developed a good relationship with their mentor, they showed enthusiasm, confidence and

assertiveness which was viewed as a positive aspect of the relationship..

Despite the importance of establishing positive relationships there is still much evidence of negative experiences in the mentoring relationship. The 'Toxic mentor' was first discussed by Darling (1984) and it referred to mentors who '*ignored*, *criticised and did not form effective relationships*' (Darling, 1984,1986; Mamchur and Myrick, 2003; Gray and Smith 2000). In Mamchur and Myrick (2003) study revealed the degree to which conflict affected relationships and the factors that contributed to conflict: expectations being different between the mentors and mentees and differences in personality. The impact of the conflict was perceived by the student destruction of their self-image. Students have demonstrated that they can use the negative experiences as learning opportunities for the future (Pearcey & Elliott, 2004). They further went on to say that a positive relationship with their mentor is crucial to their overall learning but they also highlight the emotional and psychological demands on them in developing effective relationships.

The mentoring relationship can be emotionally draining particularly if the relationship is particularly difficult relationship or if there are competing demands within the placement (Duffy, 2004b). Mentors particularly found it difficult to fail a student as this suggested they were poor mentors (Duffy, 2004b). For the mentoring relationship to be effective, the mentor needs to facilitate learning opportunities and focus on the individual student needs (Eller et al, 2014).

2.10.4 Student- mentor relationship

Studies done by Watson (2003); Andrews and Chilton, (2000) and Higgins and McCarthy, 2005 have predominately focused on short periods of time spent with each other (a few days to a couple of weeks). A study by Newton et al (2009) highlight the value students placed upon the role of their mentor during the placement period with emphasis on the placement being supportive, tolerant of the generational gap and the team being inviting.

Watson (1999) case study on one theory practice module in the common foundation programme within Project 2000 diploma and degree programmes in the UK utilising a qualitative ethnographic design with thirty five students and fifteen mentors through semi- structured interviews demonstrated that students had a 'distortion of the actual meaning of mentoring.

In a small study by Andrews and Chilton (2000) utilizing twenty two mentors and eleven students participated in the study, mentors who had a teaching qualification were found to be more confident in relation to the role than those who did not. However, since this study the NMC has formalised preparation for all mentors.

In another exploratory study carried out with Project 2000 students by Lloyd-Jones, Walters and Akehurst, (2001) examined the extent to which named mentors were available for their mentee. A group of 117 mentors and 125 students from their second and third year participated identified that students frequently worked shifts with their mentors. However, if their named mentor was absent then students had less interaction and less time in direct care. The level of direct and indirect supervision varied. The response rate was low and this only covered one week in time.

Higgins and McCarthy (2005) study examined the experiences of mental health nursing students of having a mentor during their first placement experience. The semi-structured interviews of six students suggested that the mentor was important in contributing to their learning and their initial encounter with patients was quite anxiety provoking for these students, due to the nature of the patients' illness. The students, however, valued having an named staff member who was there "just for them". The success of the student-mentor relationship was supported by a friendly, supportive but professional relationship.

These studies are limited due to short duration of the studies, focusing predominately on one module and only considering one placement. It is evident that though some aspects of pedagogy exists in the literature that examine how the mentoring relationship is shaped, I believe that this thesis can address this gap by providing a useful insight into pedagogy and learning in a variety of contexts of care for students and their mentors. It can also add to the body of knowledge about how students can be supported to learn in practice.

2.10.5 Learning to Nurse

The way nursing students learn in the practice setting has been an area of much debate over the years, but with the changing nature of nurse training programmes now, and who supports them in practice, has become even more critical (Spouse, 2001). The nature of care has changed: students need opportunities to acquire

practical skills and to develop their proficiencies to become a qualified nurse (Chan, 2002). Spouse (1998a) argued that students need opportunities to develop and acquire psychomotor skills such as hygiene care but also the communication and affective skills. The support mentors give students to learn will briefly be considered and these include; pedagogic strategies, reflection and assessment/feedback.

2.10.6 Pedagogic strategies

Watkins and Mortimer (1999) define pedagogy 'any conscious activity by one person designed to enhance the learning of another', and Alexander (2001) indicates that pedagogy connects the act of teaching with culture, mechanism of control and structure and that any definition of pedagogy must take into consideration the learner. Severiens, Meeuwisse, and Born (2015) have all agreed that students must 'feel at home' regadless of pedagogic approach.

Mentors utilise a variety of pedagogic strategies to support learning in practice: modeling, coaching, scaffolding and reflection.

A case study by Forneris and Peden-McAlpine (2009) demonstrated that expert nurses operate from a "deep tacit situational understanding" (p.1722), a finding that was similar to the work of Benner (1984). This study identified that the opportunity to discuss care decisions with their mentor enhanced their thinking. Decision-making is a key component of the requisite skills required to become a nurse and students need the support from qualified practitioners to recognise and develop these within the complexity of patient care situations.

2.10.7 Reflection

The work of Schon (1983) refers to this as "reflection in action" where the student would try to understand what is occurring in this concrete experience whilst it is taking place. Another stage of reflective observation is known as "reflection on action" (Schon, 1983) perhaps more relevant for the beginning nursing student. This is where the student would reflect on what has happened after the experience but ideally the student would need support to make sense of this. It is essential that novice nurses have some protected time to reflect and to discuss these experiences with their mentor and the opportunity to have feedback.

2.10.8 Feedback and Assessment

Students value feedback both informally and through the assessment process and it builds confidence. However, Duffy, (2004) and Nettleton and Bray, (2008) have all agreed that there can be difficulty in relation to the giving and receiving of feedback.

In Duffy (2004a) work, she identified that mentors were often reluctant to fail students particularly early in the programme and in their third year. Mentors requested support from the university which was not always evident. This does raise issues about the reliability of assessment decisions when mentors are supporting, supervising and assessing students. The study by Webb and Shakespeare (2008) to explore how mentors make judgments about clinical competence demonstrated that many judgments about student competence are made on a fairly subjective basis by mentors. Through a variety of learning and teaching strategies, reflection and feedback, mentors can support students in their learning to become a nurse. This learning, however, does not occur in isolation from the clinical placement /work environment.

2.10.9 Learning at work

The workplace is a complex learning environment but the important issue is the way students are supported and facilitated to participate. It is important that students are told briefly about the nature of knowledge which they will develop as they learn the craft of nursing but equally, they need to determine what they need to develop that will add to their growth as a nurse.

2.11. Conclusion

Many of the studies that considered mentorship relationships were small-scale qualitative studies, from either the students' or the mentors' perspectives, and they had limited information on methodology and data analysis (Pearcey and Elliott, 2004). This makes it difficult to consider the merits of this research. There are more literature reviews on mentorship (Andrews and Wallis, 1999; Wilkes, 2006) -these provided an overview of aspects of mentorship such as qualities, role and expectations. The literature review presented the current state of research on mentorship and the learning environment. There is currently limited evidence of robust qualitative studies that have looked at both students' and their mentors' experiences of mentoring and learning. Though the literature on mentoring in nursing

is wide ranging and the professional body, the NMC has set out the expectations of the role of the mentor in spending at least forty percent of their time directly or indirectly supporting and assessing students (NMC, 2008), the evolution of support for students and the requirements for their training have been redefined by the governing body (NMC 2018).

The literature review provides a strong rationale for this thesis to explore pedagogy in specialised clinical learning environments. Firstly, much of the literature addresses mentorship from either the student's or the mentor's perspective with few exploring student-mentor pedagogy. Secondly, there appears to be an assumption that mentorship may be the same in every environment and this study will explore a number of environments to consider if this is the case. Finally, there is a need to draw upon workplace learning literature. This will add to the underpinning evidence base to understand the significant role of the mentor and their relationships and interactions with students in providing pedagogy that will student-mentee relationship in practice settings. This thesis therefore aims to add to the existing body of knowledge by exploring and identifying the ways specialised clinical learning environments are constructed and the potential impact this has on practice learning, coupled with identifying the barriers that may impact on the mentor/mentee relationship in specialised learning environments.

3.0 Methodology

3.1 Introduction

In this chapter, I aim to explore grounded theory that is used for this study and its contribution to data collection, analysis and development of a substantive theory. As part of the discussion, I describe the ethical considerations associated with this methodological choice and its limitations. I also discuss how participants for the study were selected, the process of sampling, data collection and data analysis. I follow this with a discussion of the issues related to data validity, credibility, the concept of trustworthiness and theoretical sensitivity in grounded theory as it relates to the actual or potential impact that learning strategies used in practice have on the relationship between mentees and mentors, particularly within specialised clinical learning environments such as the Intensive Care Unit and Midwifery. In keeping with the ethos of grounded theory, reflexivity is maintained through the chapter by using 'I' as described by Hamill (1999).

3.2 The Research Aims and Objectives

The research aims and objectives were designed to help me focus on the key areas of my study and map out the journey of my enquiry. The research study evolved, I was continually challenged to reflect and redesign the aims and objectives to match the ever-changing landscape of the research context.

In order to ensure that I would have a meaningful understanding of the way mentees and mentors function in specialised clinical learning environments, and learn from their experiences, I developed the following aims and objectives for the study:

- 1. To explore and identify the ways specialised clinical learning environments are constructed and the potential impact this has on practice learning
- 2. To identify the barriers on mentor/mentee relationship in specialised learning environment.
- To engage with clinical practice and the use of learning strategies to maximise practice learning that support and enable students to translate practice and vice versa.

3.3 Choosing the Methodology

3.3.1 Ontology (What is reality?)

I am interested in the world around me, specifically my work environment (the Intensive Care Unit) as a nurse educator and I wanted to explore the interaction of mentors and mentees who work in specialised clinical learning environments and the knowledge that can be extracted from this study to support learning in my work environment. Bryman (1988) argues it is "the way in which people being studied, understand and interpret their social reality" (p8) which is important. There are two different philosophical views identified in considering the social reality and how this is interpreted. The first, the positivist paradigm considers the social world as external to individuals and objective and "that objects have an independent existence and are not dependent for it on the knower" (Cohen et al, 2003). The second interpretivist paradigm views objects of thought as words, which do not have an external independent meaning.

Human nature is perceived from either a subjective or an objective approach. As a subjective view, Burnell and Morgan (1979) identify human nature as entailing 'free will' and influenced by the relationship the individual has with the environment. In contrast, the objective approach views individuals as products of the environment and 'conditioned' by external circumstances. As my study is concerned with the social reality from the participants' perspectives, an interpretivist ontological approach to reality underpins the nature of this study as it set out to understand the students (mentees) and their mentors' world. As nurses, our professional governing body-the Nursing and Midwifery Council (NMC), governs this social reality of mentoring in nursing. The NMC (2008, 2018) standards outline the requirements for supporting the learning and assessment of students in the practice learning environment and specific outcomes for mentors. Coupled with this, other professional bodies are influencing the way learning is shaped in clinical practice: the Care Quality Commission's (CQC) (2014) and the Faculty of Intensive Care Medicine and Intensive Care Society (FICMS) (2013) require, as a minimum indicator for quality care to be delivered. Both the CQC and FICMS have indicated that on any shift, 50% of the staff nurses must have a post registration course related to the specialty. As I begin to understand the mentoring relationship paradigm, I had to acknowledge that this was also my world. As a nurse, I realized that I could not remove myself from this world but I had to be ever mindful of my role an insider researcher. My nursing philosophy, my professional evidence base, best practice and benchmarks also influenced the culture of the learning environment and further, the way learning took place within clinical practice placement. It is with this realization, I recognized that the participant's, and my view, of human nature is subjective and a personal experience.

An interpretive approach allows for the exploration and understanding of specialized learning environments from participants' perspectives in which reality is subjective as it is their meaning of events that is important. Sparkes (2002) argues that the thoughts and words of the culture being studied predominate in the text from the participants' interviews.

Although I have put the voices of the students and their mentors at the forefront of my research, to understand their experience whilst working in specialized clinical learning environments, I acknowledge that my voice will be present through interpretation of the participant's voice. The data collection process of interviews is a constructed social interaction. A positivist approach in contrast focuses on seeking causal relationships and focuses on prediction and control and sees the social world as objective. However, my study is seeking to understand human experiences and therefore it would be inappropriate to introduce some form of control to this process.

3.3.2 Epistemology

Epistemology is concerned with the nature of knowledge and how it is acquired. It is the theory of how we know what we know. A number of assumptions underlie social research. The first can be characterised as a positivist view. Here knowledge is something which is acquired. Furthermore, as Holloway and Wheeler (2002) argue, in the positivist approach, knowledge is based on the belief of universal laws and stresses the importance of objectivity and neutrality. In contrast, the interpretive paradigm focuses upon the subjective experience and personal, unique nature of this knowledge for individuals (Denzin and Lincoln, 2000). Here knowledge is something that has to be personally experienced (Bryman 2001). As Schwandt (1996) argues, interpretivist epistemologies can be characterised as hermeneutic because they emphasise the focus upon the situation in which human actions make meaning. In interpretivism this knowledge is through meanings attached to the phenomena being studied and the researcher is interested in trying to make sense of these. Cohen et al (2003) clarify interpretivism as multifaceted images of human behaviour as varied as

the situations and contexts supporting them.

Ritchie and Lewis (2003) argue that an interpretivist approach stresses the importance of interpretation as well as observation and understanding of the social world, and that it originates from the work of Kant who focused upon the importance of 'understanding'. Interpretivism is more concerned with "the understanding and interpretations of what is happening" (Ritchie and Lewis, 2003 p7).

Interpretivism is often linked back to the writings of the nineteenth/twentieth century sociologist Max Weber who focused upon the notion of understanding within the social sciences. His notion of 'Verstehen' centres on understanding and exploring the meaning of the human experience in the participant's own world and within the context of this world (Cohen, Manion & Morrison, 2000). The key focus within the interpretive approach is the focus on the individual experience and the nature of knowledge based upon their unique experience. It is therefore largely descriptive and through full description generating understanding and knowledge. It focuses upon action as opposed to the past and is concerned with understanding the social world around them and theory may arise from this particular situation.

Interpretivism has become a term which adopts a range of perspectives which are mainly drawn from sociology, philosophy and anthropology. These include; ethnomethodology, phenomenology, symbolic interactionism and social constructivism (Dowling, 2006). Social constructivism views truth as relative and dependent on one's perspective. Constructivism is built upon the belief that human beings construct their social reality (Searle, 1995). It enables the participants to construct meaning and this is also influenced by the interaction with the researcher within the data collection process and the researcher's interpretation of such data. Through their stories the participants can tell their own views of reality. My research will draw upon a constructivist paradigm as I am trying to gain the participants' perspectives of reality through their stories. As Crabtree and Miller (1999) argue:

"this paradigm recognises the importance of subjective human creation of meaning," (p10).

I have to acknowledge that one challenge as a nurse seeking to research other nurses, I enter into the research pathway with prior knowledge and my personal interpretation of how our world (mentors and mentees) is shaped. I cannot disregard this prior knowledge. Contrary to the belief in my chosen methodology, I cannot separate myself, and my study, from the body of knowledge that underpins my practice as a nurse. In order to achieve reliability and validity, against the backdrop of my insiderness, in this research, I aim to maintain reflexivity and use Strauss and Corbin's model for avoiding bias (Figure 11). As my research is concerned with how the social world is interpreted by students and their mentors in specialised clinical learning environments and the meaning they attach to this, the research design has been informed and guided by the theoretical interpretative stance.

3.3.3 Grounded Theory Methodology (GTM)

I have used Grounded Theory- the social constructivist framework, as described by Charmaz (2006), as it acknowledges the complexity and uniqueness of the learner and encourages the learner to be an integral part of the learning process (Wertsch 1997). A central tenet of constructivist grounded theory is to give voice to participants. Charmaz (2006) has encouraged grounded theorists to incorporate the multiple voices, views and visions of participants in rendering their lived experiences. In so doing, constructivist grounded theory has deviated significantly from the original intent of the classic methodology. Further to this, the study's perspective is interpretative and supported by the ontological and epistemological philosophical assumptions. In coming into the research situation, grounded theory gave me a useful method to learn about individuals' perceptions and feelings regarding the study aims. Grounded theory offered me a powerful methodological framework to achieve the aim of my study.

In determining the methodological framework of this study, I reflected on the use of another qualitative approach: phenomenology. After examining the construct of grounded theory versus phenomenology (Table 1), I recognized that I was aiming to develop an exploratory theory on the basis of a social process (mentoring) and not describe the meaning of a lived experience of a phenomenon. Coupled with this, I was aiming to observe my participants where the social process was occurring and not observing the context of a phenomena and aiming to generate clarity-taking it from thematic analysis to theory development. My sampling of participants was not based on a single phenomenon but a social process under different conditions: mentoring in two different specialized learning environment. As I thought on these aspects of grounded theory and phenomenology, I reflected on the nature of my

study and its intended outcomes and I set aside phenomenology. Also it was evident that as the study evolved, it did not lend itself to any another methodological approach.

I did realise, however, that grounded theory shared the following characteristics with other qualitative methods, which corresponded to those of my study, in that it focused on everyday life experiences, valued participants' perspectives, the enquiry was an interactive process between researcher and respondents and it was primarily descriptive and relied on participant's narratives. However, what was unique about grounded theory was that it provided theoretical sensitivity, a process of developing conceptual insight that is used by the researcher as he comes into the research situation. Strauss and Corbin (1994) identified that the major difference between this methodology and other approaches to qualitative research was its emphasis on theory development. The systematic procedures such as simultaneous collection and analysis of data and the constant comparative logic and theory that emerges from data provided the grounded theory study with rigor that is not accounted for in other qualitative approaches (Charmaz, 2006).

Table 1: A Comparison of Phenomenology and Grounded Theory Methodology

	Phenomenology	Grounded Theory
Philosophy	There exists an essential perceived reality with common features	Theory is discovered by examining concepts grounded in data
Goal	Describes the meaning of a lived experience of a phenomena	Develop an exploratory theory of basic social processes
Methodology (The research Question)	"What is the lived experience of (the phenomenon of interest)"	"How does the basic social process of (X) happen in the context of (Y environment)?
Sampling	Those who have experienced the phenomenon of interest	Those who have experienced the phenomenon under different conditions
Data Collection	Observe participants in the context where the phenomenon is experienced	Observe participants where the basic social process takes place
Interviewing Strategy	Participants describes experience; interviewer probes for details	Participants describes experience; interviewer probes for detail, clarity
Analytical Methods	Identify descriptions of the phenomenon; cluster into discrete categories; taken together, these describe the 'essence' or core commonality and structure of the experience Bracket views	Open, axial, selective coding: Examine concepts across their properties and dimensions; develop an explanatory framework that integrates the concepts into a core category Bracket views
Audience	Clinicians, practitioners and others who need to understand the lived experience of the phenomenon of interest	Researchers & practitioners who seek explanatory models upon which to design inventions
Product	A thematic description of the pre-given 'essences' and structures of lived experiences	Generate theory from the range of the participants' experience.

Adapted from Starks & Trinidad (2007)

3.3.3.1 Advantages and disadvantages of Grounded Theory

In considering grounded theory, I explored its advantages and disadvantages. From a new investigator's perspective, the methodology allowed me to get immersed deeply in the data: *the intuitive appeal* (Myers, 2009). As my aim was to conduct indepth interviews about mentoring experiences in specialised learning environments, I knew that I would be required to immerse myself in the data that was be generated from the interviews. This immersion was translated practically in the constant comparison, coding and memoing approaches to data analysis. Grounded theory provided a vehicle that allowed the research design to take into account my perspective as to how to design my research (Charmaz 2006). Grounded theory also proved to be very useful in answering my research questions, enlightening my thinking and provided me with the reassurance that I was maintaining my focus on the research's aims and objectives when hesitations arose during the research process.

Another advantage of grounded theory is that it allowed me to foster creativity and not bias the emerging theory with any prior assumptions. I was encouraged throughout the study to avoid preconceived theoretical data (Myers, 2009). This was not without its challenge: as an insider, I had to acknowledge my prior assumptions, knowledge and evidence base as I collected and analysed the data. Using reflexivity within the study and constant comparison fostered my creativity. Furthermore, grounded theory encouraged me to move through a process of discovery whereby codes and interpretations naturally emerge from the data. In essence, grounded theory allowed me to derive meaning from the data and analysis using creative, inductive processes; it allows for the emergence of original findings from the data (Jones, Kriflik, & Zanko, 2005)

Grounded theory is unique in its ability to generate concepts by utilizing the logic of constant comparison and frequent memo writing Hussein et al (2014). As I gathered the data, I kept a reflexive diary (memoing) (Figure 1) and kept comparing the emerging concepts with that of other interviews. Furthermore, I found that there was much value in the conceptualizing and conceptual ordering of research data towards the development of a substantive theory.

A notable advantage of grounded theory is in its systematic approach to data analysis. Other qualitative research methods frequently depend on the use of broad

principles rather than the systematic approach, leading to difficulty in their application and interpretation (Myers, 2009). This systematic approach of analyzing data were beneficial in judging, generalizing and comparing the results of grounded theory research (Strauss & Corbin, 1990). The approach of grounded theory to data analysis provided rigor and ensured trustworthiness in the emerging theory which was based on my epistemological and ontological assumptions.

Additionally, the approach will give me enough evidence to support my claims. As a novice researcher, this directed me to consider the relevance, fitness, workability and modifiability of the discovered theory. By adopting grounded theory methods, I was able to direct, manage, and streamline my data collection and, moreover, construct an original analysis of my data.

A final advantage of grounded theory was the ability for me to gather rich data (Charmaz, 2006). Rich data makes the world appear anew: it provided me with a concrete and dense fabric to construct a thorough analysis of the data in addition to aiding me to go beneath the surface of the participants' social and subjective life. In order to obtain rich data, I wrote thick descriptions through writing extensive field notes of observation gathering thorough narratives from the interviews. Grounded theory methods provided me with the tools for making sense of the data and refining it to generate insight into the participants' world. The data gave me enough background about the participants, processes and settings. Moreover, the data revealed what lies beneath the surface and exposes any changes over time.

There are limitations to grounded theory like any other research methodology. Some consider grounded theory to be very complex and time-consuming due to the tedious coding process and memo writing as part of the analysis (Bartlett and Payne in McKenzie et al., 1997). In order to deal with this complexity and the lengthy process of coding, I used specialised software to help speed up the organisation and analysis of the data.

Others purport a limitation of grounded theory to explain, predict a phenomenon or to build a theory is a very subjective process, which relies heavily on a researcher's abilities. To overcome this in my study, I have followed the methodological guidance of Charmaz (2006) to gather and analyse the interview data. In addition, findings from my pilot study were used to strengthen and refine my approach to collecting data from the in-depth interviews with the aim of fulfilling the criteria for this methodology.

3.4 Insider Researcher

As a researcher in my own clinical setting, I was challenged to examine the issues associated with studying a group to which I belonged; I became an endogenous or insider-researcher. As a nurse working in a specialist Cardiothoracic Intensive Care Unit, choosing to study colleagues in this learning environment highlighted the fact that there were many challenges that insider researchers must overcome in order to engage in a fruitful research process. The challenges that I was faced with were related to not only the ethics of being an insider researcher, but also issues related to power relations and the overall validity of my research. I overcame these challenges by engaging stakeholders and participants throughout the process and keeping a reflexive journal. These challenges were highlighted during the University Ethics Committee meeting (Appendix 1) where the position of being an insider researcher was questioned, and justification became critical to my research study, particularly if I was to conduct a study within my own working environment. I met with gatekeepers: Directors of Nursing (Appendix 3), Heads of Research, Managers of the proposed Units and Leads for Education at the research sites to discuss and gain 'buy-in' for my study.

3.5 Study Design

3.5.1 Context

As an educator working in a tertiary Intensive Care Unit (ICU) I was interested in exploring and understanding the actual or potential impact that learning strategies used in practice will have on the relationship between mentees and mentors, particularly within specialised clinical learning environments such as Intensive Care Unit and Midwifery. I also wanted to understand the learning environment's historical trajectories and boundaries in an effort to clarify the impact this may have on the mentoring relationship. Whilst I acknowledge the importance of basing health policy and health care practices on the best available evidence and on translating knowledge or evidence into action ("translational research") is increasingly being emphasized across the health sector, grounded theory offers the opportunity to generate an exploratory theory of a social process, in this instance mentoring in clinical practice. This is important for me as a nurse researcher as I am seeking to explain a potential model upon which I will further design inventions for my Unit and

generate a theory from the range of the participants' experience.

The ICU is part of a busy tertiary referral center where third year pre-registration students are placed for a period of three months. During this clinical placement, students are exposed to nursing care of patients with multi organ failure. Mentors in ICU are expected to contribute towards the development of mentees' basic nursing skills. Developing the basic nursing skills of pre-registration students is challenging as often the students can only be observers in this environment, as the majority of skills and learning in this environment are based around advanced nursing skills and physiology. However, I recognised early in my role as an ICU educator, that students are an integral part of the team and I wanted to make their stay with us as meaningful as possible and that understanding their experience would assist in developing our educational services.

In order to ascertain whether other specialised learning environments were constructed the way learning and mentoring was facilitated in my Unit, I chose to explore a clinical learning area that I was not familiar with: midwifery. I was attracted to midwifery because, unlike the ICU, midwifery is generally associated with 'normality', in that the women are not often considered 'sick' in the traditional sense. Mentors in midwifery develop mentees' basic skills in caring for the woman, the fetus and the postpartum¹ phase. As with the ICU, mentors and mentees spend the majority of their clinical time together given the complexity of the patients' condition. Mentors in both unit offer a very 'hands on' approach to the way mentees are taught. Mentees in both units are exposed to postgraduate knowledge and skills and are 'signed off': making them ready to go onto the Nursing and Midwifery register. Also, the midwifery's gatekeeper was willing to participate in my study. She believed that the learning from the midwives and pupil midwives would contribute a richer understanding to my overall study's aims. She also believed that the findings from my study may contribute to the overall development of her department, team and learning environment.

3.5.2 Setting

In order to contextualize the way the participants were selected, I will now reflect on the structure of the Intensive Care Unit (ICU) and Midwifery Department. The main

¹ Postpartum care: midwifery care provided for the woman and her baby within the first 30 days post delivery.

participants were selected from the ICU. This tertiary referral center provides care for over 1200 patients per annum who are referred to us mainly by district general hospitals and general practices across the United Kingdom. The Unit specialises in cardiothoracic surgery, invasive and non-invasive cardiology procedures, cardiothoracic transplantation (heart and lungs) and mechanical heart support services. The department is staffed with approximately 200 nursing staff with 50-75% of them having a post-registration course in ICU nursing on any shift. We facilitate 10 pre-registration nursing students per year who are in their final year and are completing their clinical rotation before entering on the NMC register. The ICU is funded for 18 beds and care is delivered on a one to one nurse ratio with a Band 7 (Senior Sister) or Deputy Sister (Band 6) nurse in charge overseeing the administration of the shift, an extra qualified nurse to act as a 'runner' and up to 18 nursing staff (Band 5 and 6 staff nurses). Pre-registration students are supernumery during their 3 months stay on the Unit: they are supervised by a qualified mentor during their stay. The Unit is noted for its low staff attrition rate (<10% per annum) and unique strategy for employing and developing newly qualified staff nurses-many of who were former students.

The Department of Midwifery in another local District General Hospital, staffed by over 100 midwives, provides midwifery services for over 2000 births per annum within the local borough and has close relations with the University. Student midwives are allocated to the Unit as part of their rotational development and midwives are expected to mentor as part of their role. A Band 7 coordinator supervises the Units and primarily Band 6 midwives provide midwifery care. The students may be from either an 18-month cohort (shortened midwifery second registration programme) or a 3-year training cohort. This determined the length of their clinical placements in the Department and the learning outcomes expectation for that cohort by the University. The students on clinical rotation are 100% 'hands-on'they are required to participate fully in the day-to-day activities of the clinical area they are allocated². All midwives are expected to have a yearly mentor update and Intention to Practice (ITP). As I reflected on the learning environments and my inclusion and exclusion criteria, I was more illuminated about my sampling strategy and realize that as the study progressed and the data collection became more focused, I moved towards selective and theoretical sampling. However, the broad

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² Labour Ward, Post Natal Unit, Triage, Theatre, Specialist Midwifery: Vulnerable Women, Diabetes and Community

selection criteria remained extant to ensure rich and meaningful data were retrieved.

3.5.3 Sampling process

Grounded theory uses theoretical sampling, where participants are selected based on the study's inclusion criteria. As I started my research journey, I had to determine who would be included in the study. In keeping with my study's aims and objectives, participants were chosen on the following criteria: any participant who was a qualified mentor in ICU and Midwifery holding a recognised qualification in mentoring for at least 12 months and student midwives and pre-registration third year students working in the ICU and midwifery. Participants were excluded on the basis they were currently doing their mentor training and newly qualified midwives or staff nurses who were being mentored as part of the initial orientation period to their Unit (Appendix 8).

I organised meetings with gatekeepers in my Healthcare Trust and another hospital; these included the Heads of Research, Directors of Nursing (Appendix 3), Heads of Departments, Managers and Leads for Education to discuss my study and to gain buy-in. They were all provided with a copy of my research proposal prior to our meeting and given the opportunity to request any further pieces of data about the study to ensure they were fully informed of the project's intent. These meetings were cordial and the stakeholders all demonstrated enthusiasm about the research. Collectively, they provided developmental feedback that contributed to accessing the participants, the clinical areas and augmentation of my interview schedule. This positive receipt for my research proposal by the stakeholders prepared me for the next phase of my project.

3.5.4 The Pilot Study

In this research study, I piloted the interview schedule and refined my interviewing skills with a group of participants (Table 2). The data from the pilot study was not used as part of my findings but augmented my interviewing techniques, development of codes, understand the constant comparison concept and provided leads that I would need to pursue as I conducted the in-depth interviews. After obtaining consent from the participants, semi-structured, in-depth audiotaped interviews were conducted with six participants who were mentors in specialised learning environments. The interview questions were of an exploratory nature due to the small scale of this pilot study and early stage in the overall research project. The questions

were designed to identify patterns and common codes in the participants' accounts and sought to identify the meaning of mentoring in specialised learning environments.

Table 2: Demographics of participants

Participant N= 17 (I1-M5: Pilot Interviews: data from these pilot interviews did not contribute to the overall findings)	Demographics	
I1 (Mentor)	Male, 42, RN ICU (>10y),	
M1 (Mentor)	Female, 45, RN Midwife/ICU (>10y)	
M2 (Mentor)	Female, 53, RN Midwife (>10y)	
M3 (Mentor)	Female, 41 RN Midwife (>10y)	
M4 (Mentor)	Female, 36 RN Midwife (>10y)	
M5 (Mentor)	Female, 43 RN Midwife Student (>10y)	
12 (Mentor)	Male, 26 RN ICU (3y)	
I3 (Mentor)	Female, 43 RN ICU (>10y)	
I4 (Mentor)	Female, 47 RN ICU (>10y)	
I5 (Mentor)	Female, 53 RN ICU (>10y)	
I6 (Mentor)	Female, 45 RN ICU (>10y)	
I7 (Mentor)	Female, 32 RN ICU (5y)	
I8 (Mentor)	Female, 42 RN Midwife (>10y)	
S1 (Student1)	Female, 27 Student in ICU (3mths)	
S2 (Student 2)	Female, 26 Student in ICU (3mths)	
S4 (Student 3)	Female, 29 Student in ICU (3mths)	
S5 (Student 4)	Female, 32 Student in ICU (3mths)	

After each interview, I reflected on the data collected from the pilot study and I wrote memos that helped me to understand the context of the interview in relation to the study and further, begin the development of codes. The evolution of the codes from the pilot study helped my understanding of the constant comparison concept that was a crucial part of grounded theory methodology. This created the foundation of my main study's sampling-as I interviewed participants, I analysed the interview and compared the emerging codes to those that I had noted from previous interviews.

Coupled with this, the collaboration with my peers strengthened my interviewing technique and enabled me to develop my knowledge and skills in this area. As I conducted each pilot interview, reflecting on each one and keeping a journal, improved the design of the interviewing schedule's wording and further, helped with my personal evolution of the way I conduct a semi-structured interview. The pilot interviews also provided valuable leads to be pursued later on in the research project in more in-depth interviews.

3.5.5 Data Collection

There are a number of different approaches to collecting data about the social context and participants' experiences. Data collection choices need to link to the research questions and the complexity of the case and its context. It is essential that appropriate steps are taken to maintain the methodological integrity of the case study (Rosenberg and Yates, 2007 p448).

I chose to do in-depth interviews as my method of collecting data for this study. Darke et al, (1998) argue that interviews are essential sources of information for interpretive research as interviews provide access to participants' views. Individual interviews enable a focus on the individual and their personal perspectives of events and situations and are frequently utilised in qualitative research. Individual interviews were felt to be the most appropriate method to collect data as they provide a focus on individual students and their mentors and their perspectives on mentoring. Interviews can provide insights that are not available to researchers working with large survey samples and are known to be the most suitable approach when seeking rich data illuminating individuals' experiences and attitudes. The drawback is that interviews are very time-consuming to conduct and analyse.

An alternative data collection method that I could have used was focus groups

whereby a group of people comes together to discuss a topic and explore their views and understanding of this topic. Although focus groups would provide some useful insights from students' perspectives I felt there would be less opportunity for detailed individual perspectives to be obtained. In addition it would be difficult to undertake this with mentors who are supporting students at different times.

The interview questions were designed from the findings of the 'pilot' study. The questions were asked in as non-directive a manner as possible to meet the study's principal aim of learning about mentoring in specialised learning environments. The data collection and analysis for this project took place in alternating sequences and was guided by the grounded theory methodology. This meant that the interviews were transcribed and coded immediately after they took place. Hence, initial findings from interview coding could help to shape the questions for subsequent interviews (constant comparison).

Reflection on the feedback received from my peers regarding my interviewing technique, made this part of the research journey more manageable: it helped me to develop my confidence in conducting the interviews, develop my interview skills and schedule, manage my time and refocus on the aims and objectives of my study.

The choice of data collection tool was important to ensure that I collected the right data, answer the research question, fit the study's methodology and achieve the research aims. The use of the semi-structured interview approach (Appendix 6 A&B) afforded me a great deal of flexibility and allowed me to probe into issues and concepts in a deeper way that other methods may not have offered. In the initial stages of using the tool, I began to realize that flexibility and depth must be aligned to my experience when using this method. In some instances, I missed opportunities to immerse myself into the interview discussion, failed to pick up cues from the participants, and in one case, lost the engagement of the participant because they did not fully understand what I was trying to ask. There were also times during the interview where the jargon I used may have been too complex.

Written comments (Appendix 7) from my peer review demonstrated that my interview schedule and overall approach to interviewing needed improving: simplifying of the language/jargon I was using and changing of the 'tone' of the question to make it more inviting. I also wrote about my interviewing experience in my journal after each interview. The feedback and self-reflection illuminated my understanding and helped

me to prepare for the next interview. My peer substantiated the fact that experience, in using the interviewing technique, will make it easier to engage with the research method and, subsequently, data collection would become more meaningful. This reassured me as a researcher and I began to understand how the evolution of my interviewing technique could enhance my overall research project and the development of my personal skills of listening, empathy and non-verbal communication.

As I reflect on the feedback given to me by my peer, the participants and my journal entries, I changed my approach to interviewing using the semi-structured method. My understanding of the interview process has evolved and my skills as an interviewer have improved. I was now able to conduct the interview with a better understanding and respect for the interview process. This contributed to my confidence as an interviewer and researcher.

In addition to the six pilot study interviews, eleven more in-depth interviews were conducted using the constant comparison method. The questions in the interview were also guided by Charmaz' approach to grounded theory, particularly on how to phrase interview questions to allow respondents to express their views without constraints (Charmaz, 2006).

During the interviews, there were many occasions where I broke away from the interview schedule (Appendix 6 A&B) to pursue various lines of enquiry that were evolving. Initially, I felt constrained by the schedule, but as the scripts were coded I began to constantly compare the evolving codes. The use of constant comparison saw the interview questions evolved and improved over time, influenced by codes and categories developed for previous interviews: I began to see codes like 'transactional', 'value', 'motivation' and 'positive thinking' emerging from the interviews. I tailored my questioning for the next interview to ascertain if these codes were evident.

The interviews were recorded with a digital voice recorder and the files downloaded from the recorder to a password secure computer for transcription. The interviews from both the pilot study and the main interviews were manually transcribed and coded. The scripts were then uploaded onto a data management tool: NVivo. Participants' names were replaced with a unique identifier: I1, I2, M1, S1...- where 'I' was the designation for a mentor and 'S' was the designation for a student.

The data collected in grounded theory was emergent and evolved as the interviews were conducted. All the data gleaned from the main interviews were considered in this phase towards enhancing the next phase of data analysis.

Other research instruments I used for the interview included: a digital tape recorder to capture the conversation, extra batteries in the event of battery failure, USB cable for uploading the interview scripts, pens and writing pads to capture written notes during and immediately after the interview, flip chart paper in the event that the participant wanted to represent their thoughts graphically, marker pens, participant information sheet (Appendix 9) and consent form (Appendix 2).

At the start of the study, I employed open sampling where I approached six mentors who were known to me and actively mentored in both the ICU and midwifery settings. They agreed to be part of my pilot study after hearing about the study. During the pilot study, I was able to improve on my interviewing technique: questioning skills, my interview schedule and confidence in interviewing. I conducted six pilot interviews to 'test' the semi-structured interview schedule proforma. During each interview, with the participant's agreement, I took random notes to consolidate my thoughts and returned to them for clarification of ideas after the interviews. After each pilot interview, I asked the participant to provide feedback about the interview with the emphasis being on my interviewing skills. Coupled with this, I kept a reflexive journal (Appendix 11) where I reflected on each interview. I also searched the literature to augment my interviewing technique. In order to strengthen my interview schedule, I invited my colleague, and Head of the Trust's research department, to peer review my interview proforma and provide written feedback

In collaboration with feedback I received from my peers and documented memos/reflections in my reflexive diary, I redesigned my interview schedule. The questions in the interview schedule (Appendix 6 A&B) were worded carefully and avoided long and ambiguous, leading, biased questions, as well as jargon. The Head of Research from the Trust reviewed my interview schedules and provided feedback for the design and delivery of the semi-structured interviews that I subsequently carried out as part of my data collection.

3.5.6 Interview preparation

I sent a letter explaining the nature of the study to all the staff nurses who met the

study's criteria in my department, and the participants at the maternity department inviting them to participate in my study. The mentees who were working in the department were also approached to participate in the study. A simple poster was also displayed in clinical areas to advertise the study and invite interest from clinical staff. Mentors and mentees, who responded to the letter or advert, were met to further explain the study's aim and objectives if required.

The participants who agreed to be part of the study were initially contacted informally, and were given the Participant Information Sheet (Appendix 10) and Consent form (Appendix 2) at least 24 hours before the interview. The aim of sending out information prior to the interviews was to familiarise the participants with the subject area and allow them time to determine whether they would be willing to participate in the study.

Table 2 illustrates the demographics of the participants who consented and were subsequently interviewed for this research project.

Six (6) pilot interviews were initially done to refine the interview process followed by eleven (11) in-depth interviews. The data from the pilot interviews did not contribute to the overall findings.

A total of eleven (11) participants (1 male, 10 females with clinical experience ranging from 3- >10 years) contributed to the study: four (4) mentees in ICU on clinical placement for 3 months, six (6) ICU mentors who have been working in the unit between 5 to 10 years, and one (1) midwifery mentor. Initially, having only one midwifery participant was a concern but as I did the in-depth interviews and utilized the constant comparison approach: I was able to achieve data saturation as explained below.

3.5.7 The Interviews

I collected data for this study using a focused in-depth semi-structured interview schedule (Appendix 6 A& B). On receiving the signed consent form, the interview was undertaken at a mutually agreeable time, at their NHS Trust at a time that was convenient and appropriate to the participant. Prior to conducting the interview I reiterated the ground rules: (i) that consent was an ongoing process throughout the interview (ii) as a participant, they have the right to withdraw from the interview at any

time without giving a reason and their withdrawal would have no personal or professional implication and (iii) the ethical concepts of researcher/participant relationship, confidentiality and anonymity. As part of the consent process, I informed the participants that confidentiality would not be maintained in the event of disclosure of clinical negligence. Participants who were satisfied with the conditions of the consent were then invited to participate in an individual face-to-face semi structured interview. All the interviews were approximately 30-45 minutes in duration. The scripts from all 11 interviews were entered as data as per Glaser's (2001) dictum that 'all is data'.

My role as the interviewer was engaging and encouraging but I had to keep myself from not getting personally involved in the interview process. I facilitated the interviewees to talk about their views and experiences in depth but with limited reciprocal engagement or disclosure. During the interviews, it was important not to restrain the participants but to give them time to talk about how they understood and described their experience of mentoring. Depending on the willingness of the participant to share their experience, the interview was allowed to continue until its natural closure.

I was aware of my limitations and capacity to concentrate and assimilate a large amount of research data that may arise from the data collection process, so no more than two interviews a day were scheduled. Where possible I restricted the interviews to one a day and no more than three in a period of a week. This provided me with reflection time and a chance to write up my analytical notes from the interview process so that my initial intuitive perceptions and general observations could be captured. Furthermore, I was able to analyse each interview script before proceeding onto the next, allowing me to formulate a picture and the emerging concepts to be developed further through theoretical sampling. This allowed me to formulate the categories that would ultimately formulate the central concept and illuminate the grounded theory.

The interaction with the participants contributed to the reflexivity of the process and augmented my understanding of their world in rich meaningful narratives. I wrote memos whilst reflecting on the interactions I was having with the participants and realised that I was also simultaneously constantly comparing the interviews towards data saturation.

Further sampling was done to refine emerging categories and theories. This process continued until 'data saturation' was achieved or when no new codes were emerging as sampling continued. While the earlier stages of grounded theory require maximum openness and flexibility to identify a wide range of predominantly descriptive categories, I realized that theoretical sampling was concerned with the refinement and, ultimately, saturation of existing, and increasingly analytic, categories.

3.5.7.1 Data Saturation

Another concept that I had to embrace in grounded theory was data saturation. It is the goal of the grounded theory process is to develop an explanatory theory—to reach saturation, which in the context of grounded theory implies a point where categories are completely explained and accounted for, and when relationships between them have been assessed.

Grounded theory assumes that part of the method, itself, is the writing of theory. The way the data is coded, memoed, and the way these memos were sorted become part of designing and facilitating the writing of the theory.

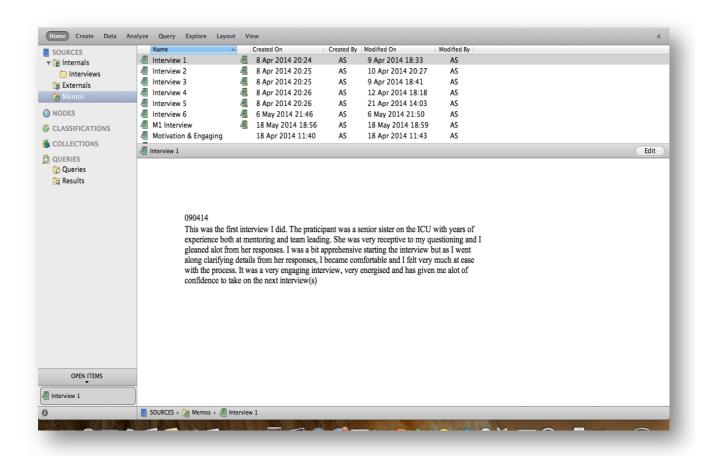
A grounded theory, therefore is reliable when no new categories in the data is collected (data saturation). This means one can say the theory is sufficiently developed. The process under which the theory has been developed can evaluate the quality of a theory. As the researcher, I had to keep my focus in equilibrium balanced between abstraction and description as concepts emerged from the data. I found that detailed descriptions provided data for conceptual abstraction and the possible emergence of a grounded theory in the future, but unfortunately these descriptions were not considered grounded theory.

3.5.8 Memo writing (Figure 1)

Memo writing supported the process of coding and developing categories. I continuously kept memos in a diary that supported me by providing a record of my thoughts and ideas. The memos enabled my reflection on the interviews and emerging codes so that I was able to engage in a dialogue with my supervisor about the collated data. Personally, it was important to write the memo immediately after the interview as my initial thoughts often spark the best ideas and the context of the interview was foremost in my mind. At later stages in the research process, my initial thoughts were represented through the memos and I was able to revisit, reflect upon and consider for the overall data analysis. I utilized the memos to question emerging

philosophies about potential meanings of interviewee's statements and compare concepts identified in interview transcripts to each other and to the literature (constant comparison). Memos were written throughout this exercise to keep track of my thoughts and ideas regarding the data analysis. Initially this was done in my reflexive diary and then they were transferred to NVivo

Figure 1 Example of a Memoing in NVivo



The extended coding process, as described in the previous sections, facilitated my reflections on codes and categories, which were captured by writing memos. I consulted the memos when establishing links between categories and setting up the initial theoretical framework. The writing of memos ('memoing') was particularly useful as this helped me to keep a note of thoughts without the pressures of having to immediately determine how my ideas fitted within the overall research findings and analysis. Memoing afforded me the freedom to jot down ideas so that these could be sorted, categorised or discarded at a later point in time. The writing and reflecting on memos has been a crucial step developing the final categories based on initial and focused codes. Figure 1 shows an example of memo writing. I used the mnemonic 'MEMO', as set out by Birks, Chapman & Francis (2008) (Figure 2), to guide this

process.

Figure 2: Mnemonic for MEMO

M: Mapping Research Activities (documentation of the decision-making processes of research design and implementation as an audit trail)

E: Extracting meaning from the data (analysis and interpretation, concept, assertions and theories)

M: **Maintaining momentum** (researcher perspectives and reflexivity throughout the evolutionary journey of the study)

O: Opening communication (for research team member exchanges)

Adapted from Birks, Chapman & Francis (2008)

As I reflected on the process of interviewing in my research project, I began to realize that I must consider my own ways of thinking and how I learn from my practice. In attempting to understand how I was changing, I realized that I was intrinsically following Lewin's model (1951) of change: unfreezing, change and freezing. I began by 'unfreezing' my thoughts and attitudes about qualitative research and the methodology: grounded theory. This new way of thinking initially posed a challenge to the way I conceptualised research as a tool for change in my own practice, but by engaging with the research process, I began to 'warm' to this qualitative methodology. In applying the second aspect of Lewin's model: 'change', I started applying the methodological principles of grounded theory that I was learning, to the research process and my professional life: this augmented my research and professional confidence. In applying Lewin's third phase: 'freezing', on one level, I immersed myself into the methodological concepts and applied them to my practice as a researcher on my day-to-day journey, but, on another level, I realized that I may not be able to fully 'freeze' this change as I am constantly immersing myself in new knowledge and therefore I am caught in a loop between the first two phases of Lewin's model of constant learning and reinvesting the knowledge back into the research process.

3.5.9 Theoretical Sensitivity

In using grounded theory, I had to consider the concept of theoretical sensitivity. Theoretical sensitivity refers to the capability to think about the data in theoretical terms. To expand on the term data, it is argued that there are three paramount categories of data employed in grounded theory research: field data (notes), data from interviews (such as notes and recordings), and more broadly, any literature or artifacts that can be serviceable to the research. Theoretical sensitivity was first discussed by Glaser (1978) and then by Strauss and Corbin (1990) (Orland-Barak, 2002).

Reflecting on theoretical sensitivity, I needed to take into consideration the fact that primary data had to be captured in the exact words and explanations of the respondents themselves (Douglas, 2003). It is argued that theoretical sensitivity is the ability of the researcher to work with the data in both theoretical and sensitive ways. That meant that I was free to theoretically and conceptually think about the data from a distance, while simultaneously maintaining an in-close level of sensitivity and understanding about the process and their involvement in that process.

3.6 Data Analysis

3.6.1 Analysis of findings

Grounded theory supports the use of constant comparison and I used this method to confirm and validate the findings from the data. This ensured that the coding process maintained its momentum by moving back and forth between the identification of similarities among and differences between emerging categories.

3.6.2 Addressing the data on the audiotapes

After each interview, I wrote memos in my reflexive diary and then manually transcribed the tape onto a password secure computer in a quiet room to maximize the opportunity to hear the tape. I then coded the script and collated the codes. As I went along, I constantly compared the codes from one interview to another and when no new codes were appearing, I stopped interviewing that group of participants as I reached data saturation. I then proceeded to interview participants from another group, constantly comparing the interviews until no new category was gleaned. After

achieving data saturation, I uploaded all the scripts onto NVivo to structure and organize the data and augment my ability to manage my data and further, augment the development of my emerging theory.

3.6.3 Use of software for data management and analysis

In order to help with the management of my data, I chose to use a password-protected computer and downloaded the qualitative analysis software NVivo to support the analysis and to help manage the interview data. The computer was utilised as efficiently as possible to reduce the amount of time spent on organising data and findings, to increase the speed of tiresome tasks, resorting the material and redefining codes. Access to the data on the computer was limited to my supervisor and I. There is the potential for unsaved data on the computer to be lost due to system and human error. To protect against this, all files were backed up onto a separate secure drive and scanned hard copies were kept in secured files.

The use of qualitative analysis software facilitated a way of following potentially promising analytic routes but also enabled these routes to be discontinued with ease. It also allowed for dynamic and real-time representation of the findings considerably assisted reflection on data and connections between the data as advocated in research by Weitzman (2000): writing up, editing, coding, storage, search and retrieval, data 'linking', memoing, content analysis, data display and graphic mapping. He further added that software can support the research process but ideas and intellectual efforts have to come from the human being conducting the research and analysis.

3.6.4 Transcribing interviews and importing into NVivo

The use of the NVivo software significantly augmented my organization skills in relation to the re-arranging and management of the considerable amount of data gathered from the interviews. For example, after coding the interviews in NVivo, all passages assigned to a specific code could be viewed on screen and printed. In the same manner, searches for specific text strings could be conducted across all interviews and relevant paragraphs containing the search string could be compared on screen or printed. The interview transcripts were formatted in a particular way in Microsoft Word to facilitate importing the transcripts into NVivo. This meant for example, that the interview questions were assigned a 'Heading 1' format. When

importing the transcript into NVivo, this resulted in the questions being displayed in the content panel in the NVivo explorer. Hence, when selecting a question, it was possible to jump to this section in the interview transcript. This enabled the information to be automatically put into the properties of the interview document when importing the interview into NVivo.

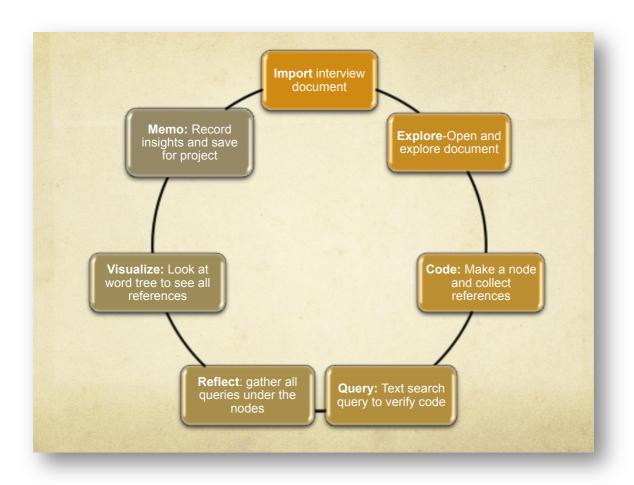
The appropriate formatting of the interview transcripts from the beginning helped to organise the data efficiently and thus facilitated the analysis of the interviews. In addition, by using the NVivo software much tedious and time-consuming work for managing and resorting the data could be avoided which freed time for more meaningful tasks, such as analysis and interviewing. Different sets of interviews could be assigned with different colours in NVivo for easy distinction.

An advantageous feature of NVivo is that the software keeps a log of all data that has been entered, which means that all codes and memos are automatically assigned a date and time stamp. This feature helped to trace the development of codes. After coding the interviews in NVivo, all passages assigned to a specific code could be viewed on screen and printed. In the same manner, searches for specific text strings could be conducted across all interview sets.

Having identified a common feature that united instances of a phenomenon, I refocused on differences within a category in order to be able to identify any emerging subcategories. Constant comparative analysis ensures that I did not merely build up categories but also breaks them down again into smaller units of meaning. In this way, the full complexity and diversity of the data were recognized, and any homogenizing impulse can be counteracted. The ultimate objective of using constant comparative analysis was to link and integrate the categories in such a way so that all instances of variation are captured by the emerging theory.

I was cognizant of the interplay between induction and deduction, in other words between data collection and interpretation. This was another process of validation of my findings but also it was part of the theory development. In what is known as a process of abduction, the interpretation of observed data helps to form a tentative theory, which then needs to be confirmed or disconfirmed with help of further data collections and analysis. I repeated this procedure until the best and most plausible interpretation of the data were found (Charmaz, 2006; Haig, 1995).

Figure 3: NVivo Cyclic Data Management Process



The cyclic process that underpins the ethos of NVivo is outlined in Figure 3. The interview scripts were imported into NVivo. These documents were opened, explored and Level 1 coding performed. I was able to run a 'Query' in NVivo that enabled me to verify any code's saturation/spread (Figure 4). I was then able to gather all the codes and reflect on them to ascertain similarity and spread. NVivo afforded me the privilege to (i) visualize the spread of references and codes by generating word trees (Figure 5) and (ii) document my reflections in memos. As I completed analyzing one interview script, the data were saved and I went on to facilitate another interview comparing what I had gleaned from the previous and being aware of similar emerging codes.

Figure 4: A Query of Code saturation in NVivo

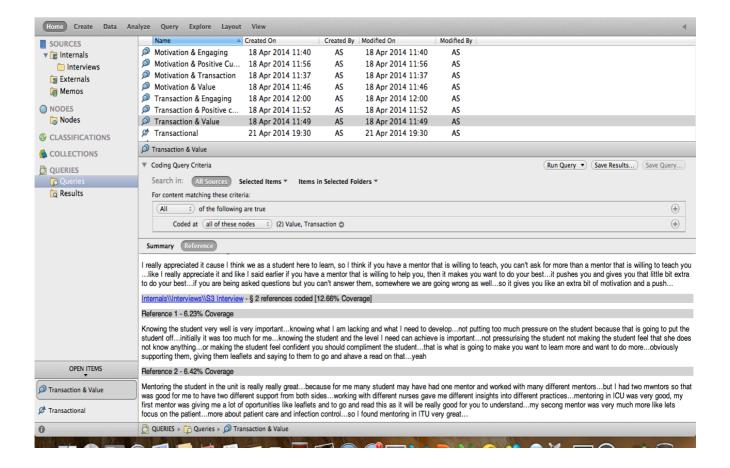


Figure 5: Verifying codes using a Word Tree



NVivo gave me the opportunity to query and verify the codes as they developed. I was able to look at how 'saturated' the code was after all the interviews were uploaded onto this tool, where the code appeared and how it linked with the literature-this helped me with the constant comparison component of the methodology.

Figure 6: An example of transcribing an interview on NVivo

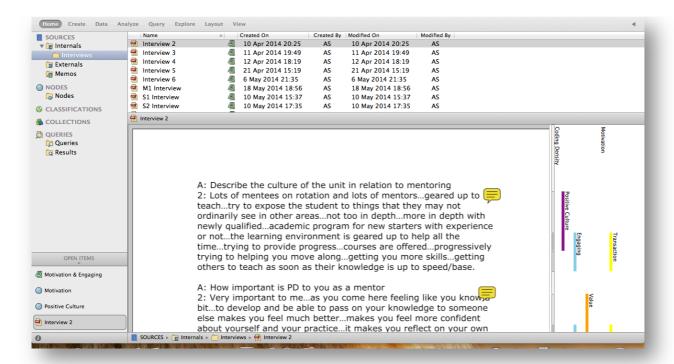


Figure 6 is an example of the exploration and coding of the uploaded document. NVivo also afforded me the opportunity to assign colors to the derived codes.

3.6.5 Coding in GTM

Grounded theory methodology advocates using several coding techniques to examine interviewee's accounts at different levels. The coding steps as suggested by Straus and Corbin (1998) (Figure 7) were used in this study.

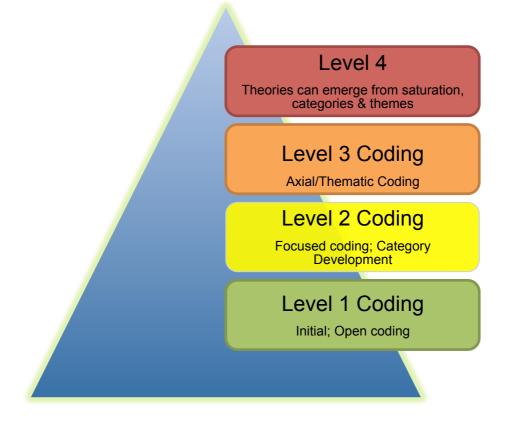
3.6.6 Interview coding and representation

The first set of interview transcripts was coded using NVivo, which prove to be a very most beneficial approach. Following the grounded theory guidance on coding, I worked through each of the transcripts and used line-by-line coding to take note of codes and phenomena on the margins. The codes were devised strictly microscopically and some more abstract categories came into view; some codes were very close to the interviewee's accounts and others more abstract or conceptual. I identified keywords and phrases and these were noted.

This system of creating codes, combined with reflection was maintained for coding all interviews. This list of codes was revised continuously as more interviews were coded. The codes were modified and verified by being applied to further interview transcripts but stayed alike for the most part. Subsequently, the codes were

organised into the NVivo software to allow searching the interviews, re-sorting of material and consistent redefining of codes in order to support the analysis process.

Figure 7: Coding steps in grounded theory



3.6.6.1 Open Coding (Level 1)

Figure 8, shows a summary of Level 1 line-by-line coding process.

Figure 8: A summary of Level Coding process: Line by line coding

NVivosample: Level 1 CodingLine by line coding Internals\Interviews\Interview1 - § 1 referencecoded [1.80% Coverage] Reference 1 - 1.80% Coverage I want to be a good role model so that they will be a good role model as well. I think that I am a good role model. I am positive and I am camand they can trust meand come to me if they are having problems. Internals\Interviews\Interview2- § 3 referencescoded [6.41% Coverage] Reference 1 - 1.29% Coverage trying to keep up to date with as much research as you can.. trying to keep up.. keep current Reference 2 - 2.31% Coverage personally it allows you to mix with people you may not normally mix with: all different ages and races. Learning about them, their styles... Reference 3 - 2.81% Coverage Helps me keep up to date, go awayand read up on things, helps to reinforce things, helps to keep your self updated...seeing them brodiess become more confident and relaxed... likes each in that Internals\Interviews\Interview3- § 2 referencescoded [6.88% Coverage] Reference 1 - 3.56% Coverage Knowledge and skills, good relationship with mentee, have to be friendly, listen to them and understand their knowledge and capacity... Tlexible, listen to mentee... Capacity how much doesshe knowabout what she is doing. Reference 2 - 3.33% Coverage Any feedback makes me improve my week points. Lask for more to be fed back so I can do more and get more positive feedback... it is important... absolutely it is important... it has helped me to develop professionally!

The first level of coding 'Open Coding', also known as line-by-line coding, provided a good starting point for me to identify initial phenomena and produce a list of codes of importance to the interviewee. Open coding was used for the pilot study interviews with the help of NVivo and manual coding. The pilot interviews were manually coded and then uploaded to NVivo to augment the organization and structuring of the data.

I initially attached codes to almost every line in the interview transcript to capture what has been said. These labels correspond closely to the interview context and were taken from the interviewee's own words, known as an *in vivo* code. Codes were assigned to participants' words and statements to develop concepts, constituting the start of the analytical process. The detailed and meticulous process of line-by-line coding helped me to open up the text and interpret the transcript in new and unfamiliar ways which also helps test my assumptions.

I developed a Word Cloud from NVivo to represent the codes that were emerging (Figure 9). A word cloud is a visual representation for text data, typically used to visualize free form text. This format was useful for quickly perceiving the most prominent terms and for locating a term alphabetically to determine its relative prominence. Word clouds are often used in the analysis of conversations, online and otherwise, to help identify key issues, trends and opinions and are a way to visually display what can be highly complex discussion threads. This type of visualization assisted me with exploratory textual analysis by identifying words that frequently appear in a set of interviews. It was also useful for communicating the most salient points or codes in the reporting stage. They displayed the most frequently used words in larger type while less frequently used terms are smaller.

Figure 9: Word Cloud for Level 1 (Open Coding)



3.6.6.2 Focused Coding (Level 2)

The next coding phase, known as focused coding or selective coding, was more abstract to me than open coding. Focused codes were applied to several lines or paragraphs in a transcript and require that I choose the most telling codes to represent the interviewee's voice. Using open codes as a starting point, the process of focused coding helped me to verify the adequacy of the initial concepts developed and whether I was achieving saturation. I then applied and therefore 'tested' the focused codes on further interview transcripts. This formed the basis for me to constantly compare the codes from previous interviews and develop my interviewing technique for the next interview. A second word cloud (Figure 10) was produced to demonstrate the codes that were generated.

Figure 10: Word Cloud for Level 2 (Focused Coding)



3.6.6.3 Axial/Thematic Coding (Level 3)

The next phase of coding is axial coding aimed to add depth and structure to existing categories. Because of its prescriptive nature, axial coding helped me to specifying the properties and dimensions for each category. At this stage of coding, the spread of the codes became more discernable. I was able to re-assemble the data that has been broken up into separate codes by line-by-line coding, investigate conditions of situations described in the interview, their actions and consequences. I was able to reflect on categories, sub-categories and to establish connecting links between these to make sense of the interview data.

3.6.7 Findings

Table 3 demonstrates a grid of the findings that developed after the levels of coding were completed.

Table 3: Coding Grid

Open Coding Level 1	Focused Coding Level 2	Axial/Thematic Coding Level 3
Positive Culture Role Modeling Value Motivated Value Motivated to help Transactional Outcomes Adaption Diverse ways Adjustment Regeneration Positive Learning environment Engage Valued Motivation Engaging Coping Achievement Expectations Engaging Neutral Hierarchy Motivate Transactional Value Supporting Engaging Positive Learning Valuing oneself Positive Environment Transactional Lengaging Affirmation Valued	Engaging Value Positive Culture Motivation Transaction	Transaction Motivation

On achieving data saturation: with no new categories were being generated, data collection ended. Level 1: open coding yielded 42 codes, Level 2: focused coding: 5 codes and Level 3: axial/thematic coding-2 main codes.

3.6.8 Bias, Reliability and Validity in Grounded Theory Methodology

In order to avoid bias in this study, I reflected on the use of grounded theory and the adopting of a constant comparative method. Using the cyclic process in Figure 3, I was able to clarify ideas, confirm categories, develop my interviewing skills and obtain data saturation.

Constant comparative methodology is the process of constantly comparing instances of data labeled in one category with other instances of data labeled for that category (Urquhart et al, 2010). I found constant comparison to be an incredibly simple, but deceptively powerful rule of thumb for data analysis and it allowed me to glean meaning and construction of concepts that were under review. This gave me fuller and more nuanced understanding of what the category might consist of. It is also helpful to use constant comparison if there was overlapping data collection and analysis because then the category can be densified using theoretical sampling.

The real advantage of practicing constant comparison, I found was that there were always dozens of instances in the data to support the theory that is produced. This view is substantiated by Urquhart (2010).

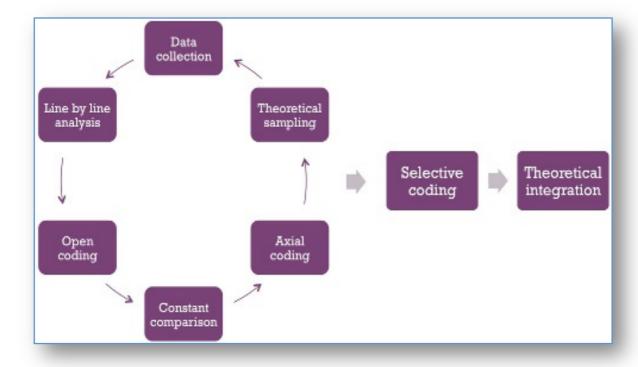


Figure 11: Avoiding bias in Grounded Theory (Corbin and Strauss, 2007)

3.6.9 Validity in Grounded Theory

In using grounded theory, I had to ensure that I maintained the validity of the study. I was challenged to present a study that demonstrated conformity and coherence of codes, concepts and categories that were to become an important indicator for a valid grounded theory.

Validity in its traditional sense is consequently not an issue in grounded theory, which should be judged by the concepts of fit, relevance, workability, and modifiability (Glaser & Strauss (1967), Glaser (1978) and Glaser (1998).

Fit: has to do with how closely concepts fit with the incidents they are representing. In this study, this was demonstrated thorough the use of constant comparison of incidents, concepts, codes and ideas (ii) Relevance: a relevant study deals with the real concern of participants, evokes "grab" (captures the attention) and is not only of academic interest: when I engaged stakeholders, I was able to extract their expectations of the study and ultimately by returning the findings of the study back to the clinical environment helps contextualize the study and presents it as a living piece of work that can be used in practice. (iii) Workability: the theory works when it explains how the problem is being solved with much variation: the development of the theory grounded by the literature adds to richness of the outcomes and its practicability in my personal and profession practice-in order to achieve this, I would have to apply the theory of the study into the daily workings of my Unit and evaluate its effectiveness with the aim of changing it as more data becomes available (iv) Modifiability: a modifiable theory can be altered when new relevant data is compared to existing data: the grounded theory as a living concept, is susceptible to criticisms by peers and the wider community of researchers. The ability to evolve enhances it as a change advocate thereby contributing to the other concepts which are part of grounded theory validity.

Also, as part of maintaining the validity of the study, five of the interview scripts were independently reviewed by my supervisors to compare and verify the emerging codes.

3.6.10 The concept of trustworthiness

Charmaz (2006) outlines the four criteria of trustworthiness in grounded theory: credibility, originality, resonance and usefulness. In relation to the criteria of credibility, and originality I needed to ensure that there was a strong link between the data that I was gathering and my research aims. I also needed to reflect on how my research extends, refine current ideas, concepts and practices. In my research, I achieved this by using constant comparison, reflexivity and memoing. Coupled with this, to ensure that I met the criteria of resonance and usefulness, I had to determine whether my research project made sense to the participants and the contribution my research findings will have on the existing body of knowledge. To achieve this I opened my research to scrutiny from fellow researchers at colloquiums, conferences and journal publications.

3.7 Ethical Considerations

My professional ethics or moral knowledge were guided by the researcher/participant relationship: as a senior nurse working within the ICU, my juniors may not be willing to share their experiences with me especially if there are mentoring situations that may contravene the requirements of the NMC code or incidents of negligence. This was closely linked to the ethical issue of confidentiality and the concept of anonymity and informed consent.

This research project was reviewed by the University's ethics committee who provided feedback on some main issues (Appendix 1). This study did not have to get permission from my local NHS research committee as I was not involving patients in my study. These main issues that came from the meeting with the University's research ethics committee were (i) the need to explore my role as an insider researcher and (ii) the need to develop individual interview schedules for the two groups of interviewees identified in the research project. From this feedback, I reflected on my position as an inside researcher and the challenges this posed on my research journey. Participants had the opportunity to meet with me and have any questions answered about the research before, during and after the research study. As qualitative research is emergent in design, the concept of true informed consent is challenging and should be based on the understanding that any participation in the study is voluntary (Holloway and Wheeler (1996). Participants were given a participant information sheet and encouraged to ask further questions about the

study. In acknowledgement of this, consent was sought prior to, during and again on completion of the interview; consent was on going throughout the process in recognition of the changing dynamics of qualitative research.

Qualitative research inherently uses small cohorts, so maintaining confidentiality can be problematic. In this study, all identifying characteristics, such as ethnic background, age, place of work, sex of participants and training background was part of the data collection. These pieces of data can potentially reveal the participant's identity because of the small cohort. Specific quotations and examples when disseminating research results could lead to the respondents being identified via deductive disclosure. If so, details of the participants were anonymised. Interviews were transcribed immediately afterwards and the script given a unique number that did not identify the participant. This was explained in the individual face-to-face meeting, on the information sheet and consent form. At the start of the interview, it was again discussed with the participant that should these issues come to light the participant will be informed that this information will need to be disclosed.

Information around counseling facilities was available as required. This was discussed with the participant, and, should the interviewee become distressed at any time, the interview would stop and I would step out of my role as a researcher to support the participant. It is recognised that there is propensity for the following issues to be volunteered during the interview: potential feelings of inadequacy, bullying, past experience of 'bad' mentoring/mentee relationships and issues related to whistle blowing and the disclosure of poor clinical practice or negligence. As part of the consent process, the participant was told that confidentiality would not be maintained in the event of disclosure of clinical negligence and this would be escalated to the Unit manager. Participants were also told at the start of the interview that their anonymity, and that the interviews and scripts will be anonymised as much as possible. Permission was sought from the participants if information that might reveal who they are was to be made public.

3.8 Data Storage

Storage of the acquired data were a priority in the study as it was linked to the ethical concepts of confidentiality and non-maleficence. After the tapes were transcribes, the transcripts were stored on a password secure computer which was only accessible to my supervisor and myself. The data were also backed up on the i-Cloud which was password protected. The storage of the data were governed by the NHS data storage regulations.

3.9 Chapter summary and conclusion

This methodology chapter explored the use of grounded theory as a suitable methodology for this research study. I adopted a qualitative, constructivist approach to gain a richer understanding and meaning of my area of interest. The chapter also developed the issues around the ethical considerations associated with this methodology, the participant selection, the sampling process, data collection and analysis and issues of data credibility and the concept of trustworthiness in grounded theory. Ethically, the issues of researcher/participant relationship, confidentiality and anonymity and informed consent associated with performing research as an insider researcher were considered. The ethical challenges of power relations and validity of the research process were highlighted at my university's REC meeting, which resulted in my reflection on my position as an insider researcher. It was evident that as an inside researcher, I needed to guard against bias by using reflexivity and ethical awareness. In maintaining validity as an insider, I met with stakeholders and gatekeepers to learn how my study will meet the aims of the organization, discipline and profession. The combination of my reflections with colleagues and their feedback augmented my understanding of how my research will fit into the wider context of my clinical practice and the interests of people who might be involved in and, importantly, those affected by the issues under research: here, the participants and ultimately, the quality of patient care were considered. In further developing my understanding of the study process and the research outcomes, I received feedback from stakeholders, which proved to be instrumental towards developing a more pragmatic approach to the study. Their feedback also enhanced the evolution of my interview schedule and my interviewing technique. Participants were selected for this study using purposive theoretical sampling from an ICU and midwifery unit. They were invited to take part in this study based on an agreed inclusion and exclusion criteria and informed consent.

The pilot study, with six (6) participants became the foundation for the next eleven (11) interviews. After consenting to be part of the study, participants were reminded of the ground the ground rules and a mutually agreeing a time and place for the interview, a 30-40 minute semi-structured interview was tape-recorded. During the interviewing process, memos were written after each interview to help me understand the context of the interview as it relates to the study. These memos were used as part of the grounded theory development. I used constant comparison method, as advocated by the methodological tenet and a reflexive diary allowed me to stay close to the data and reduce bias.

On achieving data saturation: with no new categories were being generated, data collection ended. All eleven (11) interviews were manually transcribed and then uploaded onto a password secured computer accessed only by my supervisor and I. The scripts were then uploaded onto the data management tool: NVivo. The data were backed up on a separate file (iCloud) with hardcopies available in the event of systems or human error. Demographically, the majority of participants were female, each with over 10 years of clinical experience in their specialty with their mean age of 39 years.

The data were coded systematically using Level 1: open coding which yielded 42 codes, Level 2: focused coding: 5 codes, Level 3: axial/thematic coding-2 main codes.. Initially, the codes were manually tabulated. These were then uploaded and represented on NVivo. Word clouds, word trees and queries were generated to represent Level 1 and Level 2 coding.

This study has facilitated the development of a substantive theory as the collection of data and their interpretation focus on the explanation of my study's aims. Furthermore, the chapter explored the issues of validity, the concept of trustworthiness, study credibility and theoretical sensitivity as it relates to the use of grounded theory in this research project.

On reflection, the methodology has developed my reflexivity and the evolution of a substantive theory forming the basis of the next chapter that presents the data analysis and showcases the substantive theory.

4.0 Findings Chapter

4.1 Introduction

In this chapter I present the findings that emerged from the eleven (11) interviews. My aims were to explore and identify, from their experiences: the ways specialised clinical learning environments are constructed and the potential impact this has on practice learning; learn about the effects that pedagogic strategies have on the mentor/mentee relationship, to engage with clinical practice and the use of learning strategies to maximise practice learning that support and enable students to translate practice and vice versa. One to one interviews provided access to a rich seam of material regarding mentors' experiences of their day-to-day interactions with students and to personal reflections on their wider mentoring role. The data collection method was congruent with the Grounded Theory approach providing access to the experiences of mentors and mentees in specialist learning environments.

I extracted forty two (42) open codes and five (5) level 2 categories: "Transaction", "Motivation", "Value", "Positive Culture" and "Engaging" The sample consisted of eleven (N = 11) qualified mentors and mentees from an Intensive Care Unit and a Midwifery Unit.

I used a cyclic process to analyse the interview scripts using NVivo software after the interviews with mentees and mentors were completed. NVivo provided the platform to verify the saturation of each code and enhanced the opportunity to determine which node presented with more saturation based on the queries and coding and the analysis of the code spread demonstrated that there were five codes: two major codes and five subcodes.

After each interview, the script was imported into the software and the document was explored under predefined 'nodes' and cross references were made by queries using text search. These queries validated the node and I was able to further strenghten the queries by developing word trees and memoing. A wordcloud was generated to show the saturation of the codes that were emerging from the line by line coding.

The interview scripts were reviewed by my supervisors and an, external verifier to my research study for independent validation of the coding that were emerging.

The first major Code of 'Motivation' emerged from coding the interview scripts together with two sub codes: 'Positive Culture' and 'Value'. After reflection on my

initial subcode of 'positive culture', and in collaboration with my supervisors, we agreed that the subcode should remain as 'Culture'.

The second major code was 'Transaction' with one subcode of 'Engaging'.

After the analysis of the interview scripts, and reflecting on the emerging codes and subcodes, I began to understand the myriad of issues that demonstrated importance to the respondents and noted that this was described by Strauss and Corbin (1998) as 'phenomena'.

4.2 Phenomena

These issues are also known as phenomena and were assigned a conceptual label to become a code, also known as a concept by Strauss and Corbin (1998). Some codes or concepts shared the same or similar characteristics and were pulled together into more abstract categories, which were interlinked and formed the basis for a theory.

Glaser, (1978) indicates that categories have to 'earn' their way into an emerging theory. Grounded theory methodology typically does not use quantifying data to obtain meaning. However, counting the frequency with which categories occur in interview transcripts can be useful to confirm their importance for the interviewees. Categories can carry so-called properties and dimensions.

4.2.1 Property and Dimensions

A property is a general or specific characteristic of a category, whereas a dimension denotes the location of a property along a continuum or range (Strauss and Corbin, 1998). The central or core category is a distinctive category that sits at the heart of the developed theory and summarises what is happening. All other major categories should relate to the core category, which ought to appear frequently in the data as stipulated by Strauss and Corbin, (1998).

4.2.3 Coding

Coding shaped the analytic frame and provided the skeleton for the analysis (Charmaz, 2006). Coding highlighted problems, issues, concerns and matters of importance to those being studied. Strauss and Corbin (1998) refer to categories as having 'analytic power', due to their potential to explain and predict.

4.2.4 Constant Comparison

'Constant comparisons' between collected data, codes, categories and initial findings help to crystallize ideas to become part of the emerging theory. This process was further augmented with the use of my reflexive diary. As I engaged in coding, I was able to enhance the analytical power, as described by Strauss and Corbin (1998), by confirming the codes from notes made from my reflections of the time spent with the respondents.

I now present these categories using examples of data from the interview transcripts. The source of each quotation is clearly attributed: the mentors and mentees, the interview and its reference in the transcribed text having been ascribed a pseudonym: this facilitates tracking back to the original transcript.

4.3 The codes and sub codes

Two main codes emerged from the transcripts: 'Motivation' and 'Transaction' Motivation had two subcodes: 'Culture' and 'Value'. The main code 'Transaction' had one subcode: 'Engaging'. These are now doscussed.

4.3.1 'Motivation'

The first main code that emerged from the interview transcripts was "Motivation". Maehr and Meyer (1997) presents motivation as a theoretical construct used to explain the initiation and direction for quality of behavior for goal achievement. This view is also held by Pintrich and Schunk (2002) as they regard motivation as the directed process towards goal achievement by behavior modification.

As I reflected on the open codes that formed the skeleton of this major code, I noted that respondents demonstrate motivation in two distinctive ways: intrinsic (arising from internal factors) and extrinsic (arising from external factors) as described by Lepper & Henderlong (2000).

Intrinsic motivation was demonstrated by the sense of personal satisfaction that they brought to the clinical areas. Both mentors and mentees were driven by an interest or enjoyment in the task itself that came from the individual themselves, not 'society'.

One mentor said that: " I can see that they are questioning and gives you

satisfaction...I have seen one of my student as a staff now it gives me

satisfaction...makes me feel good as well...they slowly become more confident...this is quite nice...really good....was amazing...makes me feel proud when I see this as I have always tried to be calm and understand the level of their knowledge and see what they need to learn and setting objectives...'I 4.

Mentor 3 supported the idea of personal satisfaction by indicating that: 'In my professional life...if someone tells me that I am mentoring well, I feel so happy...it is like positive feedback for my career...they are encouraging you to do more.... I got a good feedback so I want to do more....'

The mentor also qualified the fact that their motivation was from within when she said: '…! think it has to be self-motivating as well…you have to put that work in to get to the end point… it is motivating if you enjoy it…' **I 6**

Intrinsic motivation was a critical element in the cognitive, social, and physical development of both mentors and mentees. I noted that individuals who were intrinsically motivated were likely to perform better and improve their skills at a given tasks.

The intrinsic motivation of the mentors led to the development of the workforce: 'Having mentored so many persons...look at them...many work here now and doing well...' **13.**

Even the students were motivated to be better professionally and personally:

'Professionally...more inspired, confident...now that I have seen how they are here, I know how I want to be and what I can achieve... Professionally, the environment you work in, personally, to make a difference...I have said to myself that when I can't care anymore, you may see nurses like they don't care anymore...the day I feel like that I will stop...' S 2

Mentors also felt that they had achieved professionally from the mentoring relationship:

'When you work with them when they are qualified, people can say that they are your students and it is satisfying to see them go on the achieve certain things, progressing through the grades or doing something completely different' **I 8.**

And there was also a sense of personal achievement and growth from being intrinsically motivated:

'I have definitely have grown...I like the one to one teaching...I had never experienced that and when I did ...and also that feeling of achievement that somebody else has done well...somebody else has achieved...somebody else has enjoyed doing something for the first time...somebody has had a good day...they were able to do things that day that they did not do well...so it is watching them develop and grow...yeah' I 6

There was also evidence that mentors and mentees who were intrinsically motivated fostered a sense of autonomy, mastery and purpose amongst each other:

'I want to be a good role model so that they will be a good role model as well...I think that I am a good role model...I am positive and I am calm and they can trust me and come to me if they are having problems...' I 2

'I am still passing on some skills and I find that very rewarding...I am a people person, am I like to have the satisfaction to know have they passed and moved on...and professionally... it has enhance my career, I found it fulfilling as a career move having students...it has helped me learn and develop who I am'. I 8

'...you can see them scared at the beginning but by explaining to them from the basic stuff...they slowly become more confident...this is quite nice...really good....was amazing...makes me feel proud...**! 4**

'It motivates you a lot more especially when it is something you don't understand, it motivates you to think that I don't know that as much as I should so I should then read more or I should be doing something more...and because your mentor is putting so much time and effort into you it makes you don't want to come out of this and learn nothing, you want to come out with something... it motivates you if your mentor is willing to give you loads of information...definitely...100% motivated!...'S 2

In the mentoring experience, intrinsic motivation was noted to contribute positively to the relationship. The personal satisfaction that they brought to the relationship contributed to their development and enriched the social development of the mentee and mentor.

In contrast, *extrinsic motivation*, which does not come from within the individual, but from 'society' and/or other people, where tasks are performed in order to receive something from others. I noted that there were the issues of punishment, reward and compensation in the relationship:

'Any feedback makes me improve my weak points...I ask for more to be fed back so I can do more and get more positive feedback...it is important...absolutely it is important...it has helped me to develop professionally!...' I 3.

Students looked to their mentors for confirmation as part of their development... 'Someone you look up to...that's there to assist you along the way to qualifying to becoming a nurse...but also there to push you as well in your learning'...**S 1.**

There was a sense that students anticipated 'punishment' and it was important to make a positive connection with their mentors: 'It is important the learning environment and mentor that you have...someone you can approach and not feel stupid...not feeling like you are stepping on egg shells...to have someone like that where you are not feeling like that to teach you is very valuable'...\$ 2.

Good feedback was associated with good mentoring, which was the 'reward' 'If I have good feedback, I will have good mental satisfaction...it will definitely have effect on the mentee...this good teaching...'I 3.

Whilst some mentoring experiences were not very positive during the student's journey, the students were able learn from the mentoring experience and use this to motivate themselves to become better registered nurses:

'The first mentor I had I did not get much out of...that to me would be...I want to see the good qualities in people...but I just felt like a nuisance...I felt like that person did not really want me there...and when I did ask a question, it was they did not really want to answer it...I got the impression that they felt I was stupid and is something we do everyday so I should know it...and it is like this is the book to go and read it...I

can't teach you... Its opened my eyes...I did not have much confidence in much nurses and from personal experience...I did doubt how people are when it came to caring...nurses are supposed to be caring and enthusiastic about what they do...they want to help people and not have time for people...a lot the nurses I have met are like that and since I have come here, that passion has come back...I know that all the nurses are not like that...I know that I am not naïve to think that all nurses are meant to be fantastic, but the majority of them were not that nice...it makes me more determined and passionate not to be like that...' **S1**

Mentors saw that the mentoring process is a way of investing into the future generation of registered nurses as part of the extrinsic motivation issue.

Students' motivation to learn was linked to mentors' willingness to teach, a supportive nature and a relaxed approach that made the student feel 'safe': this was described as being comfortable with the mentor:

'If you have a mentor that is willing to teach, you can't ask for more than a mentor that is willing to teach you ...like I really appreciate it and like I said earlier if you have a mentor that is willing to help you, then it makes you want to do your best...it pushes you and gives you that little bit extra to do your best...if you are being asked questions but you can't answer them, somewhere we are going wrong as well...so it gives you like an extra bit of motivation and a push...'S 1

'Very important...if I did not feel comfortable with the mentor that I am with, I don't feel my outcomes or placement would be as good as it could be...I don't think I would learn as much or as happy as this affects your education...'S 4

'He (the mentor) makes me feel very comfortable ...'S 2

The concept of being 'safe' was also explained as a feeling of comfort in the mentoring relationship:

'If you feel more relaxed in the situation you are in, then you feel more comfortable in the situation you are in...I feel personally that I learn more, I pick up more, I feel more confident in myself as well and if you are feeling happy, you will get the most out of it...It's been brilliant... in myself, I am so much happier...I started to feel in myself if I really wanted to do this...' **S 1**

'If I am sacred of my mentor I won't be open to her...I will be really scared and I will be feeling really stupid... **S 4**

'It makes the environment they work in more amenable and it makes them want to come back and learn more...! 8

'Knowing the student very well is very important...knowing what I am lacking and what I need to develop...not putting too much pressure on the student because that is going to put the student off...initially it was too much for me...knowing the student and the level I need can achieve is important...not pressurising the student not making the student feel that she does not know anything...or making the student feel confident you should complement the student...that is what is going to make you want to learn more and want to do more...obviously supporting them, giving them leaflets and saying to them to go and have a read on that...yeah...'S 2

Students agreed that learning strategies tailored to their learning needs were motivating to them: strategies that promoted openess, honesty, kindness, trust and patience were appreciated as part of the learning processa and relationship:

'I quite like someone who is really open and I quite like it when the mentor says that I am unable to answer your questions, but we can work it out together...as a student it makes you feel better that they don't know everything and that they are willing to say that we will work through it together... it should be someone more open rather that someone telling you right from wrong, they explain that this is how we do it...but if someone, not shouts at you, but asks 'why don't you know this'...**S2**

'Being very supportive to students but...supporting us with the learning...and how to take more responsibility of the patient and obviously how to learn what the environment is able to give us...'S 3

Mentees also highlighted the pedagogy of mutual respect and shared responsibility as an intrinsically motivating issue in the relationship. This aspect of motivation could be interpreted as a devolvement of the mentors' responsibility towards the student.

'It does make a massive difference because you need to approach your mentor in a way that you got someone that doesn't...you need to be able to ask questions and get along with your mentor in order for you to progress... **S 2**

'...so it is really important...my mentor has been amazing...she has lent me books, she has given me things to read, given me hand outs and it makes such a difference because you are here to learn, they are willing to teach you so it is a win-win situation...S 3

In the context of extrinsic motivation, they (mentors) deployed various pedagogic strategies and teaching styles to facilitate learning and provided an opportunity to reflect on their individual approach to mentoring and what they can glean from the relationship:

Mentors utilised the pedagogic strategy of visual learning:

'The way I mentor student is that I would like to show them first and then they can ask me question and later on they can show me...that's how I mentor...' I 5

On other occasions, the mentor will use their personal teaching style and augment their approach to facilitate learning.

'I think so, it very much depends on your teaching style, and your mentoring style...I am quite open and like to make it fun and interactive that will encourage the student to learn and I will ask them questions... I 8

Further, the interaction was also an opportunity for both parties to learn from each other or refresh their learning:

"and if I haven't heard of it then they are teaching me...its working together...if they ask me questions and I don't know, them I will go and look it up and that is another string in my bow keeping me up to date and current...I think there is a two way thing that goes on there...' I 8

In reality, mentors and mentees' motivations are often a mix of both intrinsic and extrinsic factors, and the combination of the two became enablers for mentors to develop their nurturing abilities:

'Maternal feeling...most of them are younger than me...it is always nice when people do well and when they develop...it is a bit like having children...and not having kids of

my own this is as good as it gets... I think it is a bit maternal in that way...it is nice to see people doing well...' I 6; I think the main thing is...maybe a little bit of mothering the student' S 2.

There is also the aspect of keep updated with current practices. Mentors described the mentoring relationship as one that kept them up-to-date with current practices-they saw the student as being an opportunity for self-development:

'Helps me keep up to date....go away and read up on things...helps to reinforce things...helps to keep yourself updated...seeing them progress, become more confident and relaxed...I like seeing that... trying to keep up to date with as much research as you can...trying to keep up...keep current.' 1 2

The mentor relationship was also a challenge for mentors to rise to the challenge of being a teacher:

'It challenges you...because someone will ask you a question and you would ask yourself 'I haven't thought of it like that'...so it is quite nice as it stretches you especially if you have somebody who is not doing so well...it is a challenge ...'I 6.

The mix of intrinsic and extrinsic motivation also helped mentors and mentees to reflect on 'self' and personal limitations and how this reflection on self has contributed to their professional development whilst acknowledging their limitations. This creates a motivational loop or cycle of motivation where the intrinsic motivations impact on the student and mentor/student experience and relationship in a positive way and as mentors see the student learn, grow and develop it becomes an extrinsic motivation for themselves.

'Personally, it allows you to learn about them, their styles...try to help them...' I 2

'It did affect me positively... I don't feel like I am a student with my mentor, I feel like I am a colleague...my colleagues but obviously senior...it is like friendly relationship in a way... Yeah, I feel motivated... trust...that is going to build more trust between us if she realises that I am trying my best to learn, try my best to be in charge like manage the patient by myself...build more confidence in me as well...' S4

'For me personally, I generally feel that I am going to take a lot away from this placement...'S 2

'I thought at the beginning I never thought I would work in a place like this... but now I feel that I can achieve it...it may take time to get more confident...I think I can do it

at the end, I think that because of my mentor...I have that confident feeling...'S 4.

Overall...'as a student you have to feel that your mentor wants to teach you and they are willing to let you try new things and help them out...so it gives you like an extra bit of motivation and a push...S 2

The data from this major code demonstrated that mentors and mentees have intrinsic and extrinsic motivation that affects the relationship in the clinical learning environment. The wants or needs that direct an individual's behaviour toward a goal, in the context of the mentoring relationship: mastery autonomy, purpose, punishment, reward and compensation coupled with the development of 'self', truth, openness, mutual respect, honesty and personal reflection were crucial issues that promoted cognitive, social, and physical development of both mentors and mentees. The satisfaction of the individual's learning experience, whether internal or external is shaped by the culture of the learning environment. This issue of 'culture' was a subcode from the main code: motivation-the next part of this chapter will now look at the evidence from respondents related to 'culture'.

4.3.1.1 'Culture'

In the context of this sub code, culture was an issue of importance under the major code of motivation. Initially, the code "positive culture" was obtained, but it was agreed by my supervisors to analyse the data using the code 'culture'. The definition, attributes, expectations and concept of 'community' in the learning environment's culture are explored from the mentors and mentees' perspective. Culture continues to be of significant interest due to its influence on individual, group and organisational behaviours. Culture is significantly associated with psychological strain, employee retention, job satisfaction, and organizational commitment. Culture also refers to a wide range of observable events and underlying forces that operate at three levels within organizations: the visible surface level artefacts such as physical environment, order of dress, language, stories told, and observable rituals and ceremonies; the publicly espoused beliefs and values; and the basic underlying assumptions. These assumptions clarify what to pay attention to, what things mean, how to react emotionally to what is going on, and what actions to take in various kinds of situations. Culture at this level also provides a basic sense of identity and the values that provide self-esteem. Specifically, culture tells people who they are, how they should behave toward each other and how to feel good about themselves.

In order to understand the issue of 'culture' and its link to motivation in the learning environment, I reflected on the fact the motivation has two distinctive parts: intrinsic and extrinsic and were crucial issues that promoted cognitive, social, and physical development of both mentors and mentees. These attributes of motivation resonate with the definition of 'culture' and hence they form the basis of the findings.

In defining culture, mentors focused on the extrinsic aspects. They noted that culture was '...the environment and how we do things...very supportive...'

Mentor 5 with 'lots of learning opportunities: good structure available...' **I 4** and 'a very good positive environment experience...**S4**

But both mentors and mentees agreed that the culture of a learning environment must have opportunities to access (i) professional development (ii) clinical learning opportunities, (iii) protected time to develop the learning experience 'Mentor I 2, for example, discusses 'professional development':

Lots of study days, degrees... very fortunate that staff/ students can access courses, training, team days, academic programme and other meeting: MDT to learn about optimizing and maximizing patient safety and patient experience...' I 2

Mentor 2, however, discusses the access opportunities in terms of clinical learning opportunities: 'Lots of mentees on rotation and lots of mentors...geared up to teach... ...the learning environment is geared up to help all the time...trying to provide progress...'13; (iii) protected time to develop the learning experience: 'Support, protective time...they have opportunities to go to other wards, in general very supportive to students...'Mentor 5; and a healthy working relationship: 'having a nice relationship with the person (mentor & mentee)...'1 6.

The concepts of safety, openness, and honesty were important aspects in the learning environment in relation to the issue of culture. I noted there was much reflection from mentors and mentees when they spoke about these issues under the culture code.

Midwife (1 8) stated that 'You need to be honest and open, ...you need to be able to give feedback and receive feedback I think as well is very important...to a certain extent, you need to be able to relate to your mentee...because if there is a clash of personality from the very start, I don't think that any one of you will benefit from the process...'

S 1 echoed the same notion as they noted that it was 'very important...if I did not feel comfortable with the mentor that I am with, I don't feel my outcomes or placement

would be as good as it could be...I don't think I would learn as much or as happy as this affects your education...'S 1.

Coupled with the issues of safety, openness and honesty, mentors also defined the expectations of each other when they spoke about the culture of the learning. The concepts of empathy, support and patient safety were significant issues they agreed should be part of the expectations in the mentoring relationship.

One senior mentor, in speaking about the concepts in the context of culture indicated that...'it is very important...I must not be arrogant to ask for help...it should not be seen as a weakness to ask for help no matter how small the matter is... there is an expectation that as a senior sister you should be better at mentoring and you should have all the knowledge base and sometimes that is not the case as sometimes we are removed and 'rusty' 12.

They further went on to acknowledge that... 'everyone will not learn like myself...not take a risk but gauge where they are and help them to reflect on what they have done...' I 3. This, as expressed by Midwife (I 8), enables shared learning as it is a 'learning process for all people because I know I learn from my students... I 8.

Another important issue that was gleaned from the respondents was the sense of 'belonging' and 'community' that students felt during their practice placement, which is a vital part of the culture of the clinical placement.

One student remarked that it was...'Like a family unit...everyone seems to get on with each other, and respect each other and I have seen them approach you and people really don't take advantage...the majority of the time, they have got that respect ladder and at the same time, everyone's equal...which I find is really nice...and for such a large amount of people...I think management and people (not like management from above) but I think is the group of people you have and the support they may have... that's how I would sum it us as a family unit...I have said this to the people I worked with...it just seems like one big family...'S 1...'they (students) like it here because they are not being treated as numbers but as a one of the staff...S 5.

The willingness to develop and invest into a learner was evident as the student noted that...'It is amazing, even people who are not mentoring me they are willing to teach...because there is so much to learn, you may not be able to learn it in a year...there are so many opportunities that I think...everyone has been really

good...even if they are my mentor or not, even if you ask them a question, they are willing to help you...good environment, really good...**\$2**, and this contributed to the concept of belonging and community in the learning environment.

In validating the need for belongingness and community as part of the culture of the learning environment, students reflected on those placements where they did not experience this and the impact it had on their learning and future career.

Students 4 and declared their unpleasant mentoring relationship in other clinical placements which left them felling that they did not belong to the learning environment:

...'some of the students have worked elsewhere and they have had horrific experiences \$5

'...in other previous wards/placement, I had a lot of bad feelings....that all I had...I did not have much time with my previous mentors maybe they were the in charge...if they were in charge, they would send someone else to work with me...they would allocate with a different nurse...that's not going to help me...because the other nurse would be telling me but she would not have that duty to help achieve my learning outcomes...it should be the mentor who should be doing that...'S 4;

"...bad mentoring seems to lead to negative staff development..." 5.

The final issue that was important to respondents in relation to the culture of the learning environment is the need for mentors to hold fast to their professional responsibility to maintain a culture that focuses on making and maintaining competency in clinical practice (observable rituals). Mentor 1 went on to add that...'You want to make sure that you are teaching the right skills...and you are going to make them competent as RNs...'12.

It was notable that a student, after spending time in practice with her mentor, being part of the community and participating in meaningful learning concluded that in herself...'I have said to myself that when I can't care anymore...the day I feel like that I will stop...**S 2** -a sense of professional responsible is propagated.

The culture of the learning environment is important for both mentors and mentees. A culture that is open, honest, safe, empathetic, and supportive and focuses on patient safety will motivate learners. Culture is an organisation's greatest sustainable competitive advantage – it's the character and personality of the organisation and it is what makes it unique. It's the sum of its values, traditions, beliefs, interactions, behaviours and attitudes. It attracts and retains talent, drives wellbeing and

engagement and ultimately impacts performance. A culture, which is built on values such as trust, honesty and openness, provides the foundation for wellbeing and engagement to flourish. As demonstrated, when there is a spirit of belongingness and community, learners will engage and meaningful learning will occur. It is noteworthy that a positive culture encourages a sense of professionalism for the mentoring relationship. It is necessary to value that relationship and the second subcode under the major code of motivation: 'Value' is explored next.

4.3.1.2 'Value'

In the process of coding the interviews, a second sub code emerged from the transcripts-the issue of 'Value'. Mentors and mentees placed great importance on their role in the specialist learning environment and the symbiosis that existed. There is a link between value and culture (observable rituals) and this was reflected by the responses from the interviews. In the context of this study, the value placed on the learning experience by the learners and their mentors was explored.

As I reflected on the issue of value, I noted that mentors placed emphasis on being a good role model...'I want to be a good role model so that they will be a good role model as well...I think that I am a good role model...I am positive and I am calm and they can trust me and come to me if they are having problems...' I 2

This role modelling increases personal and professional satisfaction and builds confidence

...'I have seen one of my student as a staff now it gives me satisfaction...makes me feel good as well...you can see them scared at the beginning but by explaining to them from the basic stuff...they slowly become more confident...this is quite nice...really good....was amazing...makes me feel proud... you may have a student that is not learning...it make you feel upset...in general they are all keen to learn. I am really happy to mentor... and where both mentors and mentees flourish in their roles...'Mentor 4, and increased their confidence in clinical practice...'to pass on your knowledge to someone else makes you feel much better...makes you feel more confident about yourself and your practice...'I 3

The role modelling also increases the passion for the speciality thus increasing how much value is placed on the learning experience...'I am very passionate...and I like to pass on my skills with my mentees...'Midwife 2...'you can show them by example and if they can take some small part of my practice into theirs, then that make me

very happy...' I 8.

The student also agreed that a good role model was an important part of how the learning experience was valued when she said...'Apart from being here I haven't had someone who I can say who has been a really good role model...someone that is easily approachable...that's there for you...quite open and willing to teach you...without you feeling that you're are a nuisance...'Student 1. This sentiment was also noted in the major code of motivation when the student noted the impact of poor role modelling...'...bad mentoring seems to lead to negative staff development...'S 5. The mentoring relationship was seen as a mutual sharing of knowledge and skills as mentors and mentees valued what they contributed and gleaned from the mentoring process. Mentors reflected on the mentoring experience and indicated that...

'You realise that you know quite a lot of stuff...you dig out things from the back of your brain...and also that feeling of achievement that somebody else has done well...somebody else has achieved...somebody else has enjoyed doing something for the first time...somebody has had a good day...they were able to do things that day that they did not do well...so it is watching them develop and grow...yeah...I 5

The mentor further described how much satisfaction the mentoring relationship gave them on a personal level and the importance this satisfaction had on the learning process:

'It is enjoyable thing for me...I do enjoy it... I think it is more important for the person being mentored because it depends on the relationship and how they get along with their mentor, how their mentor is teaching and where along they are in the process as well... I 6.

When the student feels that they are not part of the learning process, they disengage...'The first mentor I had I did not get much out of...that to me would be...I want to see the good qualities in people...but I just felt like a nuisance...I felt like that person did not really want me there...and when I did ask a question, it was they did not really want to answer it...I got the impression that they felt I was stupid and is something we do every day so I should know it...and it is like this is the book to go and read it...I can't teach you...'S 1

The student also values feeling comfortable with the mentoring relationship ...'It is important the learning environment and mentor that you have...someone you can approach and not feel stupid...not feeling like you are stepping on egg shells...to have someone like that where you are not feeling like that to teach you is very valuable...S1.

This view is shared by mentors as they agree that it is... 'important to have an open relationship to be comfortable and see that they are not scared to question...try to be friendly but to be fair in my decisions...to enable the learning process and engagement which augments personal satisfaction...'makes me feel very good as they wanted to work with me...it is quite nice to find out that...it was a great feeling to mentor...in the same time, a student may be involved...by observing what they are doing...by correcting them...it gives me a nice feeling... I 4.

Mentors and mentees voiced a sense of wellbeing that came from the relationship that was built during the mentoring process. Wellbeing is noted to be a key part of valuing individuals and as noted by one mentor... 'it gives me a nice feeling...! 4.

This concept is similar to a previously highlighted quote also supports the idea of the impact of feeling valued as Mentor (I 2) went on to say that it motivates them to be more productive:

'In my professional life...if someone tells me that I am mentoring well, I feel so happy...it is like positive feedback for my career...they are encouraging you to do more....I got a good feedback so I want to do more...'I 2.

As much as the mentor was teaching the mentee skills and assessing knowledge, feedback from the mentee was paramount to this sense of mentor wellbeing

'If I have good feedback, I will have good mental satisfaction...it will definitely have effect on the mentee...this good teaching...'I 3.

Further to this, mentors who see that their mentees achieving their learning objectives get this sense of wellbeing:

'I am a good mentor... the mentee has achieved all their competencies, is happy...is enjoying working and learning...has nice things to say about me...' I 3

'I am satisfied mentoring when the student is interested to learn...can see that they are questioning and gives you satisfaction... when I see this as I have always tried to be calm and understand the level of their knowledge and see what they need to learn and setting objectives... I can see that they are progressing and growing up...I have had good words from them...they were very pleased for the support they had from my side...'I 4.

Students indicated that positive feedback and the achievement of the learning objectives contributed to their sense of well-being... 'It is very valuable... it is very valuable and it is going to be in my memory...and...very important... if I did not feel comfortable with the mentor that I am with, I don't feel my outcomes or placement would be as good as it could be... I don't think I would learn as much or as happy as

this affects your education...'S 3

There is also a sense of community that originates from this well being that has been echoed in the codes before. The student describes the atmosphere as that of belonging to a family:

'like a family unit...everyone seems to get on with each other, and respect each other and I have seen them approach you and people really don't take advantage...the majority of the time, they have got that respect ladder and at the same time, everyone's equal...which I find is really nice...and for such a large amount of people...'S 1,

The student expresses a sense of belongingness coupled with the sense of mutual respect and shared learning:

'It does make a massive difference because you need to approach your mentor in a way that you got someone that doesn't...you need to be able to ask questions and get along with your mentor in order for you to progress...so it is really important...my mentor has been amazing...she has lent me books, she has given me things to read, given me hand outs and it makes such a difference because you are here to learn, they are willing to teach you so it is a win-win situation...'S 2.

There were however negative issues that reduced the value of the clinical placement and ultimately the quality of the interaction between the learner and mentor. The specialist clinical environments became a lonely place for mentees especially if they did not create that professional bond with their mentor.

As noted by Mentor 3 (I 3), the 'bond' that exists in the mentoring relationship is important to enable learning:

'It just shows how isolating it can be on a placement if your mentor does not get on with you or if there is some personality clash...**I 3**

There is also the issue of mismatching the learning experience with the patient dependency can also reduce the quality of the learning experience:

'they look after some complex patients on their own and they want to do everything and it can be difficult for people to let go and stand back let the mentee crack on with things... I 3.

This however did not detract from the learning experience as the emphasis was on the development of the learner and the mentoring experience coupled with the proactive efforts of the mentee to actively seek out assistance when required:

'I know that there are people in the Unit that I can go to if there is a difficult situation that I am unable to cope with...I as a mentor is not being effective...if they are not

achieving their competencies then we need to involve the university...you want to make sure that you are teaching the right skills...and you are going to make them competent as RNs...there are a lot of people we can ask help from...**I 2**

The value that is placed on the mentoring process is important to both the mentor and mentee. Emphasising the need to be a good role model, the act of mutual respect and sharing together with a sense of wellbeing defined where emphasis is placed in the mentoring relationship. It is acknowledged that there are issues that reduce the value of the relationship but they do not detract from the learning experience as mentors value the development of the learner and actively seek help when required. As I reflected on the aforementioned codes: Motivation and its two sub codes: Culture and Value, I note that the issues are interrelated. As part of my reflexive journal, I note that mentors do not work in isolation but they have a network, and they depend on each other. I have also noted that mentees and mentors share their learning with one other- realising and valuing each other's contribution to the learning process-there is a perpetual transaction of knowledge and skills in the mentoring relationship. This therefore is the basis of the second major code: 'Transaction' followed by the sub code of 'Engaging'.

4.3.2 'Transaction'

The second major code of 'Transaction' evolve from the transcript analysis. It was evident that the mentoring process comprised of a sharing element and as sub code of 'Engaging' also emerged.

A transaction is an interaction of an individual with one or more persons, especially as influenced by their assumed relational roles. Transaction, from a more wider context can be extended to include the exchange of goods, services or even data between two mutual parties.

In analysing the data around the major code of transaction, it was evident that there was a professional transaction that took place between mentees and mentors in the learning enviornment. There was an exchange of knowledge, skills and observable rituals in the mentoring relationship. Coupled with this, there were expectations of this transaction within the relationship.

It was established that the issue of a transaction was evident from the transcripts. Mentors agreed that the relationship was a 'two way process, my growth as well as the mentee... enhances my knowledge base and also develops me further... Myself and the mentee will have to work in partnership... not one way but two way learning

process...Mentors also agreed that they must be good role models... 'I want to be a good role model so that they will be a good role model as well...I think that I am a good role model...this was also echoed in the sub code: value.

Mentors 2 and 3 appreciated the transactional nature of the mentoring relationship in keeping them relevant in their professional roles:

'Helps me keep up to date ...helps to reinforce things...helps to keep yourself updated...**I 2**,

and 'It makes you reflect on your own practice as well...so you are constantly keeping yourself up to date...keeps your student up to date and keeps your practice up to date...trying to keep up to date with as much research as you can...trying to keep up...keep current...! 3

They viewed this transaction as a way of developing themselves professionally:

'any feedback makes me improve my weak points...I ask for more to be fed back so I can do more and get more positive feedback...it is important...absolutely it is important...it has helped me to develop professionally! 'I 3

The transaction also allowed them to augment their roles:

'Both mentors and mentees flourish in their roles...and achieve their goals have set for the day... going the extra mile to achieve your learning goals...Mentor 5...

'I have definitely have grown...' I 6...

"...because I know I learn from my students ..." 8

Students also have indicated that the transactional nature of the relationship gives them a sense of wellbeing as echoed previously in the code: 'value':

'I don't feel stupid for asking the questions...they sit down with you, they go through things with you, they draw diagrams with you...anything they don't know, we go together and look through it together...it is so different...in my self, I am so much happier...**S1**,

Student 3 agree that the transactional relationshoip they have with their mentor augments the working relations in the clinical setting. This also creates a 'safe' relationship between the mentees and mentors and highlighted earlier in the code 'Motivation' and subcode 'Culture':

'...sharing information will build a good relationship between us and not make a big gap in a way that we will be supporting each other...you need to have a good relationship with your colleagues or mentor and people around you in order to make the environment more suitable, more comfortable and friendly...'S 4.

Mentors have added that the transactional nature of the mentoring relationship develops bonds through openess and trust-the same issues discussed in the major code of motivation and its sub code:

'There is the development of a bond if you work with the student over a period of time and its quite a nice feeling, and professionally it is like the student will know you next move before you are doing it...in that transaction it is like both working together but working towards the same goal... I am still passing on some skills and I find that very rewarding... if they can take some small part of my practice into theirs, then that make me very happy... I 8

Students have also indicated that the bond between them and the mentor is important for the learning process... 'Personally myself I do feel I get a lot out of it...without the mentor I would not have learned half of what I have learnt now... I have got a lot of it...'S 5

There are, however, expectations of the transaction in the mentoring process: openess, honesty, supportive, respect, patience, clarity and good interpersonal realtionships to ensure the mentoring relationship is fruitful. This is similar to the contract that occurs between mutual parties-the same is that of the learning contract between the mentee and mentor.

Mentor have indicated that the transaction is ... a two way process... Mentor 1; and it is... 'Important to have an open relationship to be comfortable and see that they are not scared to question ... support them to learn and give them opportunities and help them to grow up slowly... I 4.

Coupled with this Midwife 1 (I 8) indicated that:

'You need to be honest and open, you need to have clear objectives...you need to be able to give feedback and receive feedback I think as well is very important...' I 8. Students also share in the expectations of their mentor during this transaction as they see the transaction as having issues such as... 'Enthusiastic, kind, caring... that has time for you...and enthusiastic and wants to teach you... which has had a positive impact on their journey towards becoming a nurse... 'I started to feel in myself if I really wanted to do this...you may question sometimes in life what you are doing ...you really feel supported...'Student 1; '... I think if you have a mentor that is willing to teach, you can't ask for more than a mentor that is willing to teach you ...like I really appreciate it and like I said earlier if you have a mentor that is willing to help you, then it makes you want to do your best...it pushes you and gives you that little bit extra to do your best...S 2.

In the analysis of the interview scripts, mentees and mentors demonstrated that there was a transaction that occurred in the mentoring process. This transaction gave both mentors and mentees a sense of wellbeing but there are expectations from both parties that were necessary for learning to occur.

A sub code: 'Engaging' from the major code: Transaction emerged. I have noted that the codes are interrelated and issues are reoccuring demonstrating the constant comparision phenomena and saturation. The sub code was an issue that was voiced by the respondents and this is now discussed.

4.3.2.1 "Engaging"

This sub-code is part of the major theme: 'Transaction' described earlier and emerged from the analysis of the interview transcripts. Mentors and mentees described the mentoring process as engaging but challenging. The opportunities for learning between mentors and mentees were engaging and created the opportunity to celebrate differences and build relationships amidst adversities.

In defining 'engaging' mentors and mentees agreed that it was... 'A two way process, my growth as well as the mentee... everyone gets updated in that area and common to everyone... a learning process...' I 2. This description was also repeated under the major code of 'Transaction'.

Mentors also agreed that it was... 'aiding and supporting the students and staff in their role...**I** 3, and involved '... having a nice relationship with the person...mentor/mentee relationship...'**I** 6.

Some mentors even went on to elaborate on the fact that it felt to them that they were passin on their rituals to the mentee:

'its almost like passing on a skill, passing on your knowledge... I 8.

Students, however, shared a different perspective on the idea of engaging as they saw it as 'some one you look up to...that's there to assist you along the way to qualifying to becoming a nurse...but also there to push you as well in your learning...someone that is easily approachable...that's there for you...quite open and willing to teach you...without you feeling that your are a nuisance ...enthusiastic, kind, caring...the way you would expect a nurse to be as well...you know with a kind caring attitude...that has time for you...and enthusiastic and wants to teach you...\$

1.

Another student indicated that in their definition of guidance, they:

'would define it as guidance...like you are guiding the students...'S 2,

Overall, the student thought that engaging was: '... the one on one contact and we are always in the same environment...'S 4.

The mentoring relationship, though engaging was perceived as challenging by the mentors:

'...we have to be adaptable to meet the mentees' needs: they may have other needs: dyslexic, social, hearing...we have to adjust...it's a challenge...I 2; Being a mentor is not easy...'I 4.

Mentors however took the opportunity to learn from feedback as they engaged with their mentees:

'feedback makes me improve my weak points...I ask for more to be fed back so I can do more and get more positive feedback...it is important...absolutely it is important...it has helped me to develop professionally!' I 3;

'...I have seen one of my student as a staff now it gives me satisfaction...makes me feel good as well...' **14.**

This issue of learning from feedback was echoed in the sub code: 'Value' as it augmented the mentor's wellbeing.

Mentors perceived that it was necessary to invest in the learner to ensure they had a good learning experience. They felt that it was important to:

'going the extra mile to achieve the learning goals...'1 5;

The mentor also acknowledged that there must be that motivational loop, discussed earlier to enable learning:

'...you must have a lot of patience and being there to support them...as a mentor you want to help them, you want them to learn and you want to show them that you

are professional...to see that they are progressing and learning as well...' 14.

Amidst the challenge, mentors get a sense of reward when the relationship works:

'you can see them scared at the beginning but by explaining to them from the basic stuff...they slowly become more confident...this is quite nice...really good....was amazing...makes me feel proud...'1 6.

Even for the student, the learning experience can be challenging but there is a sense of reward ...'I know that I am not naïve to think that all nurses are meant to be fantastic, but the majority of them were not that nice...it makes me more determined and passionate not to be like that...**S 1.**

As part of the engaging process, mentors also saw the need to adapt their styles to facilitate learning:

'sometimes I have to step back and look at my teaching methods...I have to slow this down for the student...so you have to individualise your teaching to each student...I 8.

In the development of the mentoring relationship, celebrating differences suggested that this might augment the engagement of mentors and mentees:

'personally, it allows you to mix with people you may not normally mix with: all different ages and races...learning about them, their styles...try to help them...I will establish the knowledge base they have and try my best to help them apply that knowledge into our clinical area and meet their objectives...' I 2.

This celebration of differences allows the mentor to reflect on their own practice thus allowing for continued development:

'It makes you reflect on your own practice as well...so you are constantly keeping yourself up to date...keeps your student up to date and keeps your practice up to date...! 3

The engagement of the mentee with the mentor develops the professional relationship and builds confidence even if the placement relationship was not positive. Students have indicated that 'even if I have been on a bad placement, I do try and extract as much I as I can...you have to try and make the best out of it...it was nice, really good...it is important the learning environment and mentor that you have...someone you can approach and not feel stupid...not feeling like you are stepping on egg shells...to have someone like that where you are not feeling like that

to teach you is very valuable...\$4. The concepts of safety, as discussed in the sub code: value is evident here in this sub code of engaging as a mentee who 'feel more relaxed in the situation you are in, then you feel more comfortable in the situation you are in...I feel personally that I learn more, I pick up more...'The mentee...'feels more confident in myself as well and if you are feeling happy, you will get the most out of it... I don't feel stupid for asking the questions ...in myself, I am so much happier...and gives the mentee a renewed perspective as 'I started to feel in myself if I really wanted to do this...you may question sometimes in life what you are doing...'

\$1.

The sub theme of engaging demonstrated that the mentoring relationship is a two way process, though challenging, provides the opportunity to celebrate differences and build clinical confidence. Alongside the analysis of the interview scripts, the memos made after each interview has augmented the reflexivity of this findings chapter. As I immersed myself in the interviews and read the memos alongside the scripts, I was illuminated to the context of the main and sub codes presented in this chapter.

4.4 Conclusion

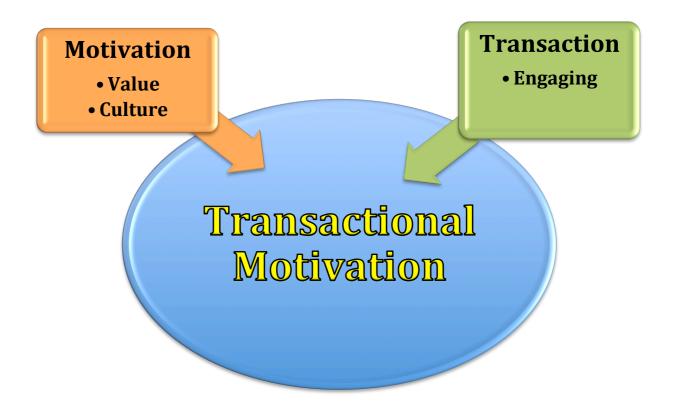
The findings have demonstrated that the mentoring process, in the clinical learning environment, provides motivation and there is a mutual exchange/ transaction which takes place amongst mentors and mentees. There is agreement that the relationship is developmental and there is scope for proposing a theory built on the codes that have been generated in this chapter. This will be explored in the next chapter.

5.0 Discussion Chapter

5.1 Introduction

The aim of this study was to develop a substantive theory that explained the pedagogic strategies used to support practice learning in specialized learning environments. The text in Chapter Four presented the data that allowed me to develop the theory of '*Transactional Motivation*'. This chapter draws on the data and relevant literature to develop this theory. I also seek to explore the contextualization and theorization of my research study, fundamentally examining how the substantive theory, that is generated from this research project, will be applicable to my work environment, and further, the wider society. I will also reflect on the study's limitations identified and that of the research's methodological framework. I aim to answer the question: What 'innovation' am I adding to my sphere of practice by doing this research? In order to help me with the focus of the assignment, and answer this question, I will be using the Impact of Research 'wheel' (Appendix 9).

Figure 12. The substantive theory of 'Transactional Motivation'



5.2 The Theory

'Transactional Motivation' is put forward as a theory, grounded in the data, as a way of viewing how mentors support students in clinical practice. The data demonstrated that students and mentors working in specialist learning environments develop advanced skills and knowledge through a mutual, collaborative exchange. As I emersed myself in the data and reflected on the experiences of mentees and mentors, I realised that this pedagogy of a mutual collaborative exchange was encapsulated in the two main codes that was derived from the data (i) 'Transaction': they were giving and receiving something from each other in the learning environment and (ii) 'Motivation' for their professional and personal development when it came to supporting practice learning in specialised learning environments. Underpinning the theory were three sub codes: 'value', 'culture' and 'engaging' which were necessary pedagogic strategies for this theory of transactional motivation.

5.3 Motivation

Motivation is an important factor in everyday life. Our basic behaviours and feelings are affected by our inner drive to succeed over life's challenges while we set goals for ourselves. Our motivation also promotes our feelings of competence and self-worth as we achieve our goals (Rabideau, 2005). Motivation provides us with means to compete with others in order to better ourselves and to seek out new information to learn and absorb. Individuals experience motivation in different ways, whether it is task- or ego-based in nature. Some people strive to achieve their goals for personal satisfaction and self-improvement while others compete with their surroundings in achievement settings to simply be classified as the best. Motivation and the resulting behaviour are both affected by the many different models of achievement motivation (Rabideau, 2005).

Achievement motives include the need for achievement and the fear of failure and are viewed as more solid cognitive representations pointing individuals toward a specific end (Elliot & McGregor, 1999). They further went on to say that there are three types of these achievement goals: (i) a performance-approach goal which is focused on attaining competence relative to others, (ii) a performance-avoidance goal focused on avoiding incompetence relative to others, and (iii) a mastery goal focused on the development of competence itself and of task mastery (Elliot & McGregor, 1999).

The pedagogy of motivation, as a concept refers to a desire, drive or need that augments or explains a behavioural change. This is situated in the incentive theory of motivation and these can be in two distinctive ways: intrinsic (arising from internal factors) and extrinsic (arising from external factors) (Killen, 1982, Lepper & Henderlong, 2000)

Intrinsic motivation is defined as behaviours where the reward is the satisfaction of performing the activity itself. Intrinsic motivation thus represents engagement in an activity for its own sake (Deci, 1971).

I noted that this was demonstrated by the sense of personal satisfaction mentees and mentors brought to the clinical areas. Both mentors and mentees were driven by an interest or enjoyment in the task itself that came from the individual themselves, not 'society'.

Intrinsic motivation was a critical element in the cognitive, social, and physical development of both mentors and mentees. I noted that individuals who were intrinsically motivated were likely to perform better and improve their skills at a given tasks.

The data demonstrated that mentors and mentees who were intrinsically motivated fostered a sense of autonomy, mastery and purpose amongst each other. In the mentoring experience, intrinsic motivation was noted to contribute positively to the relationship. The personal satisfaction that was brought to the relationship contributed to their professional development and enriched the social development of the mentee and mentor. Other studies suggest, however, that intrinsic motivation may not be so vulnerable to the effects of extrinsic reinforcements, and in fact, reinforcements such as verbal praise might actually increase intrinsic motivation (Cameron & Pierce, 1994).

Whilst some mentoring experiences were not very positive during the student's journey, the students were able to use this to motivate themselves to become better registered nurses thus demonstrated the desire to master the goal, not just for the clinical placement, but for their career as a carer (Harackiewicz, et al., 2002) and Wolters, 2004).

In contrast to *extrinsic motivation*, which does not come from within the individual, but from 'society' and or other people, where tasks are performed in order to receive something from others, I noted that there were the issues of punishment, reward and compensation in the relationship. Theorists define extrinsic motivation as "engaging in an activity to obtain an outcome that is separable from the activity itself" (deCharms, 1968; Lepper & Greene, 1978). Social and emotional incentives like praise and attention are also extrinsic motivators since they are bestowed on the individual by another person. Extrinsic rewards are often used to impact someone who shows little interest in a potentially useful activity.

In this study, students looked to their mentors for confirmation as part of their development. There was a sense that students anticipated 'punishment' and it was important to make a positive connection with their mentors. Conversantly, receiving good feedback from the mentees was associated with good mentoring as was seen as a 'reward'. Mentors saw that the mentoring process is a way of investing into the future generation of registered nurses as part of the extrinsic motivation issue and students' motivation to learn was linked to mentors' willingness to teach, a supportive

nature and a relaxed approach that made the student feel 'safe'. Students agreed that learning strategies tailored to their learning needs were motivating to them: strategies that promoted openness, honesty, kindness, trust and patience were appreciated as part of the learning process and relationship.

Mentees also highlighted the pedagogy of mutual respect and shared responsibility as an intrinsically motivating issues in the relationship.

Also within the context of extrinsic motivation, they (mentors) deployed various pedagogic strategies and teaching styles to facilitate learning and provided an opportunity to reflect on their individual approach to mentoring and what they can glean from the relationship.

In reality, our motivations are often a mix of both intrinsic and extrinsic factors, and the combination of the two became enablers for mentors to develop their nurturing abilities (Hayamizu, 1997)

The mix of intrinsic and extrinsic motivation also helped mentors and mentees to reflect on 'self' and how this contributed to their professional development whilst acknowledging their limitations. Both mentors and mentees indicated that keep updated with current practices and rising to the challenge of being a teacher was also a key component of the pedagogy of supporting learning in these specialist learning environments.

Motivation is an important factor in everyday life. Our basic behaviors and feelings are affected by our inner drive to succeed over life's challenges while we set goals for ourselves. Our motivation also promotes our feelings of competence and self-worth as we achieve our goals. It provides us with means to compete with others in order to better ourselves and to seek out new information to learn and absorb. Individuals in this study experienced motivation in different ways, whether it is task-or ego-based in nature. Some worked to achieve their goals for personal satisfaction and self-improvement while others compete with their surroundings in achievement settings to simply be classified as the best. Motivation and the resulting behavior are both affected by the many different models of achievement motivation.

Mentors and mentees have intrinsic and extrinsic motivation that affects the relationship in the clinical learning environment. The wants or needs that direct an individual's behaviour toward a goal, in the context of the mentoring relationship: mastery autonomy, purpose, punishment, reward and compensation coupled with the development of 'self', truth, openness, mutual respect, honesty and personal

reflection were crucial issues that promoted cognitive, social, and physical development of both mentors and mentees. The satisfaction of the individual's learning experience, whether internal or external is shaped by the culture of the learning environment. This issue of 'culture' was a sub-code from the main code: motivation-the next part of this chapter will now look at the evidence from respondents related to 'culture'.

5.3.1 Culture

The word culture is a complex and a hard word to definite since it consists of various cornerstones that together explain the meaning of the word. Culture is defined by components such as religion, language, social habits, lifestyle and cuisine. It can also be divided into sub- categories such as national and corporate culture. It originally derives from Latin and means tend to the earth and grow (Zimmermann and Nova 2015). Many people has during the years tried to define the actual meaning of this word and what importance culture has on different countries, the society and the people living in it. Edward Tylor, a famous anthropologist from Great Britain defines what culture is in his book with the following words: "that complex whole which includes knowledge, belief, art, law, morals, custom, and any other capabilities and habits acquired by man as a member of society." (Hofstede, 2011). Tylor emphasises the importance of belonging in a society and that every society has its own kind of culture. He also mentions that the language in a society, cuisine and other man- made things are only the result of a culture and not the culture itself.

Hofstede explained the definition of culture even one step further as:

"collective programming of the mind that distinguishes the members of one group or category of people from others" (Hofstede, 2011, p.3).

There are three important features in this definition of culture. The first one is that culture cannot be created by actions of one person. It has to be created by the activities of a whole group. The second one is that culture is a product created by humans. The last one is that the culture is something that distinguishes one group of people from other and makes every group unique (Hofstede, 2011).

Culture can be seen as a system of norms and values that are shared among a group of people and that creates a way of living. A norm is a term for specific social rules that everyone in the group is aware of and these social rules is a guideline for how to behave in different situations in the daily life. Value on the other hand is

something even more abstract and refers to ideas that individuals within group things are good and right. These individuals in the group share the same idea of how things should be and what the society for example should look like.

One must also not forget that culture is not fixed. Culture is a constantly changing phenomenon and understood in many various ways by people from different parts of the world and with different backgrounds. Therefore, to understand a society and its culture it is important to always stay updated (Zimmermann, 2015).

McGregor & Doshi (2015) indicate that an institution's culture is notoriously difficult to define due to its intangible nature, but it can be described as a shared set of beliefs and values that influences and can be influenced by employee behaviour. They further went on to say that companies whose culture is based upon intrinsic motivating factors have higher employee satisfaction and produce better customer outcomes. Culture is an organisation's greatest sustainable competitive advantage – it's the character and personality of the organisation and what makes it unique. It's the sum of its values, traditions, beliefs, interactions, behaviours and attitudes (Martin,1992).

The culture described by mentors and mentees in this study were all intrinsic in nature and followed Hertzberg Two Factor Theory (Sachau, 2007) where he indicated that (i) the allocation of roles: mentors were distinctive in their roles as teachers and nurturers which allowed both mentors and mentees to be challenged to use their full capabilities (ii) the provision of opportunities for advancement in their careers and allowing them to demonstrate their range of skills and the provision of a clear career path within an organization can be a powerful motivating factor for employees (iii) Investing in employees' learning and development: the availability of personal and professional. Team members felt valued and are given learning and development opportunities which in turn made them feel they needed to repay this investment through excellent work performance and (iv) Providing team members with autonomy: mentors and mentees were allowed to take responsibility for tasks and not micromanaged which gave them a sense of pride in their own work and see projects through to completion.

The concepts of personal safety, openness and honesty were important aspects in the learning environment in relation to the pedagogy of culture. I noted there was much reflection from mentors and mentees when they spoke about these issues under the culture theme. Empathy, support and patient safety were significant issues that were featured as they (mentees and mentors) agreed should be part of the

expectations in the mentoring relationship together with a spirit of belongingness and community. The final issue that was an important in the pedagogic strategy of culture in the learning environment was the need for mentors to hold fast to their professional responsibility and maintain a culture that focuses on making and maintaining competency in clinical practice. The pedagogic strategy of culture in the learning environment is important for both mentors and mentees. A culture that provides openness, honesty, personal safety, empathy, support and focuses on patient safety will motivate learners. Culture is the sum of an organisation's values, traditions, beliefs, interactions, behaviours and attitudes. It attracts and retains talent, drives wellbeing and engagement and ultimately impacts performance (Sparrow, 2014). A culture which is built on values such as trust, honesty and openness provides the foundation for wellbeing and engagement to flourish (Martin, 1992).. As demonstrated in this study, when there is a spirit of belongingness and community, learners will engage and meaningful learning will occur. It is noteworthy that a positive culture encourages a sense of professionalism for the mentoring relationship. It is necessary to value that relationship and the second sub-code under the major code of motivation: 'value' is explored next.

5.2.2 Value

Our values are important because they help us to grow and develop. They help us to create the future we want to experience. When we use our values to make decisions, we make a deliberate choice to focus on what is important to us. When values are shared, they build internal cohesion in a group (Barrett, 2006).

Mentors and mentees placed great importance on their role in the specialist learning environment and the symbiosis that existed. There is a link between value and culture and this was reflected by the responses from the interviews. In the context of this study, the pedagogy of 'value' was placed on the individual's learning experience by the learners and their mentors (personal fulfillment), the relationship they had with each other (mutually beneficial relationship), working together (teamwork) and development of self and others (resiliance/sustainability and planning for future generations).

The pedagogic strategy of 'value' that is placed on the mentoring process is important to both the mentor and mentee. Emphasising the need to be a good role model, the act of mutual respect and sharing together with a sense of wellbeing defined where emphasis is placed in the mentoring relationship. It is acknowledged

that there are issues that reduce the value of the relationship but they do not detract from the learning experience as mentors value the development of the learner and actively seek help when required. As I reflected on the aforementioned main codes: 'Motivation' and its two sub codes: 'Culture' and 'Value', I note that the issues are interrelated. As part of my reflexive journal, I note that mentors do not work in isolation but they have a network, and they depend on each other. I have also noted that mentees and mentors share their learning with one other- realising and valuing each other's contribution to the learning process-there is a perpetual transaction of knowledge and skills in the mentoring relationship. This therefore is the basis of the second major code: 'Transaction' followed by the sub code of 'Engaging'.

5.4 Transaction

The theme of 'Transaction' evolved as a pedagogic strategy from the data. It was evident that the mentoring process comprised of a sharing element and as sub theme of 'Engaging' also emerged. A transaction is defined as an interaction of an individual with on or more persons, especially as influenced by their assumed relational roles (Uhl-Bien, 2006). In analysing the data around the major theme of transaction, it was evident that there was a professional transaction that took place between mentees and mentors in the learning enviornment. Coupled with this, there were expectations of the transaction within the mentoring relationship.

Miller (2010) mirrors the pedagogy that exists between mentees and mentors in specialized learning clinical environments. His approach to learning suggests that the aims of a transactional learning experience is based around critical thinking, inquiry skills and problem solving-the main features of the expectations of a learner in this learning environment coupled with a multidisciplinary team (MDT) approach to learning. The clinical learning environment requires the learner to develop advanced skills and knowledge whilst ensuring that they work with the MDT to meet the needs of the patients. The transactional pedagogy in clinical practice demonstrated that there is an exchange between the mentors and mentees: they felt that the transaction was mutually beneficial for their professional growth and the transactional nature of the mentoring relationship develops bonds through openess and trust. This bond was deemed as a significant part of their professional development. There were, however, expectations of the transaction pedagogy in the mentoring process: openess, honesty, supportive, respect, patience, clarity and good interpersonal realtionships to ensure the mentoring relationship remains fruitful and valuable.

In the analysis of the interview scripts, mentees and mentors demonstrated that there was a pedagogy of 'transaction' that occurred in the mentoring relationship. This transaction gave both mentors and mentees a sense of wellbeing but there expectations that were necessary for learning to occur. A sub code: 'Engaging' emerged. I have noted that the codes are interrelated and issues are reoccuring demonstrating the constant comparision phenomena and saturation. The sub code was an issue that was voiced by the respondents and this is now discussed.

5.4.1 Engaging

Mentors and mentees described the mentoring process as engaging but challenging. The pedagogy of engaging gave mentors and mentees the opportunity to celebrate differences and build relationships amidst adversities. O'Brien, H.L. and Toms, E.G. (2008), defined engagement as "a quality of user experiences with technology that is characterized by challenge, aesthetic and sensory appeal, feedback, novelty, interactivity, perceived control and time, awareness, motivation, interest, and affect".

Engagement from an educational point of view is seen as the learner participation, and interaction with the learning material, learning activities, and the learning community. Kearsley & Schneiderman (1999) indicate that the fundamental underlying idea is for students to have meaningfully engaged in learning activities through interaction with others and worthwhile tasks. The general conceptual framework proposed by O'Brien and Toms (2008) joins the engagement theory on the importance of the self-directed, meaningful involvement with materials or applications based on cognitive challenge and motivation (O'Brien & Toms 2008).

The sub theme of engaging demonstrated that the mentoring relationship is a two way process, though challenging, provides the opportunity to celebrate differences and build clinical confidence. I will now consider how the insights gleaned from the study have addressed the research aims and objectives identified in the initial stages of the study.

Objective 1: To explore and identify the ways specialised clinical learning environments are constructed and the potential impact this has on practice learning.

I now discuss the substantive theory 'Transactional Motivation' considering what it might contribute to addressing my research aim: 'To explore and identify the ways

specialised clinical learning environments are constructed and the potential impact this has on practice learning'.

Transactional Motivation is put forward as a theory, grounded in the data, as a way of viewing how mentors support students in clinical practice. Students and mentors working in specialist learning environments develop advanced skills and knowledge through a mutual, collaborative exchange. I acknowledge the challenges and pitfalls in attempting to build a theory from data generated from a very small sample of participants. The total participants were only 11 in number and all volunteered to take part in the study but through constant comparison and saturation, I was able to funnel the codes into the substantive theory. There were no newly qualified mentors in the study, their perspective and that of students is missing and might have provided other important contributions to the research. The data provided useful insights in helping to understand mentors' experiences of supporting students in specialized learning environments, the collective expectations of learners and mentors helped in changing practice locally and provided a vehicle of support.

Objective 2: To identify the barriers on mentor/mentee relationship in specialised learning environment.

I now consider how the substantive theory of 'Transactional Motivation' meets the second objective of the study: 'To identify the barriers on mentor/mentee relationship in specialised learning environment'.

The study identified barriers that will affect mentors and mentees' ability to learn in specialized learning environments as (i) mentors reluctance to teach and share their knowledge and skills (ii) the mentees reluctance to learning from the mentors and (iii) expectations of the mentoring relations not being met.

The theory of 'Transactional Motivation' shows that these barriers exists but do not support a healthy learning relationship which comprises a mutual sharing of knowledge and skills between mentors and mentees and ensuring that agreed expectations are fulfilled.

Objective 3: To engage with clinical practice and the use of learning strategies to maximise practice learning that support and enable students to translate practice and vice versa.

In reflecting how the substantive theory 'Transactional Motivation' meets the third objective: 'To engage with clinical practice and the use of learning strategies to maximise practice learning that support and enable students to translate practice and

vice versa', the mutual exchange in the mentoring relationship causes both mentees and mentors to enter into a more positive experience and allows ultimately for a better patient journey and experience. The collaboration between the mentees and mentors allows for the development of a spirit of community which is translated into a more positive working environment- one that is built on openness, honesty, trust and caring for each other. In this environment, learners can grow and reach their fullest potential: learning is translated in to care.

5.4.2 Conclusion

The substantive theory 'Transactional Motivation' emerged from the research findings and demonstrated that there is a mutual collaborative exchange, which exists as a pedagogic strategy to support mentors and pre-registration nursing students in, specialized clinical learning environments. Mentors and mentees see the mutual sharing, whilst in practice, as a way of developing their knowledge and skills. Mentors and mentees appreciate being part of the positive learning experience and use every opportunity to continually develop themselves professionally. Mentors are also instrumental in providing students with good role modeling so that learning can take place. Underpinning all of this is a personal passion to provide care for patients in specialized clinical environments and become the best nurses of the future. The research journey has made an impact on me as a researcher and a nurse educator. As I reflect on the impact this journey has made on me, I also realised that the research also impacts on other spheres of interests-I will now share this reflection.

5. 5 Reflection on the Impact of the Research

The impact of the research 'wheel' (Appendix 9) identifies the six (6) impact zones of the research. I have chosen to use this tool as it adequately represents the spheres of interest that I am aiming to explore for the purpose of this study. These are reflected in my study's aims and objectives. I designed the research aims and objectives to help me focus on the key areas of my study and map out the journey of my enquiry. In order to ensure that I would have a meaningful understanding of the way mentees and mentors function in specialised clinical learning environments, and learn from their experiences, I developed the following aims and objectives for the study:

1. To explore and identify the ways specialised clinical learning environments are constructed and the potential impact this has on practice learning

- 2. To identify the barriers on mentor/mentee relationship in specialised learning environment.
- To engage with clinical practice and the use of learning strategies to maximise practice learning that support and enable students to translate practice and vice versa.

As the study evolved, I was continually challenged to reflect on the aims and objectives to match the ever-changing landscape of the methodology, data collection, analysis and overall development of the project. I became acutely aware of my limitations that continue to augment my research journey. As I reflect on these limitations, I now explore how I utilise these reflections in my thesis.

I will now reflect on the contribution that my study will have on the impact zones identified in Appendix 9. I have added the epistemological contribution to the impact zone given the nature of GTM and the concepts of 'Fit', 'Relevance', Workability' and 'Modifiability'.

5.6 Impact Zone Contributions

5.6.1 Epistemology

The epistemology that is born of this study is shaped around the issue of validity in GTM. Validity in its traditional sense, however, is consequently not an issue in GTM, which should be judged by the concepts of fit, relevance, workability, and modifiability (Glaser & Strauss, 1967 and Glaser, 1978).

The first concept of 'Fit' has to do with how closely concepts fit with the incidents they are representing. In this study, I demonstrated this thorough the use of constant comparison of incidents, concepts, codes and ideas. The second concept of 'Relevance' deals with the real concern of participants, evokes "grab" (captures the attention) and is not only of academic interest: when I engaged stakeholders, I was able to extract their expectations of the study and ultimately by returning the findings of the study back to the clinical environment helps contextualize the study and presents it as a 'living' piece of work that can be used in my practice. Thirdly, the concept of "Workability explains how the problem is being solved with much variation: as I immersed myself in the findings of the study and ground the emergent theory in the literature, it augments the richness of the outcomes and its practicability

in my personal and professional practice and the fourth concept: 'Modifiability': a modifiable theory can be altered when new relevant data is compared to existing data: I began to understand GTM as a living concept, susceptible to criticisms by peers and the wider community of researchers. My ability to evolve enhances me as a change advocate thereby contributing to the other concepts that are part of GTM's validity. Further to this, I believe that the findings of this project can contribute to the body of knowledge and generate further research into other relevant areas of clinical practice.

5.6.2 Teaching & Learning

In trying to understand what contribution my study will make to the sphere of teaching and learning, I reflected on the use of learning theories. Humanist learning theories make a contribution to understanding how learning in clinical practice occurs (Burnard, 1990). A key principle of humanist education is an emphasis on respecting the individual as one being motivated by an urge to learn from within. The pedagogical relationship of clinical mentors and mentees, as is being investigated in my study, lends itself to this paradigm where mentors facilitate and guide learners to achieve their objectives amidst the uncertainty and change experienced in modern health care delivery. The NMC (2008a, p. 20) has indicated that mentors are expected to 'facilitate personal and professional development of others'. Further to this, pedagogy as described by Dewey, demonstrates education as 'a fostering, a nurturing and a cultivating process' (cited in Purdy, 1998, p.114). Also, the personal relationship between the mentor and learner is integral to initiate learning (Rogers, 2000). Spouse (2001) and Gray and Smith (2000) further substantiate the importance of this relationship between mentor and student to the success of the mentoring process.

On reflection of my aims and objectives, coupled with the literature around learning theories, it is evident that the emergent substantive theory from this research project will potentially contribute a significantly innovative dimension to the theories of humanistic learning: the theory emphasizes the relationship of mentors and mentees in specialized clinical learning environments and contribute to the development of pedagogy that support learning in clinical practice. Further, as learners/students and faculty are 'consumers' of research, this study can contribute to the demand for evidence base literature to substantiate change in clinical practice.

5.6.3 Clinical Practice

As discussed above, all the humanistic theories make a contribution towards helping explain what occurs in clinical practice. On reflecting on how the findings of my project will impact on my clinical practice, I recognise that one of the main characteristics of a high performing clinical environment is one of being supportive to its care givers (Shaller, 2007, Dewey cited in Purdy, 1998, p.114). In the context of this study, the main aim was to understand how practice learning is constructed and its translation into care-the substantive theory that is generated from this study works on the premise that learners and mentors support and motivate each other and consequently contribute to a high performing environment. Also, I can envisage a stronger collaboration being formed between education provider, clinical practitioners, healthcare providers (Trusts) and further, the wider policy making process.

5.6.4 Public Policy

In considering what impact my research will have on policy, I am conscious that John (2013) indicates that it may be difficult to make a casual link between pieces of research (theory) and real world outcomes. This strengthens my argument to introduce, initially at a local Trust's level, the substance of the theory from my research and evaluate its effectiveness in practice. This may translate into the wider community through peer-reviews, networking, publications and review of data related to staff satisfaction, attrition and patient experiences- the substantive theory from this project has the potential to snowball across the nursing profession and cross over into other disciplines within clinical practice and further, healthcare provision affecting their workforce development and planning policies. There is also the potential for funding bodies, decision makers in public bodies and institutions to draw from this study to substantiate their policymaking.

5.6.5 Economic

As I reflect on the effect of the substantive theory from this research project on the issue of economics, I must acknowledge that the cost implication associated with training, developing, recruiting and retaining staff can also be a snowball effect. Studies by Jones (2005) and OBrien-Pallas et al. (2006) that examine the costs of

nurse turnover, have demonstrated that results range from about \$22,000 to over \$64,000 (U.S.) or £15K to £43K per nurse turnover. McConnell (1999) quotes that between 0.75 to 2.0 times the salary of the departing nurse is attributed to staff turnover costs, while Jones, (2005) have indicated that nursing turnover costs have been estimated around 1.3 times the salary of a departing nurse. There is also an economic element to recruitment and retention.

Poorly supported staff is proportional to a poorly performing clinical environment/healthcare Trust (Shaller, 2007). This invariably will have an impact on patient experience. A substantial body of research by Kane, Shamliyan, Mueller, Duval, & Wilt (2007) and Lankshear, Sheldon, & Maynard (2005) documents the effects of nurse staffing on patient outcomes/experience and quality of care. Further to this, a study by Aiken, Clarke, Sloane, Sochalski, & Silber (2002) suggest that there is a relationship between nurse turnover and factors that are related to quality of care. This consequently, has become a national issue in the UK and government mandated, healthcare providers', inspection bodies such as the Care Quality Commission (CQC) have already begun imposing sanctions on poor performing National Healthcare Service (NHS) Trusts (CQC, 2014) because of poor quality care and patient experience. I acknowledge that the issue of staff turnover is complex, but I believe that implementation of the substantive theory from this study, which advocates support for mentors and learners in clinical practice (a pedagogical approach), can produce a high performing clinical environment and ultimately, a positive patient experience. Economically, I can visualise the contribution that this can make to the organisation's wealth creation and business advancement and further, have a positive impact on the society.

5.6.6 Society & Environment

The Russell Group (2010) indicates that research has an impact on society: its knowledge base is enhanced and new perspectives to cultural and ethical debates are introduces. In relation to my study, it seeks to explore and introduce a new debate to the construct of mentoring in specialised clinical learning environments. The substantive theory generated from the study demonstrates the pedagogy that is required to uphold the learning relationship in this clinical setting. Also, I have become more aware of the role that my research project will play in developing social responsibility: for each other as registered nurses, for learners in these specialised

learning environment, for the patient's experience and ultimately for society. This study has the potential to substantiate clinical practice and inform social policy.

5.7 Conclusion

I realise that as one journey may have ended, I am on the cusp of starting another. The ever evolving nature of this research project has allowed me to continually acknowledge my limitations related to being an inside researcher, reassess my position as a reflexive practitioner, deal with the issues of power relations and helps me to find my voice as I seek to justify, not only the methodology for the study, but reflect and understand the impact of my study on epistemology, teaching and learning, clinical practice, public policy, the economy and society and environment. In answering the question posed at the start of this essay: What 'innovation' am I adding to my sphere of practice by doing this research? I have begun to realise that my substantive theory adds to the body of humanistic learning theories, and its incorporation into policy (locally and even nationally) has the potential to drive positive changes in clinical practice, workforce development and ultimately improve patient's experience. I appreciate that this 'innovation' may not be the panacea for the complex and diverse issues around staff satisfaction, patient experience and workforce planning, that are present in the NHS, but by situating the theory in the clinical setting, measuring its impact on quality and patient experience, allowing it to influence policy and decision making and engaging with debate that will further the tenets of the theory, the knowledge gleaned will precipitate change in our current practice and be an invaluable mechanism for the development of future practitioners, and by extension, society.

6.0 Conclusion

6.1 Introduction

In this final chapter I present (i) a recapitulation of the purpose and findings of the thesis and the relationship this study has with previous research (ii) the contribution of this study (iii) the strengths and limitations of the study (iv) recommendations (v) an autobiographical reflection .

6.1.1 Recapitulation of the thesis

The aims of my study were to explore and identify, from the experiences of mentors and mentees, the ways specialised clinical learning environments are constructed and the potential impact this has on practice learning; learn about the effects that pedagogic strategies have on the mentor/mentee relationship, to engage with clinical practice and the use of learning strategies to maximise practice learning that support and enable students to translate practice and vice versa.

The literature review demonstrated that mentoring in nursing is wide ranging and provided a strong rationale for this thesis to explore pedagogy in specialised clinical learning environments. Much of the literature addressed mentorship from either the student's or the mentor's perspective with few exploring pedagogy. The literature also suggested that mentoring relationship has governance as set out by the NMC. Finally, the literature showed that there is a need to draw upon workplace learning literature. This added to the underpinning evidence base to understand the significant role of the mentor and their relationships and interactions with students in providing pedagogy that will student-mentee relationship in practice settings. This thesis therefore sought to add to the existing body of knowledge by exploring and identifying the ways specialised clinical learning environments are constructed and the potential impact this has on practice learning, coupled with identifying the barriers that may impact on the mentor/mentee relationship in specialised learning environments.

This methodology chapter explored the use of grounded theory as a suitable methodology for this research study. I adopted a qualitative, constructivist approach to gain a richer understanding and meaning of my area of interest. The chapter also developed the issues around the ethical considerations associated with this

methodology, the participant selection, the sampling process, data collection and analysis and issues of data credibility and the concept of trustworthiness in grounded theory. Ethically, the issues of researcher/participant relationship, confidentiality and anonymity and informed consent associated with performing research as an insider researcher were considered. The ethical challenges of power relations and validity of the research process were highlighted at my university's REC meeting, which resulted in my reflection on my position as an insider researcher. It was evident that as an inside researcher, I needed to guard against bias by using reflexivity and ethical awareness. Two main codes to emerge from my analysis of in-depth interviews using GTM: Transaction' and 'Motivation'. There were also three sub codes: 'Value', 'Culture' and 'Engaging'. The findings suggest that the relationship between mentors and mentees in the clinical learning environment was a mutual collaboration and exchange, which was developmental on both a personal and professional level.

6.1.2 Contribution of the study's substantive theory

On reflecting on the contribution of this study's substantive theory, the findings of this project will contribute to the body of existing knowledge and provide an opportunity to generate further research into other relevant areas of clinical practice. The emergent substantive theory from this research project will aslo potentially contribute a significantly innovative dimension to the theories of humanistic learning: the theory emphasizes the relationship of mentors and mentees in specialized clinical learning environments and contributes to the development of pedagogy that support learning in clinical practice. Further, as learners/students and faculty are 'consumers' of research, this study can contribute to the demand for evidence base literature to substantiate change in clinical practice. The substantive theory has the potential to snowball across the nursing profession and cross over into other disciplines within clinical practice and further, healthcare provision affecting their workforce development and planning policies. There is also the potential for funding bodies, decision makers in public bodies and institutions to draw from this study to validate their policymaking. The study introduces a new debate to the construct of mentoring in specialised clinical learning environments. The substantive theory generated from the study provides the pedagogy that is required to uphold the learning relationship in this clinical setting and play a part in developing social responsibility: for each other as registered nurses, for learners in these specialised learning environment, for the patient's experience and ultimately for society.

6.2 Strengths and Limitations of the study

In my journey as a researcher, many fellow researchers cite time, resources and personal organisational issues as limitations of their projects. In my research, these factors presented as minor codes. There have been, however, four major codes which I have gleaned, from my journey, that have been identified as limitations to my project: (i) being an insider researcher (ii) developing as a reflexive practitioner (iii) navigating power relations in the research process and (iv) finding my 'voice' as a researcher. I will also reflect on the limitations of the methodological framework used in this study.

As a clinical educator, Roberts (2007) argued that I am inextricably linked to the fabric of my clinical learning environment: I am well placed to conduct research within my work setting. This however has not been the case, as the use of insider research, has not been a widely reported approach for researching clinical settings (Brannick & Coghlan, 2007). I was not prepared to justify my position as an insider researcher and thus it became a limitation of my project. This issue has subsequently evolved to become to tool that augments my reflexivity throughout the development of my thesis.

Secondly, the idea of being a reflexive practitioner was a new concept and an identifiable limitation to my project as I began this research journey. The skill of becoming a reflexive practitioner assists with situating the researcher in the data and further develops his ability to explore the data and relate it to the wider context (Savin-Baden, 2004). This concept of being 'situated' in the data is a skill I continue to develop. Being reflexive has helped me immerse into the data and develop a clearer understanding of the systematic coding and theory development that is an important aspect of Grounded Theory (GTM).

The third limitation to my research project has been the issue of navigating the power relationships that exist in the developmental trajectory of the journey. I identified two power relationships that emerged from my project (i) the *researcher-participant relations*: Bravo-Moreno (2003) indicates that the researcher 'owns' the information about the research and the participants 'own' the knowledge and experiences needed to negotiate the level of information 'exposed'/given about the study. It is this negotiation that has the ability to change the power balance between the researcher

and the participants. This issue was evident in my project and became an ethical issue that was related to informed consent and negotiation with participants to 'give up' their knowledge and experiences. The second power relationship was related to me being an insider researcher.

The fourth limitation was that of finding my 'voice' as a researcher. To overcome this limitation, I needed to understand (i) the impact I wanted my research to make and (ii) where this impact will make the most substantial contribution. To define this limitation, I use the 'wheel' in Appendix 9 to substantiate and answer the question related to the contribution I will be making to my sphere of clinical practice.

Finally, in relation to the methodology: in choosing GTM as a suitable methodology for my study, I considered the following:

- (i) the knowledge that I was seeking to extract by conducting this study
- (ii) the opportunity to explore unique specialised clinical learning environments.

I chose Grounded Theory, a research methodology developed originally by Glaser and Strauss (1967) and described by Strauss and Corbin (1990) as the most applicable for the study as it relates to the philosophical base of my study. The research philosophy I adopted was constructivism as described by Guba and Lincoln (1998), and Charmaz's (2006) constructivist conception of GTM. The social constructivist framework acknowledges the complexity and uniqueness of the learner and encourages the learner to be an integral part of the learning process (Wertsch 1997). Further to this, the study's perspective is interpretative supported by the four philosophical assumptions standpoint: (i) *ontologically*, the study is socially constructed with multiple realities (ii) *epistemologically*: the study is subjective because knowledge is derived from the researcher-participant interaction, (iii) *methodologically*: the study is hermeneutically based as the analysis of the data will be based on text interpretation and (iv) *axiologically*: understanding and truth is situated in the context of the study and is descriptive.

In choosing the methodological framework of this study, I compared GTM another qualitative approach: phenomenology, but after (i) examining the construct of GTM versus phenomenology (ii) reflecting on the nature of the study and its intended outcomes (iii) a discussion with my supervisor and (iv) examining the literature, this approach (phenomenology) was set aside. Also it was evident that as the study evolved, it did not lend itself to any another methodological approach.

I did realize, that GTM shared the following characteristics with other qualitative methods, which corresponded to those of my study (i) it focused on everyday life

experiences (ii) it valued participants' perspectives (iii) the enquiry was an interactive process between researcher and respondents and (iv) it was primarily descriptive and relying on people's words (Marshall & Rossman (2006). However, what was unique about GTM was that it provided theoretical sensitivity: the process of developing conceptual insight that is used by the researcher as he comes into the research situation (Glaser, 1978). In coming into the research situation, GTM gave me useful tools to learn about individuals' perceptions and feelings regarding the study aims. GTM also offered me a powerful methodological framework if the aim of my study was to learn about individuals' perceptions and experiences whilst working in specialized clinical learning environments.

Finally, GTM also provided me with clear guidelines for data collection and analysis consisting of coding, comparisons between data, memo writing and theoretical sampling. This afforded me the privilege to ultimately return to my clinical environment with a workable theory that can be translated into practice and ultimately positively affect care delivery, patient experience, the development of a more robust educational support structure for learners in specialised learning environments and provide a platform for future research into this essential area of inquiry. I believe that choosing GTM for this study, the knowledge gained will precipitate change in our current practice and be an invaluable mechanism for the development of future practitioners.

The issue of the small scale of participants in the research may be considered a limitation of the study. I interviewed most of the participants from on specialist unit and had more mentors in the study than mentees. Access to the second study site/unit, though granted, was challenging given that I was not 'situated' in that area of speciality and found it difficult to engage the mentors and mentees to participate. I believe that the 'thick descriptions' of my categories allows readers to vicariously experience the professional 'lives' of the participants. My findings, for example, that there is a mutual collaborative exchange between mentors and mentees, can help to change practice locally but also impact on various spheres of interest outside of the clinical setting.

I considered that these research participants, whilst not selected by means of 'purposive sampling' strategies, were likely to provide valid and useful information to help answer my research aims, in keeping with my grounded theory approach. I acknowledge that having volunteered to take part, the participants were likely to be amongst the most interested in and committed to having their voice heard. In

evaluating my study, which included no newly qualified mentors, I have considered what might have been different if they had agreed to take part. Such mentors would have not have built up an extensive repertoire of skills in the specialized field of nursing and they themselves would be developing their knowledge of mentoring and therefore the data may not have been so wide-ranging in this respect. Overall, I do not consider that my tentative theory of 'Transactional Motivation' would be fundamentally changed.

I consider a strength of the research to be the way in which I immersed myself into the the interview transcripts and the keeping of my reflexive joiurnal. It was important that I was 'steeped' in the data when commencing the process of analysis. In doing so, I believe I captured a very accurate version of what happened during the interviews. This meant that I had a solid data source to begin my analysis. Furthermore, adopting this approach meant that I was very familiar with the data as Strauss and Corbin (1998) advise, essential in adopting a grounded theory approach. In relation to validity, in its traditional sense, is not an issue in GTM and the theory should be judged by the concepts of fit, relevance, workability, and modifiability (Glaser & Strauss, 1967 and Glaser, 1978) I believe I was able to contextualize this through this project.

Coding is one of the most central processes in grounded theory (Bryman, 2008) but it is also the most difficult aspect for me as a novice researcher, in terms of understanding and operation (Strauss, 1987). Bryman (2008) however, points out that one of the main difficulties with qualitative research is that it rapidly generates vast amounts of data because of its reliance on prose, such as interview transcripts.

I was initially daunted by the volume of data collected but I adopted a systematic approach to the analysis of the data which allowed me to increase my understanding and confidence to present what I had discovered to others.

The use of the computer software programme (NViVo) to assist with organising of the data, gave me an opportunity to extend my research skills. I did find that the electronic organisation coupled with manual analysis of my data were very time consuming. I generated word clouds to represent the different levels of coding in GTM. These word clouds were helpful as they gave me a pictorial representation of each level of coding and the aggregration of the codes as I moved from one level to another.

In order to aid me in the process of data analysis I read the literature widely for examples of how Strauss and Corbin's (1998) guidance had been applied by others.

However, authors seemed to be using their own modified versions of the coding process, or failed to provide detailed descriptions of how they went about it. Bryman (2008) states that unlike the analysis of quantitative data, there are few well established, widely accepted rules for the analysis of qualitative data. This lack was disconcerting. Furthermore, trying to grasp the detail of how other researchers had carried out their coding was confusing, the terms 'codes', 'categories', 'elements', 'concepts' and 'codes' seemed to be used synonymously by many researchers making it difficult for me to understand the level to which their research had progressed. This element of my project was challenging and caused me to doubt wether I was adhering to 'correct' procedures-this made me a bit hesitant in my approach. However, I now understand that whilst differences exist in the way that it is achieved the coding process provides a means of moving from microanalysis of data to more abstract ways of conceptualising it.

My methodology chapter may have given the impression that coding of the data were undertaken mechanistically, whereas in reality coding in qualitative research is not an exact science but one that is 'in a constant state of potential revision and fluidity' (Bryman, 2008, p. 542).

I was supported in this process by my supervisor who provided regular feedback, so with perseverance the process of coding and interpreting the data eventually became clearer. I have provided in my methodology and findings chapters detail of how I undertook the process of data analysis so that readers can follow how I have interpreted the data by following my data analysis process. In doing so I would hope that another researcher would agree with the tentative theory that I have put forward and with the conclusions and recommendations that I have reached.

6.3 Recommendations arising from the research

In this section I consider recommendations for future practice arising from my research findings and the substantive theory that has emerged from the analysis of the data. It is hoped that the findings might add to debate nationally when my research findings are able to reach a wider audience by means of publication. In determining the recommendations from the research, I have used the headings of the six impact areas this research will on to help my focus, coupled with the impact on epistemology whilst being mindful of the emerging NMC (2018) standards for student supervision and assessment.

The new NMC (2018) standards seek to clarify and strengthen the support and assessment students receive whilst on clinical placement. This is being done by the introduction of the clinical supervisors and assessors and the removal the role of the mentor. These new roles, together with that of an academic assessor, will hopefully provide a more robust structure for students' 'sign-off' and their subsequent entry onto the NMC register. Coupled with this, I can see as the new NMC (2018) standards are embedded into clinical practice, it may be worthwhile applying and testing the substantive theory alongside the NMC standards towards developing research and quality initiatives aimed at enhancing the learning experience amongst clinical supervisors and assessors, and further, developing the workforce.

6.3.1 Epistemology

In staying close to the precepts of GMT, the substantive theory of 'Transactional Motivation' can add to the existing and emerging theories of motivation and pedagogy paradigms. The theory is unique-it exposes a gap in literature. Further research, testing and debate of the theory in other learning environments, and further, interactions: personal and professional will enhance its 'Fit', 'Relevance', 'Workability' and 'Modifiability'.

6.3.2 Teaching and Learning

The substantive theory of 'Transactional Motivation' is unique and adds to the key principles of humanist education. The theory emphasizes the mutual exchange that occurs in the relationship of mentors and mentees in specialized clinical learning environments and the positive impact it has on their professional and personal development. The theory also makes a contribution to the development of pedagogy that support learning in clinical practice. Further, as learners/students and faculty are 'consumers' of research, this study can contribute to the demand for evidence base literature to substantiate change in clinical practice, motivational and pedagogic strategies for support for all learners.

6.3.3 Clinical Practice

The substantive theory's premise is based on mutual sharing of knowledge and skills and the support of learners. I propose applying the pedagogy strategies of 'Engaging', 'Value' and creating a positive 'Culture' as core elements in performance indicators and proficiencies in defining high performing clinical, and by extension,

learning environments. This can potentially augment the NMC (2018) standards as the new roles of the clinical supervisors and assessors evolve.

6.3.4 Public Policy

In relation to public policy, I recommend that the substantitive theory be introduced at a local Trust's level, and the substance of the theory from my research, be evaluated for its effectiveness in practice alongside the emerging NMC (2018) standards. This can then be translated into the wider community through peer-reviews, networking, publications and review of data related to staff satisfaction, attrition and patient experiences.

6.3.5 Economic

In relation to the economic aspect of the theory, I propose using the theory as part of the Trust's workforce and development strategy towards recruiting and retaining staff-this will contribute to the organisation's wealth creation and business advancement and further, make a positive impact on the community/society.

6.3.6 Society & Environment

The substantive theory's pedagogy can influence the development of new knowledge-I therefore recommend that the work be debated and exposed to critics of theory.

6.4 Autobiographical Reflection

The learning that I have achieved from this research project is multifaceted. In this section I see this as my opportunity to share with the reader a personal account of my own learning. In order to help me structure this reflection, I decided to employ a modified version of Gibbs' (1998) reflective model.

Describe

In the first instance, Gibbs asks us to describe 'the event' in succinct, 'matter of fact' terms. This is not an easy task given the immense psychological and emotional effort that is bound up in the process of undertaking a research project. I commenced the doctoral programme seven years ago during which time I overcame many personal

issues. In September 2016, I had to take a 6 months abayance due to problems with my health. Subsequent to this, I had a change in supervisors due to her retirement and have battled with health related issues thereafter. My thesis write-up progress was slow and in November 2018, my supervisors and I agreed a prescribed plan of action to complete the thesis. We stayed close to the plan which led to me submitting this final thesis in January 2019.

Feelings

My feelings during this journey of learning have ranged from elation to despair. I did my first degree and Master's degree with the University and was excited to pursue a doctoral degree in an area of my passion: nursing education. I hoped to gain new insights that I could apply to better support learners in practice placements as well as gain a valued academic qualification. In retrospect, I feel that I was very naive when I began my project, not fully appreciating what was required at this level of study.

I got off to a great start: I had taught modules, a classroom of colleagues and support from my colleagues at work. These, however, all slowly faded away: in year 4 and onwards, there were no taught modules, everyone now worked on their own and there was resistance at work in relation to study leave and funding. This coupled with personal issues previously mentioned made it a lonely journey. I did not cope well with the uncertainty that I now understand is often an integral part of establishing and carrying out a project as a lone researcher. Despite frequent meeting and support from my supervisor I felt that I was 'left to it' for many months in making decisions about my research project. Although the ethical approval was granted, the process had many hurdles: the application process was lengthy and I felt the pressure of time upon me as deadlines stood glaring me in the face. This, accompanied by uncertainty about the research methodology, nagging doubts about my own academic abilities, coupled with time management skills, countless redrafting of chapters and having to meet the demands of full-time work resulted in a loss of confidence. As progress reports were submitted, initially I felt my confidence levels begin to slowly rise-I was 'ticking all the boxes', but with my health issues, and the noted slow progress with my writing, I felt that I was going to be kicked off the course at one stage. I also struggled with 'finding my own voice' which I felt was at time unattainable given that I had never written in the first person for my first and masters degrees. However, with encouragement from my supervisors and the incremental nature of the EdD programme my flagging confidence was reenergised.

In retrospect, I feel that a very important part of this whole journey was the time that the mentors and pre-registration students spent with me, providing rich data that I wanted to do my best to give them a voice. I began to enjoy the academic challenge of crafting a piece of work I hoped would do justice to the trust they placed in me. Mentors spoke very candidly about their story and how they tried to instil this into their mentees.

I feel that the learning gained in both personal and professional terms has been hugely worthwhile, as I now go on to consider.

Evaluation

Overall my experience has been positive. This journey has helped me to achieve one of my main objectives: to understand more about the research process itself. I believe I have achieved this objective. Conducting a literature review, grappling with theoretical frameworks, methodologies and research instruments all enhanced my knowledge and understanding. I have also enjoyed piecing together the project. The structure of the EdD programme which required me to meet with my supervisor at regular intervals, ensuring that I attended colloquiums and writing workshops and the annual reviews all helped in the process of creating a fluent account of my research. I came to understand that drafting and redrafting was part of a process that would

hopefully lead me to authoring a thesis at an acceptable level. With this in mind, I also learned to 'speak' through my dissertation-with encouragement from my supervisor, I was able to write more freely and move forward.

Learning began at the very start of the programme. I was able to share my experiences of writing a research proposal, negotiating the ethics approval process with colleagues starting out on their research projects, how to go about writing a research question, speak more confidently about being an insider researcher and apply my new found skills in research methodology: developing interview schedules and interviewing techniques.

By means of interview I gained access to data of such vividness that my understanding of the mentoring relationship has enhanced. I was glad that mentors were able to speak so openly to me. I began to fully appreciate the challenges inherent within the learning environment locally. This made me consider how I could better support learners in my specialised learning environment. As a result of this, I have written articles and facilitated workshops on developing the mentoring experiences in practice placements. For example, I introduced mentoring feedback

forms where students can give feedback on the mentoring experience. The feedback is anonomised, thematically analysed and shared with the Unit and Trust during mentor development days. Initiative has been well evaluated by mentors: they see it as a non-threatening valuable way to support theirs and the students' development. Students are also asked to submit a short reflective piece of narrative to the educators about working in the clinical area-this is done at the end of their placement-codes are generated from these narratives and shared on the monthly staff meeting. Annual mentor update sessions have also been revised with the aim of helping mentors support students in practice, rejecting the notion that formal, theoretical knowledge is superior.

As a result of my research I feel that I have a much greater connection with the participants and a deeper understanding of the challenges they face in clinical practice. I have begun to view my role in a different way, and to see myself more clearly as an enabler: giving them the opportunity to do the important and often selfless work they do. I think this will be essential in the future when reduced staffing levels may increase pressures upon mentors to an even greater extent. I very much value the personal insights I have gained from my journey.

It has been a positive experience working with the mentors and mentees with whom I have contact everyday and especially the opportunity to give them a voice in developing the learning environment. I think that I have been an advocate for lifelong learning and have demonstrated that once you have 'set your hands to the plough' there should be no turning back.

The most negative aspect of undertaking the project has been the difficulty of trying to undertake a major piece of academic work whilst juggling full time employment and family commitments. A number of personal crises arose whilst I was enrolled on this programme. I have been a student for many years and I know that setbacks are inevitable but they have to be dealt with whilst still achieving your programme targets. I have learned much about my own resilience and have already begun to mentor and support students and colleagues, who also have many competing demands upon their time, with much greater credibility.

Analysis

As a novice researcher I found the uncertainty of the journey to be very unsettling. This was particularly true in the early stages when I found that significant aspects of my study were undecided.

I now realise that there is as much learning to be gained from undertaking the process of research as there is in the product of that research.

Producing chapters required drafting, re- drafting, reflection upon and re-evaluation of my work on an on-going basis. This necessitated frequent engagement with the literature and consideration of how this relates to my own work. This helped me to understand my findings and to appreciate what my research has really been about. I think I have made a contribution to understanding the construct of specialised learning environments and the pedagogy that mentors' and mentees' can use to augment the learning experience.

6.5 Conclusion

As I reflect on the journey of this study, I realise that I have emerged from this experience as a better nurse educator. This journey through the research process has been a great learning experience. My intention for the future is to contiune publishing the findings arising from this research and open the debate of the tentative theory of 'Tranasctional Motivation' with the intention of situating it in all the sheres of interest. It is clear that the emergence of a unique theory requires further testing, debate and research to maximise and fully understand its impact in all spheres of interest. The substansive theory of 'Transactional Motivation', though it evolved from a study carried out between learners in a specialised clinical learning environment, has the capacity to influence a new pedagogy paradigm that can make a positive contribution in the wider community. Whilst some of the recommendations arising from my research have been implemented locally, there is still much to do to ensure that this pedagogy continues to evolve.

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Appendicies

Appendix 1: University Ethics Approval

From: Melanie Nakisa

Sent: 12 September 2013 09:52

To: Allan Seraj **Cc:** Lauren Griffiths **Subject:** Ethical Approval

Dear Allan

Thank you for sending the modifications to your proposal for ethical approval.

We can now award you ethical approval for your project: "Pedagogic strategies to support practice learning in specialised clinical learning environments: A Grounded Theory Approach."

I have sought advice from the chair of our ethical panel and the two lead panel members who dealt with your proposal regarding your request to include people within your own Trust. Here is the response of the panel chair (which has been approved by the other two panel leads), for your information:

"I think the advice that he should not do this within his own clinical area was related to the output not being as robust as it would be if he was doing this somewhere that they would not know him, because the participants would be less inclined to say what they thought he wanted to hear.

However, because there will be no harm to the participants and if Lauren as his supervisor thinks that the role of practitioner researcher as outlined below is appropriate for this study, then I suggest that we can agree."

Good luck with your research and with seeking approval through the Trust R&D departments. Please let me know if you need any documentation from us in support of your approval through the Trusts.

With best wishes

Mel

Dr Mel Nakisa

Senior Administrator (Research) Academic Quality Directorate

Buckinghamshire New University

High Wycombe Campus

Queen Alexandra Road

High Wycombe

HP11 2JZ

Tel 01494 522141 ext 4008

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Appendix 2: Consent Form

CONSENT FORM Title of Study: "Pedagogic Strategies to support Practice Learning in Specialised Clinical Learning Environments: A Grounded Theory Approach" Name of Researcher: Allan Seraj Contact Number: 01895XXXXXX E-Mail: aseraj01@XXXXX.com Please tick the appropriate boxes I have read and understood the project information sheet (Version 3) for the above study...... I agree to take part in the above study and agree to the interview being audio-taped...... I understand that my taking part is voluntary; I can withdraw from the study at any time and П without giving any reason, without my legal rights being affected..... I understand my personal details such as phone number or address will not be revealed to people outside of this project..... I understand that my words may be quoted in publications, reports, web pages, and other research outputs but my name will not be used..... I agree to assign the copyright I hold in any materials related to this project to Allan Seraj (Researcher).... I understand that in the event of clinical negligence being disclosed during the interview, this will have to be reported through the appropriate channels and confidentiality would not be On this basis I am happy to participate in the "Pedagogic strategies to support practice learning in specialised clinical learning environments: A Grounded Theory Approach" study Name of Researcher...... Signature...... Date....... If you have any queries or concerns, please contact: Allan Seraj (Researcher) One copy to be kept by the participant, one to be kept by the researcher

Appendix 3: Research Access Letter

IIICICSCAMOISANAS, TAMAGOSIN		
Bucks New University		
		28 th January, 2014
To whom it may concern		
Dear Sir / Madam,		
Please treat this letter as authorisation Harefield Hospital to proceed with his F doctoral research's data collection.	for Allan Seraj, Practice R&D application at	Education Charge Nurse at gaon Hoopital as part of his
Yours sincerely,		
Troressor Theresa marphy Director of the Patient Experience as	nd Nursing	
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Appendix 4: Management Permission for Research

Project Title: Pedagogic strategies to support practice learning in specialised clinical

learning environment: A grounded theory approach.

R&D Ref: 2014IC001H **REC Ref:** Not applicable

CSP Ref: N/A

Study Sponsor: Buckinghamshire New University

Notification of RB&HFT NHS Management Permission for Research

Thank you for registering the above study with the Research Office. I am pleased to inform you that your study now has NHS Management Permission (previously know as R&D approval) and can commence at Royal Brompton & Harefield NHS Foundation Trust (RB&HFT).

NHS management permission for the above research study is granted on the basis that the study will be conducted as described in the protocol and in accordance with the supporting documentation submitted (listed below), and on the understanding that the study is conducted in accordance with the principles set out in the Research Governance Framework for Health and Social Care (April 2005, 2nd Edition, Department of Health (DoH)) and RB&HFT Policies and procedures.

Documents Reviewed	Version number	Date
Protocol		

Appendix 5: Search Strategy: 2005-2018

Search Terms	Search Engines	Number of studies found	Relevant
Mentee- mentor relationships; mentorship and nursing: mentorship and learning; mentorship and nursing students; mentorship and mentors; learning environment and mentorship; specialised learning environment; clinical practice learning and nursing students; pedagogy and nursing, pedagogy and learning, nursing and mentorship, preceptorship.	CINAHL PubMed EBSCO host Medline Science Direct PsycINFO ERIC British Education Index		27

Appendix 6: Interview Shedules A: Mentor

Semi structured questionnaire proforma		
Semi structured Questions	Notes	
How does your approach to mentoring affect the learning process in clinical practice		
What effect does your teaching strategies have on the relationship with your mentor		
Discuss what personal & professional effect has the interactions with your mentee made on you		
How would you describe the culture of this unit in relation to mentoring		

Interview Schedule B: Mentee

interview Schedule D. Mentee	
Semi-structured Questions	Notes
What effect does the approach of your mentor's style of mentoring have on your learning?	
What effect does your mentors' teaching style have on your learning?	
Discuss the personal and professional effect has the interaction with your mentor made on you?	
How would you describe of the unit in relation to mentoring?	

Appendix 7: Feedback from Peer on Interview Technique

Appendix 2

January 2014 Well done on your good work for your research.

Bullet points about our meeting today as requested. The topic guide for your interviews were discussed and the main feedback was about the wording of the questions

Some questions to set the scene for the participant will ensure that better 'shared communication' takes place. For example 'Can you please tell me about the teaching that is done is your unit? How is it done? What do you think about the way it is done and the people who do it?

Some of the questions are couched in 'research' terms and I think a student or junior staff may have difficulty in understanding what the questions mean. They will then try to 'make sense' of what they don't understand and their answers will reflect concepts different to what you thought you were asking about. Sometimes a conversation about what the participants think the research is about will uncover any misunderstandings.

'Culture' means many different things to different people so I would expand this question to be more explicit about what you want to find out (e.g. environment, team working, work processes, organisational setting etc.)

Let me know if I haven't been clear! Best wishes ${\tt SF}$

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Appendix 8: Inclusion and Exclusion Criteria for Participants

Inclusion Exclusion

- Any participant who was a qualified mentor in ICU and Midwifery holding a recognised qualification in mentoring for at least 12 months
- Student midwives in midwifery
- Pre-registration third year students working in the ICU.
- Nurses currently doing their mentor training
- Newly qualified midwives
- Staff nurses who were being mentored as part of the initial orientation period to their Unit.

Appendix 9: Impact of Research 'Wheel'



Emerald Group Publishing. Impact of Research [11 April 2014].
 Available from: http://www.emeraldgrouppublishing.com/authors/impact/index.htm
 http://blogs.lse.ac.uk/impactofsocialsciences/2011/07/14/publishers-measuring-impact/

Appendix 10: Participant Information Sheet (Mentor/Mentee) Sample

The Participant Information Sheet (Mentor/Mentee)

Research title: "Pedagogic Strategies to support Practice Learning in Specialised Clinical Learning Environments: A Grounded Theory Approach"

Part 1.

Introductory paragraph.

I would be grateful for your help with some research which I am doing for my Professional Doctorate in Education. Before you decide whether you would like to take part I would like you to understand why it is being done and what it would involve for you. I can go through this information sheet with you if necessary which will take about 10 minutes.

Purnose

The purpose of the research is explore and understand the actual or potential impact that learning strategies will have on the relationship between mentees and mentors within clinical learning environments. The research will also seek to explore and identify the way specialised clinical learning environments are constructed and the potential effect this has on practice learning.

There is also an educational purpose as it will be my dissertation for my Doctorate.

Why have you been chosen?

You have been chosen because your employing organisation has given permission for me to approach you and you meet the inclusion criteria.

Do you have to take part?

It is up to you to decide to join the study. I can discuss it with you and if you agree to take part I will ask you to sign a consent form.

You may decline to take part without giving a reason. This will have no implications for you and your decision will remain anonymous.

Participant Information sheet

You may withdraw at any point without giving a reason. This will have no implications for you and your decision will remain anonymous.

What will happen to you if you take part?

Interviews will be carried out with you by the researcher named below. During the interview you will be encouraged to share your experiences through answering a few direct questions. You may be prompted at some points to ensure that you discuss all areas. The interviews will be recorded and written down and then common themes which arise will be considered.

The interview will take approximately 1 hour and can take place at a suitable place convenient to you. You will be given the opportunity to read the written copy of the interview to check to see if you feel it represents what was said and to give you an opportunity to add or delete any of the content. At the start of the interview you will be asked to talk about your experience as a mentor/mentee in practice

You will be encouraged to expand on your answers as well as given an opportunity to discuss issues that you want to raise.

Benefits

If you take part you will not benefit directly but the information gained will be used to improve training and education of nurses and other health care professionals.

Confidentiality

Your name will <u>not</u> be included when the study is written up; you will be allocated a pseudonym in order to maintain confidentiality.

In the event of disclosure of clinical negligence confidentiality would not be maintained and will be dealt through the appropriate local policies and guidelines.

If you feel that you are interested in participating please continue and read part 2.

Participant Information shee Version 3

Appendix 11 Reflective Journal Front Page



Reflexive Journal

The reflexive journal, according to Lincoln & Guba (1995) is where the researcher makes (i) regular entries during the research process, (ii) reflects on his own values and interests and (iii) records the logistics of the study and the methodological decisions and reasoning behind them.

This reflexive journal outlines the doctoral student's journey from the preparation of the project to delivering agreed outcomes to date.

The journal also documents the student's reflection on knowledge and personal learning in the research journey.

Reference

Lincoln, Y.S., Guba, E.G. (1995) *Naturalistic Inquiry*. Newbury Park, CA: Sage Publication